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MARCH 1962 VOL. 85 NO.

3

Price Trends and the Business Cycle in Postwar Years

Recent Growth of Paid Leisure for U.S. Workers

The Impact of Exports on U.S. Employment

Coverage of Union Health, Insurance, and Pension Plans

UNITED STATES DEPARTMENT OF LABOR

BUREAU OF LABOR STATISTICS



UNITED STATES DEPARTMENT OF LABOR

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Monthly Labor Review

UNITED STATES DEPARTMENT OF LABOR • BUREAU OF LABOR STATISTICS

LAWRENCE R. KLEIN, *Editor-in-Chief*
MARY S. BEDELL, *Executive Editor*

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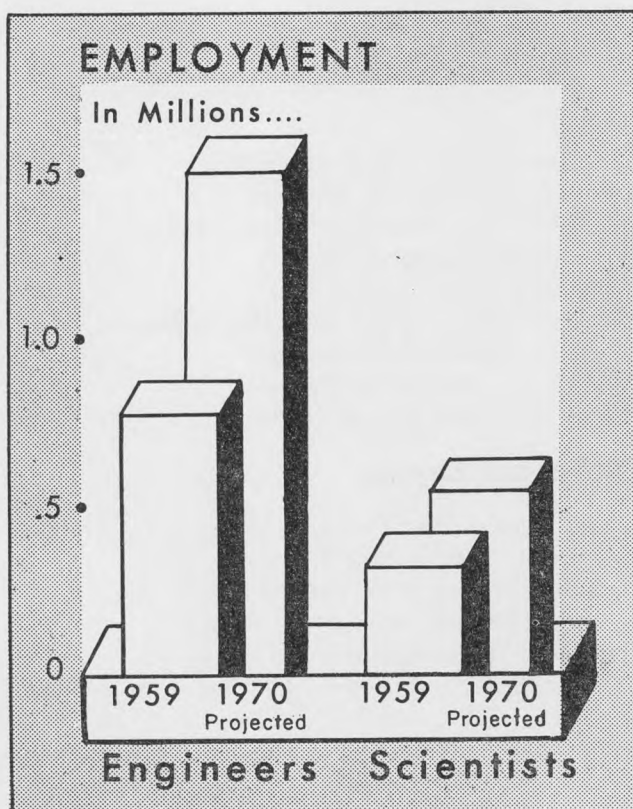
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The Need for . . .

Scientists and Engineers



The crucial role of scientists and engineers in the economic progress of the United States—both at home and in the competition for world markets—emphasizes the need for anticipating future demands. The chart shows the results of an attempt to develop a systematic method of projecting employment needs for workers in these occupations.

The basic assumptions underlying the projections, the methodology used in deriving them, and their limitations will be summarized in an article, "The Long-Range Demand for Scientists and Engineers," which will appear in the April issue of the *Review*.

The Labor Month in Review

IN THE APRIL ISSUE, the *Monthly Labor Review* will present in considerable detail the recommendations of the 13-chapter report of the tripartite Presidential Railroad Commission. These in effect were the recommendations of the public members. The carrier members accepted them with reservations. The union members rejected the major recommendations.

The Commission had been appointed in November 1960 to investigate work and pay rules disputes between 195 carriers and the 5 unions representing about 200,000 operating employees. Both parties had committed themselves to resume bargaining immediately following the Commission's report. The reaction of the parties to the report might in part reflect their need to assume a stance before negotiations. More likely, however, it stemmed from the uncompromising vigor of the report and the philosophy underlying it. As Commission Chairman Simon H. Rifkind put it, when you attempt to effect a change, "it follows that the adventitious beneficiaries will complain."

Summed up in a single sentence, the report concluded that it was time for a change in the "common law" of the union-carrier relationship, but there also must be time enough to make the change. All parties can concede that the report gave an explosive wrench to the issues which have created periodic crises in railroad bargaining, and it is worth quoting some of the language which reveals the purpose and the philosophy which motivated the public members.

Railroad rules and practices relating to manning and pay computation, the report states, "developed over a period of more than 100 years" from a mixture of "practices and habits, from collectively bargained agreements, from decisions of courts and arbitration tribunals, from Federal and State legislation, and from actions taken [under Government control] during and immediately after World War I." While some changes have taken place to accommodate improvement in operations to "revolutionary changes in technology and to the

changes in the national context in which the railroad industry operates," the report says they have not been far reaching enough.

A lack was noted in the flexibility required "to permit many changes in manning and assignments which are appropriate in the light of the technological and economic revolutions that have taken place." Collective bargaining practice on the railroads "has permitted a lag to develop between the rate of change in the 'common law' of the industry and the rate of change in railroading and the Nation." The necessity "to close the gap" has been widely recognized, the Commission felt, by both labor and management.

SEVERAL BASIC CONCEPTS were set forth by the Commission as a "framework within which we believe it will be possible for the parties to find solutions for their problems."

1. Collective bargaining must be the medium within which all issues must be settled, but procedural reforms in bargaining will strengthen the bargaining process.

2. A psychological adjustment is urged on the parties in order to regard "the decade of the 1960's as a period of transition and adaptation to the new arrangements" proposed in the report. A transition period "is necessary because it is not prudent to make a sharp and precipitate break with the past. . . . Revolutionary changes even for the better carry a high price in disruption [which] might exceed the value of the improvement." Consequently, "the best must yield to the better" and be "endowed with a time dimension."

3. Recommendations are made with varying degrees of specificity. The Commission hopes "that the degree of particularization . . . is sufficient to provide the catalysis necessary for the parties themselves to close the gap . . . between the technology and the economics of the industry . . . and the rules governing the pay, assignments, and working conditions"

4. The parties are urged to "establish a continuing joint activity." This will provide a "continuous review of the rules in the light of technological and other developments"

5. A "coordinated manpower review should be undertaken to plan for more effective, secure, and equitable manpower administration." The Commission suggested that the industry, which has improved its utilization of freight cars through "pooling and coordination on a national basis" should do as much for its employees.

6. Fundamental to the Commission's thinking has been the premise "that the Nation is entitled to a safe and efficient rail-transport system" in which management can with reasonable freedom introduce technological improvements, employees can be assured of a "sound and equitable pay structure" and of safe and efficient working conditions, and the adverse effects of productivity improvements are cushioned. The Commission emphasized that it was not influenced in its recommendations for change by "the

ability or inability of the industry to pay. . . . Views concerning finances might conceivably affect the pace of necessary adjustments, but they do not bear significantly upon the directions which adjustments should take."

7. All of its recommendations, the Commission asserted, could be more harmoniously useful if "accompanied by the adoption of an integrated national transportation policy covering all forms of transport and a maximum effort by railroad management to become as efficient and imaginative as possible."

THE COMMISSION REPORT is forceful in its insistence that the time for change is emergently at hand. "The country, the carriers, the operating employees, and their labor organizations cannot afford to miss this opportunity for self-correction of rules and practices Neither the national welfare nor the welfare of the railroad operating employees nor the welfare of the carriers will be served by a stubborn refusal to yield the status quo or to accept a new idea in the belief that some cherished privilege or practice will be endangered." The national interest commands the resolution of the conflict between work rules and technological change. "The backwashes of civilization are strewn with the debris of peoples who stood stolidly against change."

Having sounded this tocsin, the Commission then proclaimed its added responsibility to see that the public blessings of technological advance are not made "a private curse."

NO PARTY to the proceeding could accuse the Commission of using weasel words to becloud its recommendations. For example, in the controversy over the need for firemen on diesel locomotives in yard or freight service, the major rationalizations for the presence of the fireman have involved the safety and mechanical duties performed. The Commission concluded that "the fireman's lookout function . . . is not essential to the safe and efficient operation of road freight and yard diesels" and that "he possesses no unique or traditional 'craft right' to discharge this function." On mechanical functions, the Commission stated "that they involve a small proportion of the total time on duty, are relatively minor, and are not essential to safe operation." The Commission chairman stated the matter thus in a press interview: "the fireman aboard that engine does not serve a useful enough purpose" to warrant his presence. But the recommendations also in-

cluded an elaborate plan for monetary and other assistance to displaced firemen.

THE CARRIERS' separate statement recognized that "no subject so complex as the outdated work rules . . . can be settled to the complete satisfaction of everybody." However, it was contended that "there is no precedent in American industry for protective provisions of such cost or magnitude." Despite the "deficiencies of this report" in relation to the denial of some of management's proposals and the imposition of "increased cost without regard to . . . ability . . . to pay . . . we are convinced that . . . these recommendations are designed to serve the public interest."

THERE WERE four separate dissents by the union representatives. S. C. Phillips of the Brotherhood of Locomotive Firemen and Enginemen concentrated on a point-by-point rebuttal of the report's arguments against the need for firemen on diesels in yard and freight service. In conclusion, he stated that the report "is contrary to the record." He urged the Commission, "before it plunges everyone into catastrophe to look again at this case." He warned that the report "neither hews to the issues nor finds support in the record of proceedings."

H. F. Sites of the Brotherhood of Railroad Trainmen and S. W. Holliday of the Order of Railway Conductors and Brakemen joined in a statement which concentrated on the crew consist and compensation recommendations. In regard to the former, they contended that the "Commission, after a year of hearings and investigation, has been unable to identify any substantial area of overmanning attributable to negotiated crew consist rules." On wage structure, they felt that the proposals "would create chaos in a structure that at least is working, however much it may need modernization." They feared that "haste" had led to a "haphazard" plan.

James W. Fallon of the Switchmen's Union of North America wrote that "the recommendations . . . would lead to the eventual elimination of the distinction between road and yard service" and would give management rights "which no labor organization can relinquish."

The brief comments by A. F. Zimmerman of the Brotherhood of Locomotive Engineers termed the report "obnoxious" and promised submission to the President of a separate report.

Price Trends and the Business Cycle in Postwar Years

PEARL C. RAVNER*

WHOLESALE PRICES in this country have gone up by one-fourth and consumer prices by one-third in the 14 years since 1947. All of the wholesale price rise and most of the retail increase occurred during three periods: the years immediately after World War II, the Korean emergency, and the aftermath of the 1955-57 investment boom. Aside from these periods, consumer prices inched slowly upward and wholesale prices remained steady, or trended down, reacting neither strongly nor promptly to the fluctuations of the four postwar business cycles. The only marked cyclical responses occurred for wholesale prices in the 1949 downturn and for both consumer and wholesale prices in 1950, when the outbreak of hostilities in Korea occurred during a time of business recovery.

Some of this stability resulted from the primary influence of factors other than business fluctuations on important segments of both wholesale and retail prices—farm products, foods, and services. Farm products and foods, because of the particular stages of the meat production cycles, exerted downward price pulls throughout the last three business recoveries. Consumer prices for services, as part of a long-run uptrend, nudged retail prices upward in both recession and recovery. Another stabilizing factor has been the relative inflexibility of prices of semiprocessed and highly processed commodities during economic downturns.

The major difference between the price response in the current recovery and that of the three previous postwar recoveries has been in industrial commodities. From the February 1961 trough in economic activity, wholesale prices of all commodities other than farm products and foods

declined slowly and reached a low 8 months later. Although the decline was fractional, it contrasted sharply with gains exhibited by industrial prices during the early months of the previous postwar upswings.

General Price Trends Since World War II

Immediately after World War II, the enormous backlog of demand for still limited supplies sparked a buying surge at a time when cash holdings were large and credit was easily available. With the removal of Government controls, prices rose rapidly in 1947 and 1948. After some decline in prices during the recession of 1949, a rush of buying by both consumers and businesses and increased defense expenditures during the Korean episode brought a price spurt in 1950 and 1951. "Emergency" price controls were again adopted, though far less restrictive than those in force during World War II.

Except for some downward adjustment in wholesale prices from their 1951 level, several years of price stability followed. An expansion in plant and equipment investment between 1955 and 1957 caused prices to advance in 1956 and 1957, particularly in the producer durable goods industries. Since 1957, the stability of overall wholesale prices has been particularly evident; annual averages between 1958 and 1961 have differed by less than 0.5 percent. Consumer prices, also relatively steady, moved up 3.5 percent in the same period. (See table 1.)

Built-in economic stabilizers and Government antirecession measures helped sustain individual income and the level of consumption in the postwar downturns, despite the decline in the gross national product. (See chart 1.) As a result, demand did not fall sharply and there was no strong pressure to reduce prices. Although production fell and unemployment rose, total personal income—except for a decrease in the recession of 1948-49—remained stable. At the same time, costs of production and distribution remained heavy and fixed, organized labor offered powerful resistance to wage cuts, and price structures in significant sectors of the economy were rigid. Thus, both demand and costs exerted pressures to sustain the

*Of the Division of Prices and Cost of Living, Bureau of Labor Statistics.

price level during the current and the two previous recessions.¹ Only in 1949 did prices—particularly at wholesale—decline significantly during the downturn, as drastic slumps in wholesale prices of farm products (12 percent) and processed foods (8 percent) served to reinforce the drop (5 percent) in prices of industrial commodities. In each of the four recessions, consumer prices held firmer or rose more than wholesale prices:

Peak and trough months ¹	Percent change		
	Industrial production	Consumer Price Index	Wholesale Price Index
May 1960–Feb. 1961.....	-7.2	+1.0	+0.3
July 1957–Apr. 1958.....	-14.1	+2.2	+ .9
July 1953–Aug. 1954.....	-9.2	+ .3	- .4
Nov. 1948–Oct. 1949.....	-8.5	-1.9	-6.5

¹ National Bureau of Economic Research peak and trough months.

The general price level was also stable during the early months of all four postwar recoveries. Even in the earliest one, the inflationary upturn in wholesale and consumer prices did not develop until hostilities began in Korea in June 1950, more than a half year after the business upswing. (See table 2.) Lack of price response to the economic upswing was not confined to the early months of recovery in the later economic cycles. Overall prices did not show substantial gains even 2 years after recovery began in the 1954 and 1958 economic troughs. Consumer prices were only about 2 percent higher 24 months after 1954 and 1958 troughs. Wholesale prices—virtually motionless after the 1958 trough—were, however, about 4 percent higher 2 years after the 1954 trough.

Influences on Price Behavior

Among the many factors which affect prices, four stand out as influencing the general price level since the end of World War II. The first and second—increased agricultural and industrial productivity—have substantially alleviated upward pressures on both consumer and wholesale prices. The third—rapid growth in prices paid by consumers for services—has raised the general retail price level. The fourth factor—resistance to the downturn of prices of semiprocessed and highly processed commodities—has nullified potential offsets during economic contractions for price increases in times of expansion.

Agricultural Productivity. Much of the objective of price stability in our economy can be traced to the phenomenal growth of agricultural productivity. (See chart 2.) Farm products and processed foods represent 25 percent of the Wholesale Price Index, and foods over 28 percent of the Consumer Price Index. In addition, lower prices for nonfood farm products are indirectly reflected to some extent in the prices of the finished goods using these raw materials. Since World War II, output per man-hour in agriculture has risen at an average rate of more than 6 percent a year.² In the 1950's alone, crop production per acre

¹ For a discussion of inflation theory and the first three postwar recessions, see Alvin H. Hansen, *Economic Issues of the 1960's* (New York, McGraw-Hill Book Co., Inc., 1960), Economics Handbooks Series.

² *Output Per Man-Hour in the Private Economy in 1960* (Bureau of Labor Statistics, press release, Aug. 18, 1961, USDL-4698).

TABLE 1. KEY WHOLESALE AND CONSUMER PRICE INDEXES, ANNUAL AVERAGES, 1947–61

[1947–49=100]

Year	Wholesale Price Index						Consumer Price Index					
	All com- modities	Farm products	Processed foods	All other commod- ities	Durability		All items	Services	Commodities			
					Durable goods	Nondurable goods			All	Durable	Nondurable	
											Food	Less food
1947.....	96.4	100.0	98.2	95.3	92.8	98.4	95.5	94.5	96.3	94.9	95.9	95.7
1948.....	104.4	107.3	106.1	103.4	102.5	105.4	102.8	100.4	103.2	101.8	104.1	103.1
1949.....	99.2	92.8	95.7	101.3	104.7	96.2	101.8	105.1	100.6	103.3	100.0	101.1
1950.....	103.1	97.5	99.8	105.0	108.8	100.1	102.8	108.5	101.2	104.4	101.2	100.9
1951.....	114.8	113.4	111.4	115.9	119.3	112.4	111.0	114.1	110.3	112.4	112.6	108.5
1952.....	111.6	107.0	108.8	113.2	119.8	107.2	113.5	119.3	111.7	113.8	114.6	109.1
1953.....	110.1	97.0	104.6	114.0	122.2	103.6	114.4	124.2	111.3	112.6	112.8	110.1
1954.....	110.3	95.6	105.3	114.5	123.3	103.4	114.8	127.5	110.2	108.3	112.6	110.6
1955.....	110.7	89.6	101.7	117.0	128.2	101.2	114.5	129.8	109.0	105.1	110.9	110.6
1956.....	114.3	88.4	101.7	122.2	136.7	102.1	116.2	132.6	110.1	105.1	111.7	113.0
1957.....	117.6	90.9	105.6	125.6	141.4	104.7	120.2	137.7	113.6	108.8	115.4	116.1
1958.....	119.2	94.9	110.9	126.0	142.8	106.4	123.5	142.4	116.3	110.5	120.3	116.9
1959.....	119.5	89.1	107.0	128.2	145.9	105.0	124.6	145.8	116.6	113.0	118.3	118.3
1960.....	119.6	88.8	107.7	128.3	145.7	105.3	126.5	150.0	117.5	111.6	119.7	120.1
1961.....	119.1	88.0	108.5	127.7	145.2	104.9	127.8	152.8	118.3	111.3	121.1	120.8

increased by 30 percent and livestock production per breeding unit by 20 percent. In contrast, demand for farm products advanced slowly, primarily reflecting population growth. In recent years, there has been only a very small per capita

rise in food use as income increased. Consequently, farm production has constantly exceeded consumption despite stepped-up Government disposal programs (domestic and export) and production controls.³

³1962 *Agricultural Outlook* Chartbook (U.S. Department of Agriculture, November 1961).

Wholesale prices of farm products have been the most sensitive to expanding agricultural pro-

Chart 1. Economic Influences and Price Trends
[Quarterly data except output per man-hour, which is annual]

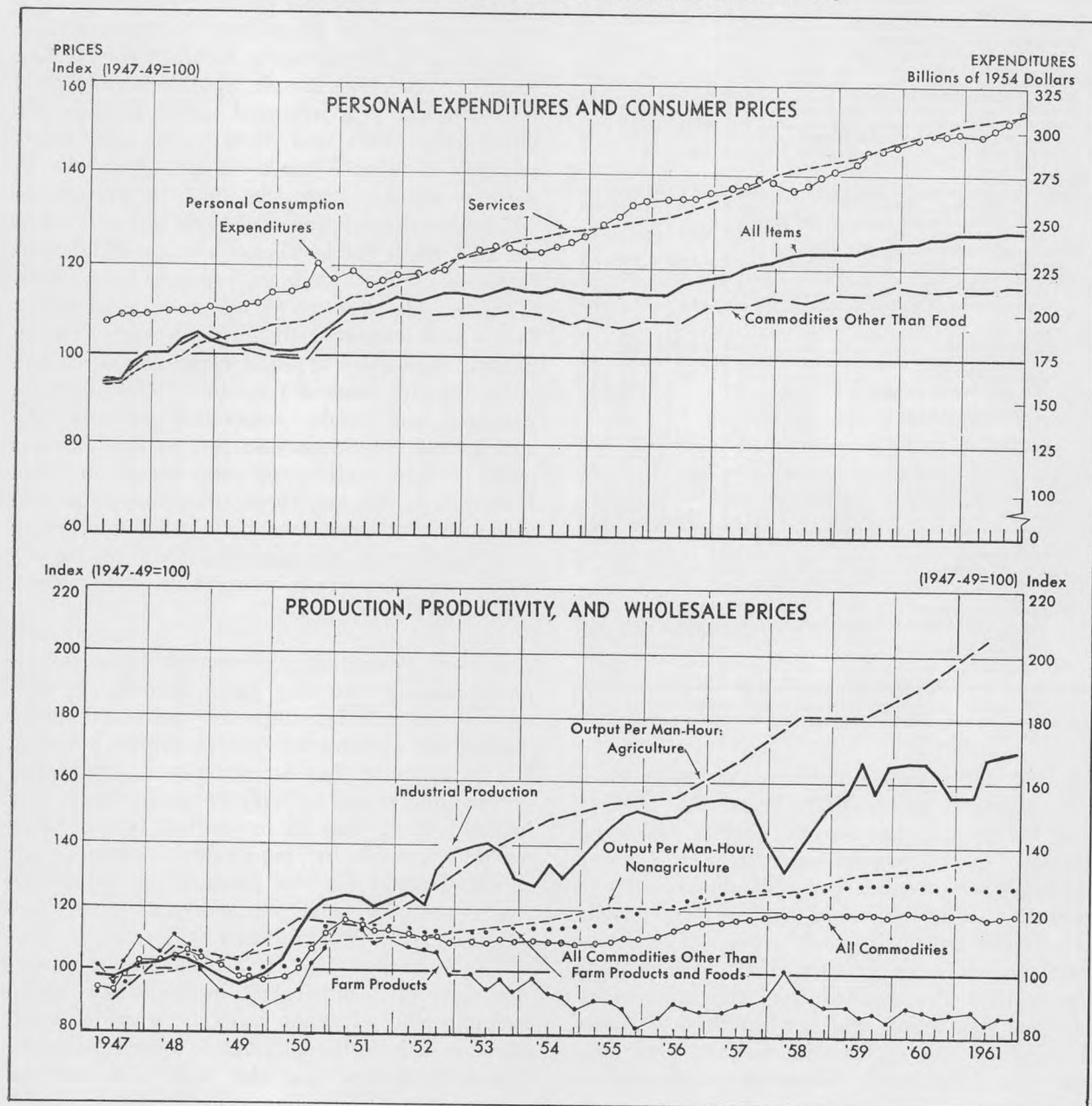


TABLE 2. PERCENT CHANGES IN WHOLESALE AND CONSUMER PRICES 9 MONTHS AFTER EACH POSTWAR TROUGH¹

Groups	Trough month ¹			
	Feb. 1961	Apr. 1958	Aug. 1954	Oct. 1949
WHOLESALE PRICE INDEX				
All commodities.....	-1.0	+0.2	-0.5	+5.2
Farm products.....	-2.7	-6.3	-4.8	+10.7
Processed foods.....	-2.4	-2.5	-4.0	+7.2
All commodities other than farm and food.....	- .5	+1.6	+1.0	+3.8
Textile products and apparel.....	+ .1	- .4	- .3	+2.4
Hides, skins, leather, and leather products.....	+5.4	+4.4	-1.2	+5.9
Fuel and related products and powers.....	-3.1	+2.6	+ .1	+2.0
Chemical and allied products.....	-1.9	- .7	0	+ .8
Rubber and rubber products.....	- .9	+ .5	+9.2	+20.3
Lumber and wood products.....	0	+4.1	+3.7	+19.0
Pulp, paper, and allied products.....	-1.7	+ .8	+1.2	+1.8
Metals and metal products.....	+ .1	+2.9	+3.0	+6.3
Machinery and motive products.....	- .3	+1.6	+1.9	+ .8
Furniture and other household products.....	+ .1	- .1	- .2	+1.8
Nonmetallic mineral products.....	+ .1	+1.3	+2.2	+1.2
Tobacco products and bottled beverages.....	+1.1	+ .5	+ .1	- .2
Miscellaneous.....	+2.4	+3.1	-10.8	+10.0
Stage of processing:				
Crude materials for further processing.....	-1.9	-2.2	-3.0	+13.9
Crude foodstuffs and feedstuffs.....	-4.6	-6.0	-6.3	+14.9
Crude nonfood materials, except fuel for manufacturing.....	+4.1	+4.4	+2.4	+15.7
Intermediate materials, supplies, and components.....	- .7	+1.0	+ .7	+5.3
Finished goods.....	-1.0	- .1	- .8	+2.2
Consumer finished goods.....	-1.4	- .5	-1.5	+2.5
Producer finished goods.....	+ .1	+1.4	+1.8	+1.3
Durability:				
Total durable goods.....	- .1	+2.0	+2.1	+4.0
Durable manufactures.....	- .1	+1.7	+1.9	+3.6
Total nondurable goods.....	-1.5	-1.3	-2.2	+5.9
Nondurable manufactures.....	-1.7	- .6	-1.4	+5.5
CONSUMER PRICE INDEX				
All items.....	+ .6	+ .2	- .7	+1.4
Food.....	-0.9	-2.1	-2.5	+3.8
Housing.....	+ .4	+ .4	+ .2	+1.7
Apparel.....	+1.5	0	- .4	-1.2
Transportation.....	+2.9	+4.2	- .9	+1.2
Medical care.....	+1.9	+3.7	+1.6	+1.1
Personal care.....	+ .4	+ .7	+ .4	-1.0
Reading and recreation.....	+2.0	0	- .1	-3.0
Other goods and services.....	+ .1	- .2	+ .1	+ .9
Special groups:				
Commodities less foods.....	+1.2	+1.1	(2)	(2)
Nondurables less foods.....	+ .7	+ .1	(2)	(2)
Durables.....	+2.1	+2.6	(2)	(2)
Durables less cars.....	- .1	- .4	(2)	(2)
Services.....	+1.2	+1.3	(2)	(2)

¹ National Bureau of Economic Research trough month.² Not available because prices were not calculated on a monthly basis previous to 1956.

ductivity and—despite continued price supports—have averaged substantially below the 1947–49 level for most of the postwar period. After responding to the Korean emergency by a sharp upturn, prices trended generally downward and reached a low at the end of 1955, owing primarily to a drastic fall in livestock prices. The subsequent rise of farm product prices to a peak in March 1958 also resulted from the influence of livestock production cycles, when the low points of hog and cattle cycles coincided and fewer animals were slaughtered. Since then, farm product

prices have moved steadily down again. The first half of 1961 witnessed a fall in cattle prices and a dramatic decline in poultry prices which brought the over-the-year average of farm product prices to the lowest level in the 14 years studied. Despite acreage reductions under the 1961 feed grain program and unfavorable weather conditions in parts of the country, total farm output was about the same in 1961 as the record high of the previous year.

In contrast, wholesale prices of processed foods and consumer food prices have been above their 1947–49 level for substantially all of the ensuing period. (See chart 2.) In 1961, processed food prices for the year averaged higher than in any year except 1951 and 1958. Consumer foods reached an alltime high. Nonetheless, the 9-percent increase over the 1947–49 average in wholesale prices of processed foods was well below the 28-percent rise in wholesale prices of all commodities other than farm products and foods. Similarly, the 21-percent advance in consumer food prices was lower than the 31-percent rise in prices for all other types of consumer purchases.

During the postwar recessions, prices of farm products and foods, responding primarily to agricultural conditions and not to the business cycle, remained stable or rose, except in 1949. However, in the last three recoveries, farm and food prices fell both at retail and wholesale, acting as a restraint on the general price level by offsetting increases which occurred in other sectors. (See table 2.)

Industrial Productivity. Increased industrial capacity and productivity gains have helped materially to alleviate upward price pressures. The overall downward impact, however, has been less for industry than for agriculture. First, the production gains of agriculture were much higher in this period. Second, in addition to expanding demand caused by population increases, per capita demand for the products of industry—unlike that for farm products—has grown significantly with higher incomes.

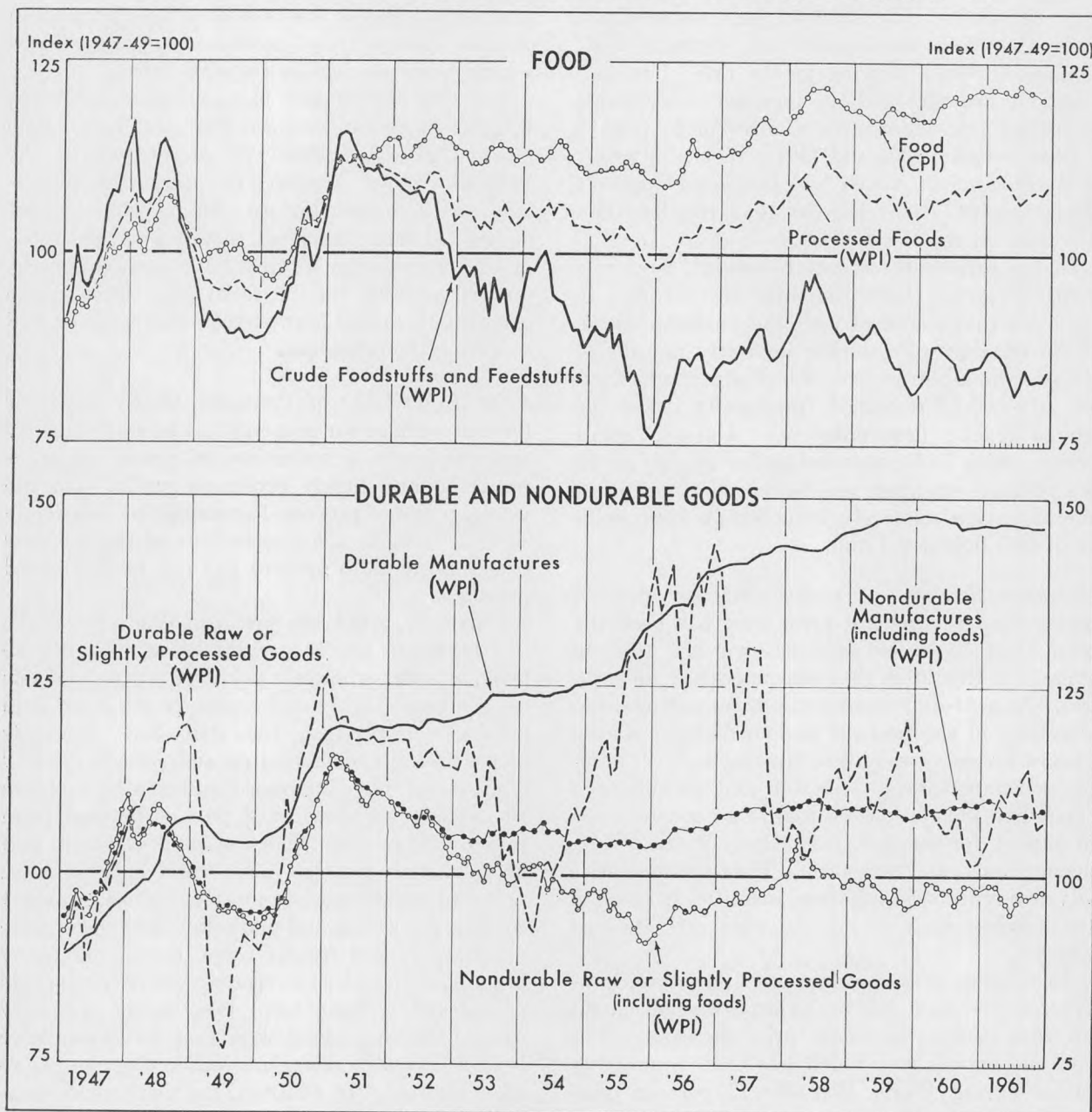
The years since 1947 have witnessed an impressive flow of technological innovations. These technological advances have been widespread, affecting all industries, though to differing degrees. The same period has also seen a substantial

growth in the amount of fixed capital available per worker, and these increases in capital stock have been a major influence in the achievement of greater productivity. Output per man-hour has risen 2.9 percent annually for manufacturing industries since World War II and 2.3 percent for

⁴ *Output Per Man-Hour in the Private Economy in 1960*, op. cit.

nonmanufacturing industries,⁴ and production capacity increased an average of 70 percent for all manufacturing during the 1950's alone. However, industries varied greatly in rate of productivity increase, as well as growth of capacity. Where the rate of productivity increase has been lower than average, but wage rates and other costs

Chart 2. Price Trends of Commodities at Various Processing Levels, 1947-61



have followed the general pattern of advance, prices have been under continued upward pressure.

The investment boom of 1955-57 not only intensified upward price pressures (especially for producer durable goods) but also brought a considerable increase in the productive capacity of many industries. In particular, this happened in industries such as steel, aluminum, automobiles, and machinery which had experienced some difficulty in meeting peak demands of consumers prior to 1957. The 1955-57 expansion helped eliminate many bottlenecks and shortages and, combined with a slowing in the rate of overall economic growth, held the increase in wholesale industrial prices down to slightly more than 1 percent between 1958 and 1961. Wholesale prices of durable goods, which had jumped 41 percent above the 1947-49 average by 1957, rose less than 3 percent in the last 4 years.

In the three most recent recessions, wholesale industrial prices have remained stable; only in 1949 did they decrease with the business slump. However, they rose during the early months of the postwar upturns, except in the current recovery when they remained fractionally below the trough level. (See chart 3.) Durable goods prices, which had responded rather quickly to all the previous upswings and advanced a significant amount, were relatively immobile in 1961, with an overall downward pull.

Consumer Services. A major source of upward pressure on the general price level has been the more than 50-percent increase over the 1947-49 average in the prices that consumers pay for services. As pent-up consumer needs for commodities were met in the postwar period, demand shifted toward services, which are growing in both number and importance. This shift and the country's expanding population resulted in a persistent rise in outlays for services, particularly medical care, personal care, and recreation. The continued price advance reflects, in addition, scarcities in some of the services such as medical care and low-cost housing.

In relation to the prewar price structure, however, services have just in the last few years caught up with general consumer price increases. The cost of services rose much less than commodity prices during World War II—13 percent compared with 55 percent from 1939 to 1946.

The important service component of the Consumer Price Index is made up of costs for rent, transportation, medical care, household operation (including gas and electricity), and other service charges such as hair cuts, movie admissions, and mortgage interest. Many of these prices are rates subject to public regulation or legislation and accompany the granting of an exclusive operating franchise, such as for the sale of electricity, gas, or urban transit. Other service costs represent professional fees or items with a high proportion of labor charges; most consumer services contain a large wage element in the final price.

The CPI for services has increased each year, without exception, between 1947 and 1961. The greatest growth—almost 90 percent above the 1947-49 average—has been in transportation services, and the next highest—70 percent—in cost of medical care. Incident to this longrun trend, prices for consumer services have exerted a slight upward pressure on the retail price level in the early months of all four postwar recoveries as well as during the recessions.

Price Inflexibility of Processed Goods. Another force at work in our economy has been the rigidity and resistance to reductions of prices for semi-processed and highly processed goods. On the whole, prices of processed commodities—although slow to react to the fluctuations of the business cycle—respond to upward but not to downward pressures.

Currently, wholesale prices of crude foodstuffs and feedstuffs are 15 percent below the 1947-49 level, whereas wholesale prices of processed foods are 9 percent higher and consumer prices for food are up by 21 percent. (See chart 2a.) The costs of processing and marketing and advertising and distribution have increased sufficiently to more than offset the downward pull of lowered farm prices. Labor costs, which account for about half of marketing charges, have risen substantially; prices of containers and most other items bought by food processing and marketing firms have gone up sharply; and freight rates, rents, and many other costs have also increased. Moreover, profits of marketing firms have been rising gradually since 1952 and, along with cost increases, have been reflected in rising unit marketing charges to the consumer. In addition, the many more marketing services now provided, such as more con-

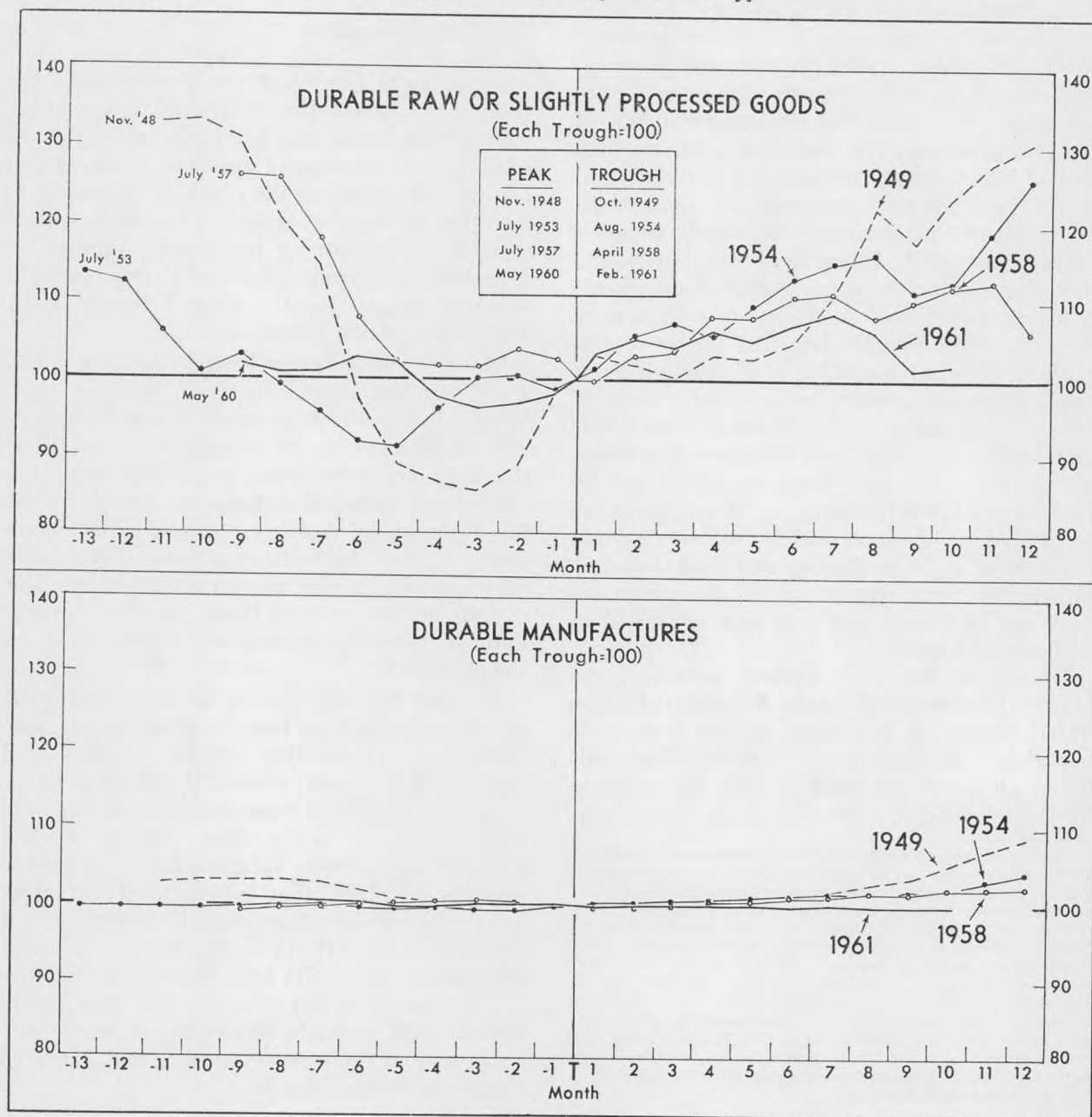
venient packaging, further processing to more nearly final use forms, and more effective storage, have added to the proportion of the food dollar that goes for marketing charges.⁵

⁵ *Food Costs* (U.S. Department of Agriculture, Agricultural Marketing Service, Miscellaneous Publication 856, April 1961), p. 7.

Two other factors—producer competition and lack of durability—have an important effect in making crude foodstuffs prices more subject to downward pressures than processed or consumer foods. Farmers are dispersed and do not control the market for their product. Many farm prod-

Chart 3. Wholesale Prices of Durable Goods in Four Postwar Business Cycles

[From peak through first year of recovery]



ucts cannot be stored profitably and must be sold when harvested, even if the price falls drastically. In contrast, processing companies, wholesale distributors, and retail food chains are much more highly organized and the larger companies can resist fluctuations caused by the immediate supply and demand situation. Furthermore, as processing is completed, many of the foods can be stored and this, in turn, permits greater resistance to price reductions.

Industrial semiprocessed and highly processed commodities also exhibit considerable price inflexibility and resistance to downward price pressures. (See chart 2b.) The cost structure of fabricating industries is much more complex than that of industries producing crude materials, and it involves numerous costs and conditions which are unrelated to the demand and supply situation for raw materials.⁶ Heavy fixed overhead costs—including those for research and development, long-term capital, and construction—add to price rigidity. Also, a higher degree of market control exists at more advanced levels of processing. A single firm may account for so large a share of total industry sales that small competitors follow its trend in pricing, and in many important industries, a few giant corporations control 80 percent or more of the market. Moreover, at the retail level, competition among producers is often in terms of style, packaging, and quality factors rather than price concessions, as consumers are more apt to be susceptible to such appeals than professional buyers.

During the last three postwar recessions, the only major segment of wholesale industrial prices which showed a consistent decline was crude materials. Although prices of industrial materials fell at all processing levels in 1948–49, decreases for the more highly fabricated goods—both inter-

mediate and finished—were much smaller than those for crude materials. Similarly, wholesale prices of crude industrial materials were the only ones which responded quickly to the economic upturns. Prices of the more highly processed goods, stable in recession, remained stable or crept up slowly in the early months of the last three recovery periods but tended downward in 1961. (See chart 3.)

The Current Situation

In the early months of the recovery from the 1960–61 recession—the mildest of the postwar period—both retail and wholesale prices showed considerable stability. Consumer prices, which had trended up during the recession, continued to inch up after the trough. Wholesale prices reversed from moving fractionally upward in recession to moving fractionally downward in recovery and, 9 months after February 1961, averaged 1 percent lower.

The agricultural cycle is again tending downward, but not as sharply as in 1958 or 1954. Wholesale prices of farm products and foods have reflected this movement by continuing well below the February 1961 level, while consumer food prices have wavered just below the trough for the first 9 months of recovery. Industrial commodities as a whole have shown substantially greater price stability in this recovery than in the past and, in contrast with all three preceding postwar upturns, have not exerted any upward push on the price level.

Although intensifying cold war issues during the current recovery have brought about a resurgence in Government spending, the general price level has not yet increased; whether it will do so, under conditions of greatly expanded capacity and still limited demand, is not clear. Excess demand pressures appear to be absent so far in the present recovery. Unless the international situation drastically worsens, there seems little likelihood of a precipitate price rise in the near future. Increasing productive capacity and efficiency and improving technology, as well as competition from foreign imports, will probably temper any upward price impetus from the current recovery and increased Government expenditures.

⁶ More comprehensive discussion and analysis of differences in price trends and industrial price structure for commodities at varying stages of processing may be found in a variety of sources, among which the following provide a selection: William G. Bowen, *The Wage-Price Issue: A Theoretical Analysis* (Princeton, N.J., Princeton University Press, 1960); John M. Clark, *The Wage-Price Problem* (Philadelphia, American Bankers Association, 1960); Charles L. Schultze, *Prices, Costs and Output for the Post War Decade: 1947–1957* (New York, Committee for Economic Development, 1959); John K. Galbraith, "Market Structure and Stabilization Policy," *Review of Economics and Statistics*, May 1957, pp. 126–128; Jules Backman, *Price Practices and Price Policies* (New York, Ronald Press Co., 1953); Richard Ruggles, "The Nature of Price Flexibility and the Determinants of Relative Price Changes in the Economy" in *Business Concentration and Price Policy* (Princeton, N.J., Princeton University Press, 1955).

Recent Growth of Paid Leisure for U.S. Workers

PETER HENLE*

TRADITIONALLY, the American economy has been oriented more toward work than leisure. American habits of living and American cultural standards have tended to emphasize the virtues of work and the vices of idleness. Of course, in the Nation's earlier years, there was little choice; only through constant toil could the early settlers provide for themselves and their families. Long working hours were the accepted practice for the early industrial enterprises as well.

Gradually, a productive economy and a changing climate of public opinion made possible more leisure time. One of the primary goals of early union activity was a shorter workday and workweek. The value of rest away from work and the adverse effects on health of long hours became recognized. The accepted standard for hours of work declined slowly, through voluntary action by employers, collective bargaining, and State and Federal legislation. The 12-hour day gave way to the 10- and then the 8-hour standard, and eventually the 40-hour, 5-day week became the norm. A more recent development has been the emphasis on other forms of leisure—the paid vacation and the paid holiday. Before World War II, these were quite limited for hourly paid workers, although many salaried workers had been receiving this type of benefit.

Increased leisure has also been a byproduct of various shifts within the economy. The decline in employment in agriculture and small retail stores, both of which traditionally have involved long hours, has meant an automatic drop in average working hours.

This growth of leisure time has played a major role in shifting the patterns of family living and in stimulating more widespread travel, sports, and

recreation activity throughout the country. Much of the output of the American economy now consists of end-products for leisure-time use or consumption. For example, while the gross national product grew by 14 percent between 1957 and 1960, consumer expenditures for foreign travel were up 34 percent; books and maps, 28 percent; theater and opera, 26 percent; and commercial participant amusements (such as bowling), 30 percent.

The purpose of this article is to bring together statistics which the Bureau of Labor Statistics has compiled from time to time on various aspects of leisure time, primarily hours of work, paid vacations, and paid holidays. It also attempts, for the first time, to measure changes in the average worker's available leisure time in the 20 years 1940-60. In doing so, leisure time is not defined simply as time away from work because, in an economic sense, leisure has little meaning unless it represents paid time taken voluntarily. The individual concerned has to be assured that he can spend time away from work without sacrificing living standards for himself and his family. It is in this sense that leisure time is used in this article.

Hours of Work

Hours of work have been declining for over a century.¹ The most marked reductions occurred between 1900 and 1930, when average weekly hours dropped from about 67 to 55 in agriculture and from 56 to 43 for nonagricultural workers.

During the depression of the 1930's, working hours were further reduced, but by necessity rather than choice. Most of the industry codes promulgated under the National Industrial Recovery Act between 1933 and 1935 included provisions limiting the workweek to 40 hours (in some cases, 35) in an effort to stimulate greater employment. The enactment of the Fair Labor Standards Act in 1938 represented legislative decision that 40 hours a week constituted a desirable standard, with certain exceptions, for workers in interstate commerce. Work after 40 hours was not prohibited, but was made expensive to schedule by requiring that such hours be paid for at the penalty rate of time and one-half. The new standard was introduced gradually, beginning with 44 hours for

*Special Assistant to the Commissioner, Bureau of Labor Statistics.

¹"The Workweek in American Industry, 1850-1956," *Monthly Labor Review*, January 1958, pp. 23-29.

the first year of the new law. The 40-hour standard became effective in October 1940, and at that time, workweeks exceeding this standard were found almost exclusively in industry groups either partially or wholly exempt from the Fair Labor Standards Act—retail trade and class I railroads, for example.

The most significant change since 1940 has been the more widespread adoption of the 40-hour week. Far more workers have seen their hours shortened to 40 than reduced below this level. While there have been some reductions of work schedules below 40 hours, these have taken place only in a few industries, largely those in which unions have made shorter hours a primary objective in collective bargaining. In effect, the standard set in the Fair Labor Standards Act for firms in interstate commerce had, by 1960, been extended to the vast majority of nonfarm wage and salary workers.²

These are conclusions reached after an examination of available BLS data on hours of work during the period 1940–60. Three types of data have been involved in this examination:

1. *Hours worked* by individuals in the labor force as reported by a sample of the Nation's households and published in the Monthly Report on the Labor Force. (Data for periods prior to July 1959 were published by the Bureau of the Census.)

2. *Scheduled hours of work* as reported by employers in response to surveys of wage rates covering wage and salary workers in particular localities and industries.

3. *Straight-time hours* as reported by labor unions in four industries in which the Bureau conducts surveys of union scale wage rates.

The basic figures for average hours worked are shown in table 1 for May of 1948, 1956, and 1960 for the various classes of workers in the economy. (Comparable data for earlier years are not available.) These months were chosen because they represent months of generally high economic activity. By choosing the same month of each year, problems of seasonal adjustment were avoided.

These figures make it clear that hours are still longer in agricultural than in nonagricultural pursuits. Moreover, those who set their own hours, the self-employed, work longer hours than those whose hours are set by their employer or through collective bargaining.

TABLE 1. AVERAGE WEEKLY HOURS WORKED BY PERSONS AT WORK, 1948, 1956, and 1960

Class of worker	All workers			Full-time workers ¹		
	May 1948	May 1956	May 1960	May 1948	May 1956	May 1960
Total at work.....	43.4	41.6	40.8	46.8	46.0	45.5
Agriculture.....	52.5	49.6	48.0	58.3	56.4	55.5
Wage and salary workers.....	49.4	42.8	43.3	56.9	53.5	52.3
Self-employed workers.....	57.9	58.7	56.5	59.6	59.2	58.6
Unpaid family workers.....	39.4	35.8	35.4	54.0	49.3	49.4
Nonagricultural industries.....	41.9	40.7	40.1	45.2	44.8	44.6
Wage and salary workers.....	41.1	39.7	39.3	44.2	43.8	43.7
Private employers.....	41.1	(?)	39.1	44.3	(?)	43.8
Government.....	41.3	(?)	40.3	43.1	(?)	43.1
Self-employed workers.....	47.9	49.1	47.1	52.7	53.1	52.7
Unpaid family workers.....	39.4	39.4	40.0	50.1	50.2	49.4

¹ Persons who worked 35 hours or more during the survey week.

² Not available.

Between 1948 and 1960, average weekly hours worked by all employed persons declined by 2.6 hours, or 6 percent. However, since part-time workers have been forming a considerably higher portion of the labor force, the figures for all workers exaggerate the trend toward a shorter workweek. In 1960, almost 6 million workers voluntarily were working at jobs of less than 35 hours a week.³ The decline for full-time workers was only 1.3 hours, or 2.8 percent. The drop in working hours for full-time workers was quite marked in agriculture; in fact, several times the decline for nonagricultural workers. On the other hand, there was no decline for full-time self-employed persons in nonagricultural industries.

The distribution of full-time wage and salary workers by hours worked in table 2 confirms the continuing slow decline in the average workweek. Yet for most workers there has been little, if any, change in working hours. The majority of nonfarm workers were on a 40-hour workweek in 1948 and have remained so. By 1960, those working fewer than 40 hours had increased from 5 to 8 percent of all full-time nonagricultural wage and salary workers. Each of the industry divisions also showed an increase in the proportion of those with workweeks of less than 40 hours. However, only in nondurable manufactures and the service, finance, insurance, and real estate division was this proportion higher than 10 percent.

² A 1961 amendment to the Fair Labor Standards Act extended coverage to about 3.6 million workers, most of whom are in retail, service, and construction industries. Beginning September 8, 1963, most newly covered workers must be paid overtime after 44 hours, 1 year later, after 42 hours, and in 1965, after 40 hours.

³ "Labor Force and Employment in 1960," *Monthly Labor Review*, April 1961, pp. 344-354.

More significant perhaps was the drop in the proportion of those working more than 40 hours, from 43 percent in 1948 to 33 percent in 1960. The drop was sharpest for agriculture, where the proportion working 48 or more hours declined from 81 to 60 percent. In manufacturing, where the 40-hour week was standard by 1940, the decline was slight; but in mining, transportation, trade, and services, the continuing shift toward the 40-hour week was quite marked.

These figures, of course, represent hours actually worked, as reported by a member of the households included in the survey. An individual working longer than 40 hours may be doing so because he has been assigned overtime work, because those are his regular hours, or because he has more than one job. (In December 1960, 3 million workers held more than one job.⁴) Similarly, a person

working 35-39 hours may have a work schedule calling for those hours, may have begun or quit a job during the survey week, or may have missed certain scheduled hours for such reasons as illness, bad weather, or cutbacks in production. However, the years selected were years of relatively high economic activity, so that differences in the amount of both overtime and short time would be slight. In any case, the definition of full-time workers as those working 35 hours or more would exclude most short-time workers. Moreover, the proportion of multiple jobholders has not changed significantly.⁵ Consequently, there is little doubt that the 1948-60 decline in hours worked reflected, for the most part, changes in scheduled hours.

These figures on hours actually worked can be compared with BLS studies providing data on scheduled hours. Such figures for the year ending June 30, 1961, are available for 13.8 million workers in the country's standard metropolitan areas (table 3).⁶ Almost two-thirds of all office workers and over four-fifths of all plant workers in metropolitan areas were employed in establishments in which a 40-hour schedule predominated. Practically all the remaining office workers had schedules of less than 40 hours (mostly 35 or

⁴ "Multiple Jobholders in December 1960," *Monthly Labor Review*, October 1961, pp. 1066-1073.

⁵ Ibid.

⁶ Data were obtained for 1 payroll period during the year (primarily in early 1961) for all nonsupervisory employees (including working supervisors or foremen) in the offices and plants of establishments in the 6 broad industry divisions shown in table 3. The scope of the survey excluded government institutions and the construction and extractive industries. The establishments within the scope of the survey were those employing 50 or more workers except in the largest areas, where the minimum size was 100 employees in manufacturing, public utilities, and retail trade.

TABLE 2. FULL-TIME WAGE AND SALARY WORKERS, BY HOURS OF WORK DURING THE SURVEY WEEK AND INDUSTRY, MAY OF 1948, 1952, 1956, AND 1960

[Percent distribution]

May of—	Total, 35 hours or more	35 to 39 hours	40 hours	41 to 47 hours	48 hours or more	May of—	Total, 35 hours or more	35 to 39 hours	40 hours	41 to 47 hours	48 hours or more
AGRICULTURE						MANUFACTURING, TOTAL— Continued					
1948.....	100.0	3.6	10.7	5.2	80.5	Nondurable goods					
1952.....	100.0	6.2	14.0	7.4	72.4	1948.....	100.0	6.4	64.5	8.6	19.5
1956.....	100.0	7.9	13.6	10.7	67.8	1952.....	100.0	9.9	64.3	9.6	16.2
1960.....	100.0	6.2	18.2	15.9	59.7	1956.....	100.0	10.7	63.4	9.2	16.7
NONAGRICULTURAL IN- DUSTRIES, TOTAL						1960.....	100.0	11.0	61.7	8.8	18.4
1948.....	100.0	4.8	51.8	12.3	31.1	TRANSPORTATION AND PUBLIC UTILITIES					
1952.....	100.0	6.1	55.0	11.3	27.7	1948.....	100.0	2.1	42.5	11.2	44.2
1956.....	100.0	7.4	56.3	11.1	25.2	1952.....	100.0	2.8	65.9	7.1	24.3
1960.....	100.0	7.6	59.6	9.4	23.3	1956.....	100.0	4.3	67.9	7.9	19.9
MINING						1960.....	100.0	4.3	69.3	6.8	19.6
1948.....	100.0	.7	41.8	5.4	52.1	WHOLESALE AND RETAIL TRADE					
1952.....	100.0	1.4	48.9	6.0	43.7	1948.....	100.0	3.3	34.8	15.5	46.5
1956.....	100.0	3.5	56.3	8.7	31.5	1952.....	100.0	4.2	36.5	16.8	42.4
1960.....	100.0	7.4	59.1	5.4	28.1	1956.....	100.0	5.5	40.0	14.9	39.6
CONSTRUCTION						1960.....	100.0	6.1	44.1	13.0	36.8
1948.....	100.0	4.9	54.4	12.3	28.5	SERVICES AND FINANCE ¹					
1952.....	100.0	4.8	54.9	9.6	30.7	1948.....	100.0	10.3	40.8	13.8	35.1
1956.....	100.0	8.5	58.9	10.8	21.8	1952.....	100.0	11.3	44.7	13.3	30.6
1960.....	100.0	6.9	64.8	10.0	18.3	1956.....	100.0	12.3	45.6	13.4	28.7
MANUFACTURING, TOTAL						1960.....	100.0	12.0	51.3	10.3	26.5
1948.....	100.0	4.1	66.7	11.2	18.0	PUBLIC ADMINISTRATION					
1952.....	100.0	5.7	65.5	10.1	18.7	1948.....	100.0	2.0	67.2	8.8	22.0
1956.....	100.0	6.4	66.3	9.1	18.2	1952.....	100.0	4.7	68.5	6.0	20.7
1960.....	100.0	6.7	68.4	8.2	16.7	1956.....	100.0	5.3	68.5	7.6	18.6
Durable goods						1960.....	100.0	4.8	71.3	6.3	17.6
1948.....	100.0	2.2	68.7	12.4	16.7						
1952.....	100.0	2.7	66.3	10.5	20.5						
1956.....	100.0	3.6	68.3	9.0	19.2						
1960.....	100.0	3.4	73.4	7.8	15.4						

¹ Includes insurance and real estate.

37½), while most of the other plant workers had hours longer than 40. As a general rule, office workers had shorter scheduled hours than plant workers.

The figures for scheduled hours generally fall below those for hours actually worked by full-time workers but follow a similar pattern of industry variations. The incidence of overtime work and dual jobholding would tend to make working hours longer than scheduled hours. In addition, the scheduled hours data cover only metropolitan areas, where hours are often shorter than in the smaller cities and rural areas.

No comparable information on scheduled hours is available for years prior to 1960, but the Bureau's union wage-scale studies provide hours information dating back to earlier years for four industries (table 4).

In the printing trades, nearly all unions have succeeded in their attempts to reduce scheduled hours below 40. In 1940, 64 percent of the union

workers in the industry were scheduled to work a 40-hour week, while only 13 percent had workweeks below 37½. By 1960, only 2 percent were on a 40-hour week, while 54 percent had schedules of less than 37½ hours. The average workweek had dropped to 36.6 hours.

In the local trucking and transit industries, unions have achieved widespread reductions in the workweek to the standard 40 hours. In trucking, 65 percent of union members in 1940 worked schedules of 48 hours or more. By 1960, this figure had been reduced to 2 percent while the proportion working 40 hours or less had grown from 13 to 94 percent. While 1940 data for the local transit industry are not available, the trend from 1946 to 1960 is similar. In the earlier year, almost as many union members were working 48 or more hours as were working the 40-hour week. By 1960, only 4 percent had schedules as long as 48 hours, while 85 percent were on the 40-hour week.

In the fourth industry—construction—the average schedule has actually lengthened somewhat since 1940, when 29 percent of the workers were still on schedules that had been shortened below 40 hours during the depression of the 1930's. During World War II, standard hours in many areas were lengthened to the 40-hour week, and this standard has been generally maintained in the postwar years. As a result, in 1960, only 12 percent of the workers were on schedules of less than 40 hours.

In summary, recent years have witnessed a gradual increase in leisure time through reductions in the standard workweek and in hours actually worked. While such reductions have taken place throughout the economy, they have not followed a uniform pattern. In a few industries, notably printing and publishing and women's apparel, general reductions in hours to a level below 40 have taken place. In many predominantly white-collar industries, the workday has also been reduced below 8 hours. In most manufacturing industries, the 40-hour week has remained standard. In such nonmanufacturing industries as retail trade and services, where many establishments were not subject to the Fair Labor Standards Act, there has been a major movement toward the 40-hour standard.

TABLE 3. WORK SCHEDULES OF FIRST-SHIFT PLANT AND OFFICE WORKERS IN METROPOLITAN AREAS,¹ BY INDUSTRY DIVISION, YEAR ENDING JUNE 30, 1961

[Percent of workers]

Scheduled weekly hours	All industries	Manufacturing	Public utilities ²	Wholesale trade	Retail trade	Finance ³	Services ⁴
OFFICE WORKERS							
All schedules.....	100	100	100	100	100	100	100
Under 40 hours ⁵	35	21	23	29	23	64	49
35 hours.....	10	7	9	9	5	17	18
36½ hours.....	3	1	(⁶)	2	2	8	3
37½ hours.....	13	8	13	13	10	21	19
38¾ hours.....	4	4	1	3	2	7	4
40 hours.....	64	78	76	66	70	36	46
Over 40 hours.....	2	1	(⁶)	5	7	(⁶)	5
Average hours.....	38.9	39.4	39.2	39.2	39.6	37.9	38.6
PLANT WORKERS							
All schedules.....	100	100	100	100	100	-----	100
Under 40 hours ⁵	7	7	1	4	10	-----	8
37½ hours.....	3	3	1	2	4	-----	3
40 hours.....	82	85	94	77	67	-----	63
Over 40 hours ⁵	11	8	6	19	23	-----	29
42 hours.....	1	1	1	1	2	-----	2
44 hours.....	2	1	(⁶)	4	5	-----	4
45 hours.....	2	2	2	3	3	-----	3
48 hours.....	4	2	1	3	7	-----	16
Over 48 hours.....	2	2	1	4	2	-----	1
Average hours.....	40.5	40.2	40.3	41.1	41.1	-----	41.5

¹ See text footnote 6.

² Includes transportation and communications. Railroads were excluded in a few of the areas studied.

³ Includes insurance and real estate.

⁴ Includes, among others, hotels, personal services, business services, auto-repair shops, motion pictures, nonprofit membership organizations, and engineering and architectural services.

⁵ Includes weekly schedules other than those shown separately.

⁶ Less than 0.5 percent.

TABLE 4. UNION SCALES OF WEEKLY HOURS¹ IN SELECTED INDUSTRIES AND TRADES, SELECTED DATES, 1940-60
[Percent of workers]

Hours scale ¹	Local trucking			Building trades			Printing trades			Local transit ²		
	June 1940	July 1950	July 1960	June 1940	July 1950	July 1960	June 1940	July 1950	July 1960	July 1946 ³	July 1950	July 1960
All scales.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 40 hours.....	0.4	0.9	3.0	29.2	13.5	12.0	35.5	85.9	97.8	-----	-----	-----
Under 35 hours.....	-----	-----	-----	9.6	.9	1.2	4.1	2.2	2.3	-----	-----	-----
35 hours.....	-----	-----	1.4	19.6	12.6	10.7	5.0	6.4	19.1	-----	-----	-----
Over 35 and under 37½ hours.....	-----	-----	1.6	-----	-----	-----	3.4	33.0	32.8	-----	-----	-----
37½ hours.....	-----	-----		-----	-----	-----	21.7	42.6	43.1	-----	-----	-----
Over 37½ and under 40 hours.....	-----	-----		-----	-----	-----	1.3	1.7	.5	-----	-----	-----
40 hours.....	12.7	72.1	91.1	66.9	86.5	88.0	63.8	13.9	2.2	31.6	31.9	84.7
Over 40 and under 48 hours.....	21.9	6.7	3.6	2.9	(⁴)	(⁴)	5.7	5.2	-----	26.2	24.0	6.3
Over 40 and under 44 hours.....	5.3	1.3	1.1	-----	-----	-----	-----	-----	-----	4.0	5.4	1.7
44 hours.....	12.5	1.8		-----	-----	-----	-----	-----	-----	22.0	18.4	3.7
Over 44 and under 48 hours.....	4.1	3.6		-----	-----	-----	-----	-----	-----	.2	.2	.9
48 hours.....	44.4	16.7	2.0	.9	-----	-----	-----	-----	-----	27.0	25.6	3.2
Over 48 hours.....	20.6	3.4	.1	(⁴)	-----	-----	-----	-----	-----	3.7	3.7	.8
Not specified.....	-----	.2	.2	-----	-----	-----	-----	-----	-----	11.5	14.8	5.0
Average hours.....	47.2	42.0	40.1	38.3	39.3	39.3	38.8	37.2	36.6	-----	43.9	40.6

¹ Maximum schedules of hours at straight-time rates agreed upon through collective bargaining between trade unions and employers in cities of 100,000 or more.

² Operating employees only.

³ Earliest date for which figures are available.

⁴ Less than 0.05 percent.

⁵ May include a very small number with longer hours.

NOTE: Dashes indicate either no data reported or data not tabulated for specified interval.

Paid Vacations

A more pervasive increase in leisure time since 1940 has occurred as paid vacations have been adopted or lengthened for virtually all types of workers.⁷ For example, in 1940, collective bargaining agreements applying to 2 million organized wage earners, or about one-fourth of all union members, provided annual vacations with pay.⁸ For most of these workers, the maximum vacation period for which they might become eligible was 1 week. A few agreements provided a 2-week vacation for all workers and about a fourth of the workers who got vacations were entitled to 2 weeks if they met specified service requirements, but only rarely was provision made for more than 2 weeks. By contrast in 1957, 91 percent of the workers covered by major collective bargaining agreements (each covering 1,000 or more workers) were eligible for paid

vacations, and 84 percent of the agreements made provision for a maximum vacation of at least 3 weeks, usually for longer service employees.⁹

Practically all office and plant workers in the country's metropolitan areas are now entitled to paid vacations. In 1961, more extensive vacation benefits were generally provided for office than for plant workers. After 25 years of service, 38 percent of the office employees but only 25 percent of plant employees were eligible for 4 weeks or more of vacation (table 5). Similarly, after 10 years of service, 41 percent of the office employees but only 29 percent of the plant workers were eligible for 3 or more weeks of vacation. The most prevalent service requirements for the 2-week vacation were 1 year for office employees and 2 or 3 years for plant workers.

These figures, however, do not indicate the length of vacation actually taken by employees, and no such data are collected. But the Monthly Report on the Labor Force provides an estimate of the number of individuals absent from their job "on vacation" during the entire survey week. On the assumption that the survey week is representative of the months concerned, these data yield annual estimates of full weeks of vacation. (See table 6.) For 1960, over 83 million full weeks

⁷ One exception is employees of the Federal Government. Vacation provisions for the 1 million Government workers covered by the Federal Classification Act were reduced by the Annual and Sick Leave Act of 1951 from a uniform 26 days' annual leave to 13 days for employees with less than 3 years' service, 20 days for those with 3 but less than 15 years, and 26 days for those with 15 years or more.

⁸ "Vacations with Pay in Union Agreements, 1940," *Monthly Labor Review*, November 1940, pp. 1070-1077.

⁹ *Paid Vacation Provisions in Major Union Contracts, 1957* (BLS Bull. 1233, 1958); for summary, see *Monthly Labor Review*, July 1958, pp. 744-751.

of vacation were recorded—150 percent of the 1948 level and an average of 1.3 weeks of vacation per employed person.

This figure understates total vacation time for two reasons: (1) The survey week, being the week ending nearest the 15th of the month, generally avoids all major holidays, whereas vacations tend to occur more frequently during holiday weeks. (2) The figure does not include paid vacation time of less than a full week. Including estimates for these two gaps in the calculations, a rough figure for total vacation time for 1960 would amount to 96–100 million vacation weeks.¹⁰

Almost 85 percent of nonagricultural wage and salary workers were paid while on vacation in 1960. The percentage varied somewhat by industry, from a low of 60–70 percent for construction and the service industries (including educational services) to 93 percent for workers in transportation and public utilities and 96 percent for employees in public administration.¹¹

Paid Holidays

A similar development in recent years leading toward increased leisure has been the growth in the provision of time off with full pay on holidays.

Before World War II, while major holidays were frequently observed throughout industry, the practice of providing pay for hourly rated employees was quite rare. During the war, the practice of paid holidays first began to spread, partly as a result of decisions by the National War Labor Board that the granting of as many as 6 paid holidays would be allowed within wage stabilization regulations. But in 1943, a Bureau of Labor Statistics analysis of collective bargaining contracts concluded:

Although an increasing number of union agreements make provision for paying wage earners for some or all of the major holidays, the majority of agreements in manufacturing, construction, and mining merely provide time off on holidays, without pay.¹²

After the war, the practice of paid holidays spread generally throughout industry. The most recent survey of holiday provisions in major collective bargaining agreements indicated that in 1958 only 12 percent of the workers covered were not

entitled to paid holidays.¹³ Nearly three-fifths of the workers under agreements calling for paid holidays were entitled to 7 or more paid holidays.

Currently, the average appears to be about 7 paid holidays in major American industries. In the country's metropolitan areas, data for 1961 show that all but 1 percent of the office workers and 5 percent of the plant workers received pay for holidays not worked (table 7). The majority of both office and plant workers received 7 or more paid holidays. Some 24 percent of the office employees had 9 or more paid holidays, but only 7 percent of the plant workers received this number. The average among those receiving holiday pay was 7.8 paid holidays for office workers and 7.0 for plant workers. Thus, the traditional advantage of office workers over plant workers with regard to this benefit still applies.

The number of paid holidays varied by industry. Traditionally, banks have had a liberal holiday policy, and over half of the office workers in the finance industry received 9 or more paid holidays, and over one-third, 11 or more. Among plant workers, the industry with the most extensive paid holiday provisions was public utilities. Among both office and plant employees, retail trade provided the fewest paid holidays.

Frequently, the additional paid holidays that have been recognized have been, not the tradi-

¹⁰ This figure is based on these computations:

1. To estimate the extent of the understatement because the survey week generally avoids all major holidays: The most recent survey week containing Labor Day (September 1959) showed 600,000 more persons on vacation than in the following September. The last survey week containing July 4 (July 1954) showed 1.3 million more people on vacation than in the following July. Assuming 7 holidays a year, 6 of which have the same effect as Labor Day, and adding 1.5 million for the seventh (July 4), additional vacation weeks due to the occurrence of holidays would be between 5 and 5½ million. Variations in the specific identity of the 6 paid holidays received by the average worker (footnote 15) due to differences in local customs, worker desires, employer practice, etc., account for the assumption that some workers observe holidays (and take vacations during the holiday week) on at least 7 different days during the year.

2. To estimate the extent of the understatement because no allowance was made for part-time vacations: According to household survey data, in the average week, about one-half of 1 percent of all employed persons take about one-third week part-time vacation. For 1960, this amounted to approximately 4–5 million vacation weeks. However, certain part-week vacations may not be fully reported in the monthly survey (for example, in weeks containing a holiday that are not survey weeks). Consequently, a judgment was made that the total understatement for part-week vacations might be somewhat higher than these statistics would indicate.

¹¹ Special Labor Force Report 14, *Labor Force and Employment in 1960* (Bureau of Labor Statistics, 1961), table E-3, p. A-36.

¹² "Vacations and Holiday Provisions in Union Agreements," *Monthly Labor Review*, May 1943, p. 929.

¹³ "Paid Holidays in Major Contracts, 1958," *Monthly Labor Review*, January 1959, pp. 26–32.

tional holidays, but days that provide additional leisure time at certain times of the year or a longer weekend. For example, holidays immediately preceding Christmas and New Year's Day have become increasingly popular. The Friday following Thanksgiving has become a recognized holiday in a small number of bargaining agreements. Following are two agreement clauses which illustrate how the selection of holidays has been geared to the desires of employees for longer weekends.

Washington's Birthday is designated as the holiday in February except when the observance of Lincoln's Birthday would provide a longer weekend, in which event Lincoln's Birthday shall be the observed holiday . . .

* * * * *

If Christmas Day is on—
 Sunday----- Preceding Friday
 Monday----- Preceding Friday
 Tuesday----- Preceding Monday
 Wednesday----- Day after Thanksgiving
 Thursday----- Following Friday
 Friday----- Preceding Thursday
 Saturday----- Preceding Friday¹⁴

How Much More Leisure?

Clearly there has been a marked increase in leisure time over the past 20 years. Admittedly, estimates of how much increase has taken place must be rough approximations, particularly since few data are available for 1940. Nevertheless,

¹⁴ Ibid., p. 30.

TABLE 5. VACATION PAY PROVISIONS¹ FOR OFFICE AND PLANT WORKERS IN METROPOLITAN AREAS,² BY INDUSTRY DIVISION, YEAR ENDING JUNE 30, 1961

[Percent of workers]

Amount of vacation pay and length of service ¹	Office workers							Plant workers						
	All industries	Manufacturing	Public utilities ³	Wholesale trade	Retail trade	Finance ⁴	Services ⁵	All industries	Manufacturing	Public utilities ³	Wholesale trade	Retail trade	Services ⁵	
All provisions.....	100	100	100	100	100	100	100	100	100	100	100	100	100	
AFTER 1 YEAR OF SERVICE														
Under 1 week.....	(⁶)	(⁶)	-----	(⁶)	(⁶)	-----	(⁶)	1	1	(⁶)	(⁶)	1	(⁶)	
1 week.....	23	16	53	26	63	3	25	73	77	64	59	69	70	
Over 1 and under 2 weeks.....	1	1	(⁶)	(⁶)	1	(⁶)	1	4	6	2	(⁶)	2	2	
2 weeks.....	75	80	46	72	35	96	70	18	13	31	36	27	18	
Over 2 weeks.....	2	2	(⁶)	1	(⁶)	(⁶)	3	2	2	2	1	(⁶)	2	
AFTER 5 YEARS OF SERVICE														
Under 2 weeks.....	1	1	(⁶)	1	2	(⁶)	3	5	5	(⁶)	6	6	14	
2 weeks.....	85	88	95	89	81	79	66	82	83	94	84	74	74	
Over 2 and under 3 weeks.....	5	3	(⁶)	2	1	11	8	5	7	1	2	2	2	
3 weeks.....	9	7	4	7	15	9	19	6	4	4	7	17	2	
Over 3 weeks.....	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	3	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	1	
AFTER 10 YEARS OF SERVICE														
Under 2 weeks.....	1	1	(⁶)	1	2	(⁶)	3	4	3	(⁶)	4	6	14	
2 weeks.....	50	47	71	52	41	46	47	48	45	71	54	39	61	
Over 2 and under 3 weeks.....	8	13	3	3	1	9	1	18	26	3	4	1	3	
3 weeks.....	40	38	25	42	53	44	42	27	23	24	34	51	14	
Over 3 weeks.....	1	1	1	1	2	(⁶)	6	2	2	1	1	3	1	
AFTER 15 YEARS OF SERVICE														
Under 2 weeks.....	1	1	(⁶)	1	2	(⁶)	3	4	3	(⁶)	4	6	14	
2 weeks.....	15	13	5	25	26	12	27	19	16	3	29	28	44	
Over 2 and under 3 weeks.....	1	1	(⁶)	1	(⁶)	1	1	2	3	(⁶)	1	(⁶)	2	
3 weeks.....	79	81	92	71	69	80	60	69	71	92	62	61	32	
Over 3 weeks.....	5	4	2	2	3	7	9	5	5	4	2	4	3	
AFTER 25 YEARS OF SERVICE														
Under 2 weeks.....	1	1	(⁶)	1	2	(⁶)	3	4	3	(⁶)	4	6	14	
2 weeks.....	13	12	5	24	24	9	25	17	15	3	28	26	42	
Over 2 and under 3 weeks.....	(⁶)	1	(⁶)	(⁶)	(⁶)	(⁶)	1	2	3	(⁶)	1	(⁶)	2	
3 weeks.....	46	49	56	43	24	42	50	43	44	56	43	32	31	
Over 3 and under 4 weeks.....	3	6	(⁶)	1	-----	1	1	7	11	1	1	(⁶)	1	
4 weeks.....	37	31	38	30	50	47	19	25	22	38	22	36	5	
Over 4 weeks.....	1	(⁶)	1	(⁶)	(⁶)	2	(⁶)	(⁶)	(⁶)	1	(⁶)	(⁶)	(⁶)	

¹ Includes percentage or flat-sum type payments converted to equivalent weeks of pay. Periods of service were arbitrarily chosen and do not necessarily reflect the individual provisions for progression. For example, the changes in proportions indicated at 10 years' service include changes in provisions occurring between 5 and 10 years.

The distribution does not indicate the number of workers actually receiving vacations of the stipulated length, since this depends on the number meeting length-of-service and other eligibility requirements.

² See text footnote 6.

³ See footnote 2, table 3.

⁴ See footnote 3, table 3.

⁵ See footnote 4, table 3.

⁶ Less than 0.5 percent.

they give for the first time some indication of the magnitude of changes in paid leisure time. Essentially, the increase in leisure time in 1960 over 1940¹⁵ consists of the following:

	<i>Hours per year per full-time employed person</i>
1½ hours less in the workweek-----	75
6 days more paid vacation-----	48
4 days more paid holidays-----	32
Total-----	155

For the economy as a whole, this additional leisure time amounts to over 10 billion hours (5.0 billion from the shorter workweek, 3.2 billion in additional vacation, and 2.1 billion in added holidays).

Many of these hours represent additional time away from work. This is obviously true, for example, of the reduction in the workweek. However, the additional paid holidays largely represent payment for time which in 1940 was spent away from the plant without compensation. The additional vacation time is a combination of these two factors.

The 155 hours represent almost 4 average weeks of employment, but they represent only a small fraction of the gain in productivity that the national economy has achieved since 1940. BLS estimates of output per man-hour would indicate that to produce the 1960 output with the 1940 productivity would have required an additional 1,447 hours of working time—or 71 percent more—for each employed member of the 1960 labor force.¹⁶ Thus, the 155 hours that have been accounted for in terms of reduced hours of work, increased vacations, and paid holidays amount to only 11 percent of the hours that have been made available by the Nation's increased productivity since 1940.

While this gain in leisure time represents only a relatively small proportion of the increased

TABLE 6. ESTIMATED NUMBER OF FULL VACATION WEEKS OF EMPLOYED PERSONS, 1948, 1952, 1956, AND 1960

Item	1948	1952	1956	1960
Number of full vacation weeks (millions)-----	1 55.5	59.9	71.5	83.5
During July and August-----	1 38.5	36.2	42.0	49.4
During other 10 months-----	19.0	23.7	29.5	34.1
Average number of persons employed (millions)-----	59.1	61.0	64.7	66.7
Average number of vacation weeks per employed person-----	.9	1.0	1.1	1.3

¹ Survey week in July included July 4.

TABLE 7. PAID HOLIDAY PROVISIONS¹ FOR OFFICE AND PLANT WORKERS IN METROPOLITAN AREAS,² BY INDUSTRY DIVISION, YEAR ENDING JUNE 30, 1961

[Percent of workers]

Number of paid holidays ¹	All industries	Manufacturing	Public utilities ³	Wholesale trade	Retail trade	Finance ⁴	Services ⁵
OFFICE WORKERS							
All provisions--	99	99	99	99	98	99	98
Less than 6-----	4	2	1	7	10	5	8
6 and 6½-----	19	14	9	26	42	18	20
7 and 7½-----	33	49	47	24	32	10	20
8 and 8½-----	19	22	21	23	7	15	19
9 or more-----	24	12	22	20	7	51	21
Average number ⁶ -----	7.8	7.4	7.8	7.5	6.7	8.9	7.4
PLANT WORKERS							
All provisions--	95	96	98	97	93	-----	77
Less than 6-----	8	5	2	13	18	-----	18
6 and 6½-----	21	15	12	27	40	-----	35
7 and 7½-----	44	52	49	23	22	-----	14
8 and 8½-----	16	17	18	19	10	-----	4
9 or more-----	7	6	16	14	4	-----	6
Average number ⁶ -----	7.0	7.1	7.6	7.1	6.1	-----	6.1

¹ All combinations of full and half days that add to the same amount are combined; for example, the proportion of workers receiving a total of 7 days includes those with 7 full days and no half days, 6 full days and 2 half days, 5 full days and 4 half days, etc.

² See text footnote 6.

³ See footnote 2, table 3.

⁴ See footnote 3, table 3.

⁵ See footnote 4, table 3.

⁶ Based on workers in establishments providing paid holidays.

productivity since 1940, this is not unexpected. Much of the limited productivity gains of the previous decade, 1930-40, were reflected in shorter hours of work, not because workers preferred greater leisure but because of the depressed conditions of the decade. The passage of the Fair Labor Standards Act to a large extent reflected changes in hours that had already taken place.

¹⁵ Estimates in the tabulation presented here were derived as follows:

Average hours of work: The drop of 1½ hours per week seems reasonable in view of the 1.3-hour drop for full-time workers between 1948 and 1960 (table 1). Comparable estimates for 1940 are not available.

Paid vacation: Figure assumes an average paid vacation per employee of 0.3 week in 1940 and 1.5 weeks in 1960. The 1940 figure would make allowance for the following paid vacation: none for farm workers; 1 week for one-fourth of all manual and service workers (roughly the proportion of the 1940 survey for union members; see footnote 8); 2 weeks for one-half of the white-collar workers; and 1 week for one-fourth of the white-collar workers. The 1960 figure is based on 1.3 weeks of full vacation (table 6) plus an allowance for the understatement described in footnote 10.

Paid holidays: Figure represents the difference between 2 paid holidays in 1940 and 6 paid holidays in 1960. The 1940 figure allows no paid holidays for farm workers, 1 for manual workers, and 5 for white-collar workers. The 1960 figure is based on 7.0-7.8 paid holidays for workers in metropolitan areas (table 7) and a smaller number for workers outside these areas.

¹⁶ An alternative method of determining the allocation of productivity gains to income and leisure would be to compare the actual 1960 output with that resulting from applying 1960 man-hours at 1940 levels of productivity. This procedure also involves taking into account the reduced annual hours worked during this period. The results from the two methods are essentially the same.

In the two decades following the 1930's, the emphasis quite naturally was on income rather than leisure.

A review of the changes in paid leisure between 1940 and 1960 shows that there was no major shift in the standard workweek. Perhaps the most significant development was that more than half the total gain in paid leisure resulted from increased vacation and holiday time, rather than from a reduction in working hours. This is a definite shift from the pattern of earlier years and seems to indicate that leisure time preferences are running more to additional whole days each year rather than additional minutes each day.

Of course, the leisure time gained since 1940 does not necessarily represent time available for travel, recreation, etc. The nature of the economy and the Nation's living habits have changed in important ways since 1940, and since individuals now live farther from their place of employment, some of this additional "leisure" time may now be spent in commuting to and from work.

Although the average employee has more leisure time today than in 1940, many individuals continue to prefer more work to more leisure in order to maximize their income. The operation of today's economy makes it possible for those who wish to work longer hours to do so, either by accepting overtime when it is available or by

obtaining a second job. The economy also makes it possible for more people, especially women, to work at part-time jobs.

It is difficult to generalize about future trends in leisure time from this record. There is no way to measure the intensity of the demand for more leisure time against the intensity of the demand for greater income to be spent on leisure time activities. Trade unions continue to present demands for a shorter workweek, although much union pressure in this direction is motivated not by the desire for more leisure but by the possibility of increasing the number of jobs. Of course, regardless of the motivation, the attainment of shorter hours of work would bring with it greater leisure time.

Changes in vacation and holiday practices continue to be negotiated in collective bargaining. A number of unions have also expressed interest in some type of extended paid leave provided periodically for longer service employees.

One new factor is the form which the demands for leisure time are likely to take. The relatively slight decline in average hours of work in recent years has been accompanied by a greater interest in more extended paid vacations and a greater number of paid holidays. Providing a greater number of days off seems likely to continue to receive greater emphasis than reducing the time spent each day at work.

We have decided upon and at once put into effect through all the branches of our industries the 5-day week. Hereafter there will be no more work with us on Saturdays and Sundays. These will be free days, but the men, according to merit, will receive the same pay equivalent as for a full 6-day week. A day will continue to be 8 hours, with no overtime. . . . age-old custom viewed leisure as "lost time"—time taken out of production. . . . The leisure was a loss—which a good employer might take from his profits. . . . there is a profound difference between leisure and idleness. . . . We think that, given the chance people will become more and more expert in the effective use of leisure. . . . But it is the influence of leisure on consumption which makes the short day and the short week so necessary. The people who consume the bulk of goods are the people who make them. That is a fact we must never forget—that is the secret of our prosperity.

—Henry Ford, in an interview with Samuel Crowthers, appearing in *World's Work* for October 1926, as quoted in the *Monthly Labor Review*, December 1926, pp. 1162–1165.

The 10-Hour Day in the Philadelphia Navy Yard, 1835-36

O. L. HARVEY*

EDITOR'S NOTE.—*The following article is of historical interest because it describes what is probably the first instance of action by the Federal Government regarding labor.*

AGITATION for the 10-hour day reached its peak in Philadelphia during the 1830's. By 1834, shipyard mechanics had persuaded the private yards to accept their proposed schedule of hours but had received no concessions from the local Navy yard. Correspondence in the National Archives¹ indicates, however, that the problem was settled in favor of the mechanics by two changes in Navy work schedules—one in 1835 and the other in 1836.

The Navy Yard Schedule in 1835

In the absence of evidence to the contrary, it is assumed that the work schedule for the Navy yard which was officially approved in 1819 was still in force in early 1835. Regulations governing the hours of work of mechanics in all U.S. Navy yards were officially reported to the Board of Navy Commissioners—a body independent of the Secretary of the Navy—in reply to a request from John Rodgers, chairman of the Board, to all Navy yard commandants on December 30, 1818.² The reply from Comdr. Alex. Murray, at that time commandant of the Philadelphia yard, was transmitted on January 6, 1819.³ It records a schedule, which the Board approved March 24,⁴ “as agreed upon by the Naval Constructor and myself for the consideration of the Board of Commissioners.” This schedule is shown in the table accompanying this article.

On April 30, 1835, the then commandant of the Philadelphia Navy Yard, Capt. James Barron, wrote to the chairman of the Board (still James Rodgers) stating that he (Barron) had refused to employ ship riggers and others who were unwilling to accept the existing schedule of workhours but had expressed willingness to work at the schedule obtaining in private yards in the same metropolitan area.⁵ The latter schedule, Barron wrote, “differ(s) from ours altogether,” and he illustrated the difference by a comparison: The Navy yard worked from sunrise to sunset, with 45 minutes for breakfast at 7 a.m. and an hour for dinner at 1 p.m.⁶ Private yards worked from sunrise to 6 p.m., with an hour for breakfast at 8 a.m. and 2 hours for dinner at noon.

In reply, on May 2, Rodgers approved Barron's decision, though recommending some relaxation, allowing perhaps an hour for breakfast and up to ½ to 2 hours for dinner during “the long, hot days of summer.”⁷ However, he left the decision to the commandant, saying that the yard's schedule should be “regulated at your discretion, commencing at sunrise and closing the day's work at sunset.” Even with the contemplated relaxation, the workday would have ranged from about 7½ hours in midwinter to almost 12 hours in midsummer.

On the spot in the midst of the agitation, Barron was none too happy with the Navy requirements. In a letter of June 8 to Rodgers, he even suggested the advantages of the Commissioners' proffering

*Of the U.S. Department of Labor.

¹ Relevant correspondence is to be found in the letter books and journal of the board of Navy Commissioners and the letter book of the Secretary of the Navy for the years 1835 and 1836. For convenience, the following abbreviations (in parentheses) are used in subsequent footnotes referring to these bound documents:

Navy Commissioners' Office:

Letters from Secretary Navy (NCO-Sec)

Letters to Commandants (NCO-Com)

Letters from Commandant, Philadelphia (NCO-Phila)

Board of Navy Commissioners:

Circulars Issued (BNC circ)

Journal (BNCJ)

John R. Commons (ed.), *A Documentary History of American Industrial Society, Vol. VI, Labor Movement, 1820-1840* (Cleveland, The Arthur H. Clark Co., 1910). (Commons)

For her intelligent help in discovering this correspondence for me, my thanks to Mary Goggin, Navy Division, National Archives.

² BNC circ, vol. 1.

³ This is an unbound document. It was incorrectly dated December 6, 1818, by the recording clerk; the postmark reads January 6.

⁴ NCO-Com, vol. 2, p. 50.

⁵ NCO-Phila, 1835.

⁶ Presumably Capt. Barron was describing the schedule in effect at time of writing.

⁷ NCO-Com, vol. 10, p. 307.

a workday of 6 a.m. to 6 p.m., arguing that such a condition already had been accepted for mechanics in some private employment and was likely to come about eventually in the Navy yard.⁸ For the information of the Commissioners, he enclosed a printed copy of the schedule of hours which the shipwrights and other mechanics were demanding.

(The mechanics sought to limit hours of work to approximately 10 a day year round. They concentrated their main efforts on the summer months, seeking to end the workday at 6 p.m. and to double the time allowed for dinner. Presumably no thought was given at this time by either party (except, in passing, by Barron) to the added possibility of starting all days at, say 7 a.m. and requiring that breakfast throughout the year be taken before coming to work.)

In his reply of June 23, 1835, Rodgers argued that, though the mechanics' proposal did not differ materially from the schedules obtaining in the various Navy yards, there were nevertheless many reasons why it would be inexpedient to adopt them for the public service.⁹ He conceded, however, that "there seems to be no reason why the extent

and distribution of their [the mechanics'] time for a day's work should not be left subject to such regulations as circumstances may require, according to the nature and adequacy of the public service."

At this point, the National Trades' Union stepped into the picture, with a memorial dated July 2, 1835, from the Philadelphia Committee on Correspondence (J. Moulder, William Fallen, and Charles Myrtill) to the Secretary of the Navy, Mahlon Dickerson, in which they enclosed a copy of the schedule Barron had sent Rodgers and which, they wrote, had been "agreed upon some 18 months since" with the private yards.¹⁰ They urged its adoption at the Navy yard.

The reply came from Acting Secretary John Boyle, in the absence of Secretary Dickerson.¹¹ The Acting Secretary was not lacking in sympathy with the proposal; he agreed that the hours of labor should be modified.

The mechanics took this letter to Barron, who properly refused to act on it until he had been instructed officially.¹²

On his return to the office, Secretary Dickerson wrote to John F. Stump of the mechanics' committee, concurring with Boyle's opinion. His letter (dated August 17, 1835), however, is curiously worded. "I think," he wrote, "10 hours

⁸ NCO-Phila, 1835.

⁹ NCO-Com, vol. 10, p. 356.

¹⁰ NCO-Sec 1835, p. 190.

¹¹ Ibid., p. 198.

¹² Ibid., p. 193.

WORKING-HOURS REGULATIONS, PHILADELPHIA NAVY YARD, 1819, 1835, AND 1836

[All columns except the first two are duration in hours and minutes]

Date	Time of—		Length of day	Time off ¹			Working time		
	Sunrise	Sunset		Jan. 6, 1819	Aug. 26, 1835	Sept. 3, 1836	Jan. 6, 1819	Aug. 26, 1835	Sept. 3, 1836
Jan. 1-15	7:27	16:56	9 29	1 30	1 45	1 45	7 55	7 44	7 44
Jan. 16-31	7:25	17:10	9 45	1 30	1 45	1 45	8 15	8 00	8 00
Feb. 1-15	7:15	17:29	10 14	1 30	1 45	1 45	8 15	8 00	8 00
Feb. 16-28	7:00	17:45	10 45	1 30	1 45	1 45	8 44	8 29	8 29
Mar. 1-15	6:41	18:00	11 19	1 45	2 00	2 00	9 15	9 00	9 00
Mar. 16-31	6:20	18:15	11 55	1 45	2 00	2 00	9 34	9 19	9 19
Apr. 1-15	5:54	18:31	12 37	1 45	2 00	2 00	10 10	9 55	9 55
Apr. 16-30	5:32	18:45	13 13	1 45	2 30	2 00	10 52	10 37	10 37
May 1-15	5:11	19:00	13 49	1 45	2 30	4 00	12 04	10 43	11 13
May 16-31	4:55	19:14	14 19	1 45	2 30	4 14	12 34	11 19	9 49
June 1-15	4:45	19:27	14 42	2 45	3 00	4 27	11 57	11 42	10 05
June 16-30	4:42	19:36	14 54	2 45	3 00	4 37	12 09	11 54	10 15
July 1-15	4:46	19:38	14 52	2 45	3 00	4 38	12 07	11 52	10 17
July 16-31	4:54	19:33	14 39	2 45	3 00	4 33	11 54	11 39	10 14
Aug. 1-15	5:08	19:20	14 12	2 45	3 00	4 20	11 27	11 12	10 06
Aug. 16-31	5:22	19:03	13 41	2 45	2 30	4 03	10 46	11 11	9 52
Sept. 1-15	5:36	18:39	13 03	1 45	2 30	2 00	11 18	10 33	9 38
Sept. 16-30	5:48	18:17	12 29	1 45	2 00	2 00	10 44	10 29	11 03
Oct. 1-15	6:04	17:51	11 47	1 45	2 00	2 00	10 02	9 47	10 29
Oct. 16-31	6:17	17:30	11 13	1 45	2 00	2 00	9 28	9 13	9 47
Nov. 1-15	6:34	17:08	10 34	1 45	1 45	2 00	8 49	8 49	8 34
Nov. 16-30	6:51	16:54	10 03	1 30	1 45	2 00	8 33	8 18	8 03
Dec. 1-15	7:08	16:46	9 38	1 30	1 45	1 45	8 08	7 53	7 53
Dec. 16-31	7:20	16:47	9 27	1 30	1 45	1 45	7 57	7 42	7 42

¹ Includes time allowed for breakfast and dinner, and the time between quitting and sunset.

SOURCE: Hour of sunrise and sunset derived from *Climatic Handbook of Washington, D.C.* (U.S. Weather Bureau, 1949), and length of day computed

from these hours (the resulting figures exceed by some 9 minutes those shown in the source cited below for 1835). Time off and working time are from sources cited in following text footnotes: 1819, footnote 3; 1835, footnote 14; and 1836, footnote 22.

of labor in a Navy yard should *upon an average* be considered a day's work."¹³ (*Italics supplied.*) But the decision, he pointed out, would have to be made by the Board of Navy Commissioners, whose functions, by law, were independent of those of the Secretary of the Navy.

His thought becomes more explicit when one examines the Board's journal for August 26, 1835, where an amended work schedule is presented, together with the computations followed in arriving at it.¹⁴ What the computations reveal is a method by which the length of workday varies with the season of the year, but, *taken over the year as a whole*, yields an average (9 hours, 53 minutes) verging on 10 hours.

On the same date, August 26, 1835, Board Chairman Rodgers issued a circular to the commandants of all Navy yards, establishing the amended schedule as regulations.¹⁵ He commented to Barron, in a separate note that "the Board could not, consistently with their idea of public duty, recognize any arrangement for one yard, which should not be common to all."¹⁶

Subsequent entries on the Commissioners' copy of the circular of August 26 suggest that the effective date of the regulation was delayed for several yards until October. No such entry is posted against Barron's name, but there is reason for believing that the Philadelphia timing was similarly delayed, because, at the second convention of the National Trades' Union at New York City in October 1835, William Murphy reported success in negotiations with private shipyards, but none with the Navy.¹⁷ The convention decided to continue its agitation and to petition the Congress and the President for Navy adoption of the schedule already existing in private yards.

The Schedule Adopted in 1836

The effects of this agitation are reflected in a message from Barron to Rodgers some months later, on June 18, 1836, in which he pointed out that the difference in hours between private and

Navy yards (regardless of the recent change in the Navy schedule) had caused so much criticism that he would favor conformance with local custom.¹⁸ Then, in August 1836, Philadelphia workmen memorialized the President.¹⁹ As a result, on August 31, 1836, Dickerson wrote Rodgers to instruct Barron to adopt the hours prevailing in private yards in the City and County of Philadelphia.²⁰ This instruction Rodgers transmitted to Barron on September 1.²¹ The regulations posted by Barron on September 3 correspond in all essentials with the demands earlier propounded by the mechanics.²²

Setting a Precedent

Rodgers' regulations of August 26, 1835, constitute the first Navy order (and probably the first from a Federal Government agency) accepting the 10-hour day principle, and his order of a year later, on September 1, 1836, issued under instructions from the Secretary of the Navy, was the first to establish it in practice, at least in the Philadelphia Navy Yard, in accordance with the objectives sought by the mechanics. At the third convention of the National Trades' Union, meeting in Philadelphia during October 1836, it was observed, however, that this concession at the Philadelphia Navy Yard was not a general order. The convention thereupon moved to petition the President of the United States to establish a uniform 10-hour day on all public works.²³ It was not until March 31, 1840, that President Van Buren issued the first order that mechanics and laborers employed anywhere in the Executive Branch should be required to work no more than "the number of hours prescribed by the 10-hour system."

¹³ Navy Department, General Letter Book No. 21, 1834-35, pp. 419-422.

¹⁴ BNCJ, 1834-36, p. 318.

¹⁵ BNC circ, vol. 2, p. 318.

¹⁶ NCO-Com, vol. 10, p. 401.

¹⁷ Commons, pp. 231-248.

¹⁸ NCO-Phila, 1836.

¹⁹ Commons, p. 301.

²⁰ NCO-Sec 1836, p. 216.

²¹ NCO-Com, vol. 11, p. 246.

²² NCO-Phila, 1836.

²³ Commons, pp. 277-279 and 304.

Training for Executive Staff in Labor Unions

JOSEPH MIRE*

OPPORTUNITIES FOR EXECUTIVE TRAINING of union officials and staff members are lacking in our educational system. Such training requires a specific curriculum which no institution of higher learning is offering today. Nor has labor, until now, seen fit to establish under its own auspices some center where such training might be undertaken.

The need for such training opportunities needs little documentation. Within the lifetime of most union leaders, the nature of their work has changed from that of a simple propagandist to that of a highly complicated and responsible profession requiring training and expert knowledge in many fields. These profound changes have put great demands on the union official.¹ In addition to having the skills of popular leadership, he must know at one time or another how to interpret and utilize the studies of industrial engineers, the opinions of lawyers, or the advice and findings of actuaries, economists, political scientists, sociologists, and other specialists. The development of mutual respect and constructive attitudes on problems of employer-employee relations requires of both sides of the bargaining table competence and knowledge of a wide variety of subjects.

These subjects concern the whole area of collective bargaining, the impact of technological changes on the union and the worker, complex problems of union administration, intra as well as extra union communication, government regulation and legislation, participation in community leadership, foreign policy, and international labor affairs.

An empirical approach to the problems of the day makes for a practical and realistic policy, but it cannot fully prepare union leaders for situations

which they neither expect nor desire. Labor needs an understanding of its larger aims and purposes and of the society of which it is a part, an understanding which only learning can provide. The complexity of industrial relations, and the interdependence of all economic groups in society, make a concern for broader social, political, and economic concepts and implications imperative.

American labor education, whether conducted by unions under their own auspices, or in cooperation with universities,² is devoting considerable effort to the training of union staff and officers. This training, however, concentrates heavily on knowledge and skills necessary in the exercise of union leadership in everyday matters such as collective bargaining, union administration, labor law, grievance procedures, parliamentary law, and public speaking. As a rule training is non-residential and seldom extends beyond 1 week.

The NILE Union Staff Institutes

To meet the needs of the labor movement for staff well grounded in traditional social science subjects, the National Institute of Labor Education sponsored three experimental 10-week residential study institutes in 1961. They were held at the University of California (Berkeley), Cornell University, and Michigan State University (jointly with the University of Michigan and Wayne State University) and will be repeated in 1962. Some 53 union representatives participated in the program which centered around four core subjects: Central Economic Problems of the 1960's, American Government and Politics, Man and Society, and The American Labor Movement (History and Philosophy).

This program was supplemented by seminars and evening sessions on a variety of subjects, such as trade unions and the public interest, the defense of a free society, civil liberties and civil order, the organization of business and industry, the welfare state, government regulations of unions, and technology and institutions.

*Executive Director, National Institute of Labor Education.

¹ The term "union official" as used here comprises full-time appointed or elected union officers and staff, including those at the national or international level, and those in charge of statewide district or local organizations.

² Twenty-two universities have established full-time staffs and year-round services for labor groups. In addition, some 60 other colleges and universities render limited services to workers and unions, ranging from regular evening classes and summer institutes for teacher training courses to occasional institutes or conferences on the university premises.

Heavy reading assignments were an integral part of the program. They were set rather high to make the students realize that they needed to speed up their reading. This promptly led to the addition of much-appreciated courses in improving reading skills at all three universities. At Michigan State, the students discovered an ingenious way to save time in their reading while actually getting more out of the material. They organized themselves into five "reading teams," divided the reading assignments, and then held "bull sessions" over the materials that had been read.

The California group spent a weekend at the Marine Cooks and Stewards Training School in Santa Rosa discussing the role of religion in society. They were joined in their discussions by a Protestant minister, a Catholic priest, a Jewish rabbi, and a Buddhist priest. Other extracurricular activities included a visit to an art center (Michigan) and several volunteer research projects. One group of students (California) conducted an opinion poll to find out what university students thought about labor-management problems. Another group studied the attitude of 1,000 plant workers toward the problems of retirement, and still another studied job evaluation in the State services. Taking advantage of the presence of a management group on campus, the Cornell students engaged in mock bargaining with their roles reversed.

Organization of Curriculum. The three universities used different approaches in organizing their programs: *California (Berkeley)* offered two of the courses—Labor History and Philosophy and American Government and Politics—during the first 5 weeks and the other two—Economics and Man and Society—during the last 5 weeks. In addition, the program included a reading and writing skills course, seven 3-hour seminars, and two weekly evening sessions.

Cornell held courses on Labor History and American Government during the first 4 weeks, continued with a weeklong seminar on Governments, Public and Private—The Regulation of Union Activities, and followed with the courses on Economics and Man and Society during the next 4 weeks. The last week was fully devoted to a seminar on the Welfare State. The program was supplemented by a course on improving

reading, 5 daylong seminars, and 17 evening sessions.

Michigan started the first week with Labor History and Economics and added the course on Man and Society in the third week and Government and Politics in the fourth. Three daylong lecture-discussion sessions on Technology and Society, Organization and Man, and the United States and the World Community were used to introduce three of the four core subjects. Seven daylong seminars and 16 evening sessions made up the remainder of the program.

To provide for a continuous analysis of the program, the director held separate weekly meetings at Michigan State University with all students and with the faculty. In addition, the students met at the home of a different instructor each week for a bull session continuing until the late hours of the night in which students were free to raise any questions related to the program.

A typical program during 1 week at each of the universities follows:

California (Berkeley): First Week

Monday, Tuesday, Thursday, Friday, 9:30 to 3:30:

Reading Skills: Mrs. Irene Athey

Labor History and Philosophy: Dr. Walter Galenson,
Professor of Economics and Industrial Relations

American Government and Politics: Dr. DeVere
Pentony, Assistant Professor of International Relations

Wednesday, 9:00 to 12:00: Seminar on Discussion Methods: Dr. Harry Miller, Berkeley

Wednesday, 2:00 to 3:30: Library Orientation

Thursday, 4:00: Tour of Industrial Relations Library

Evening sessions:

Tuesday: U.S. Foreign Policy: Dr. Richard Cox, Department of Political Science

Thursday: Technology and Institutions: Dr. Leon Lee, San Jose State College

Michigan: Sixth Week

Monday: Daylong session on Social Security: Dr. William Haber, Professor of Economics, and Fedele Fauri, Dean of School of Social Work

Tuesday through Friday, 9:00 to 3:00:

Economics: Dr. Jack Stieber, Director of Labor and Industrial Relations Center

Sociology: Dr. James B. McKee, Associate Professor, Department of Sociology and Anthropology

Psychology: Dr. Eugene H. Jacobson, Associate Professor, Department of Psychology

Political Science: Dr. Ralph M. Goldman, Associate Professor, Department of Political Science

The Labor Movement: Dr. Albert A. Blum, Assistant Professor, Department of Social Science

Increasing Reading Productivity: Professor Robert Repas, Coordinator, Labor and Industrial Relations Center

Saturday and Sunday: Session on Art and Society: Visit to Detroit Art Center, guided by Professor Alden Smith, Jack Bailly, and Virginia Harriman

Evening session, Wednesday: Economics: Dr. Jack Stieber

Cornell: Last Week

Monday through Thursday, 8:30 to 3:00:

Socialism and Public Ownership: Dr. Douglas F. Dowd, Assistant Professor of Economics

The Welfare State Controversy: Dr. Duncan M. MacIntyre, School Of Industrial and Labor Relations

The Welfare State in Being, an Examination of British and Swedish Social Services: Dr. Duncan M. MacIntyre

The Welfare State and Collective Bargaining: Dr. Donald E. Cullen, Associate Professor, School of Industrial and Labor Relations

The Welfare State at Home: Dr. Duncan M. MacIntyre

The Labor Movement and the Future: Professor George W. Brooks, Visiting Professor, School of Industrial and Labor Relations

Evening sessions, Monday through Wednesday:

Civil Liberties and Civil Rights: Dr. Milton R. Konvitz, Professor, School of Industrial and Labor Relations

Thursday:

Closing ceremonies—Speech by Mr. Joseph D. Keenan, Secretary, International Brotherhood of Electrical Workers

pating university and several union education directors. Sixty-five written applications were received in 1961, of which 63 were approved—3 of these only after personal interviews with the applicants. There were 13 dropouts—10 before the beginning and 3 during the institutes.

Financial Arrangements. A generous grant received from the Fund for Adult Education made it possible to absorb the major cost of administration and tuition and to offer scholarships covering approximately half the cost of room and board. The other costs—loss of income, travel, spending money, and the remainder for room and board—were borne either by the union or the student and sometimes by both. The three participating universities each contributed substantial funds to assure the recruitment of a well-qualified faculty.

Cooperation With Labor. Labor's cooperation in the NILE staff institutes was of the highest order. Seldom before have educational representatives of labor organizations been so intimately involved in every aspect of a university conducted program. Through the instrumentality of a special advisory committee, labor's advice and assistance was sought at every stage, with subcommittees dealing with problems of recruitment and selection of candidates and evaluation of the program.

Evaluation

Because of the experimental character and great importance of this program, NILE, with the assistance of another grant from the Fund for Adult Education, is making a substantial effort to evaluate the three institutes. Careful records are being kept by the three universities on every aspect of the program, i.e., composition and selection of students, curriculum, faculty, teaching methods, accommodations, etc. In addition, a team of three evaluation specialists working under the direction of Professor Goodwin Watson of Teachers College, Columbia University, has been conducting a series of before and after interviews as well as tests on the four subject matters in an attempt to learn what changes in knowledge, perception, and attitudes have occurred.

This process will be repeated for the 1962 institutes, and the results should offer some clue as to whether institutes of that type can develop a more broadly versed and sophisticated union staff.

Criteria for Eligibility and Selection of Students.

The institutes are open to any member of a bona fide union serving in a responsible union position (elective or appointive), who is sponsored by either a local union, an international, or a city or State central body. A definite preference is indicated in the prospectus and application blank for full-time staff; however, part-time staff are not barred if they have the breadth of experience and background to benefit in measurable degree from the program. Another important consideration is the assurance that an applicant will return to a responsible position in the labor movement after completion of the institute.

There are no academic requirements for admission. Applicants are expected, however, to be able to read and write with moderate ease since both are a vital part of the program.

The final decision on admission rests with a Committee on Selection appointed by the National Institute of Labor Education. The committee includes representatives of each partici-

Papers From the 1961 IRRA Meeting

EDITOR'S NOTE.—*The following four articles, excerpted from papers presented at the Industrial Relations Research Association meetings in New York, December 28–29, 1961, were selected for their diversity of subject matter as well as special interest for Monthly Labor Review readers. Minor word changes have been made to facilitate transitions. Footnotes, except as references for material quoted by the authors, and supporting tabular material have been omitted.*

Industrial and National Wage Levels Under Big Unionism

FRANK C. PIERSON*

A WIDELY HELD VIEW among contemporary economists is that unions exert little independent influence on broad national wage movements, let alone on the relationship between the general wage and price level or on relative shares in the real national product. The economic impact of unionism is said to be limited almost wholly to local markets or to rather narrow subsectors of the economy. Such opinion on this vital issue is quite wrong and should be rather drastically revised.

In their role as economic institutions, unions can be thought of as performing two principal functions. First, they try to cut in on whatever special economic opportunities already exist, or can be created, in the environment in which the unions happen to operate. Second, they endeavor to extend these special opportunity gains to workers in other firms, which sometimes are subject to the same economic conditions but often are not. The hypothesis to be examined here is that, absent unions, employers in the first category would not generally share special opportunity gains with their employees, and employers in the second category would not generally be subject to effective pressure to match these improvements in working conditions. Unions, of course, encounter various degrees and kinds of resistance from em-

ployers in carrying out these two functions, but the capacity and willingness of employers to resist sustained, well-organized union pressure is often quite limited. The firms within a given industry which enjoy above-average profit prospects may have the resources but may also lack the economic motivation to withstand such pressures, while the firms with below-average profit prospects may have the economic motivation but may also lack the necessary resources to resist. In a nonunion world, the pressures on employers to share gains with their employees tend to be sporadic and ineffective, but in a union world, these pressures tend to become pervasive and overriding.

Wages in Past Recessions

There are various ways in which the hypothesis outlined above can be tested empirically. The following questions of fact need to be answered: (1) Have the largest unions, despite important differences in the industries in which they operate, generally led the way in securing gains equal to or in excess of those granted by other industries? (2) Have wage and benefit levels in other important industries followed the increases won by the largest unions quite closely? (3) Have the increases in wages and benefits in industry generally clearly exceeded levels that could be explained strictly on market or economic grounds during periods of sluggish expansion and continuing unemploy-

*Professor of Economics, Swarthmore College.

ment? (4) Have wage-benefit levels continued to rise in the economy even in periods of recession? (5) Finally, have wage-benefit levels in the industries in which the largest and most powerful unions operate risen considerably more than economic conditions in these industries would warrant? Below is a brief review of the evidence on each of these five points for six large union groups—in automobile manufacturing (motor vehicles and equipment), building construction, bituminous coal mining, class I railroads, basic steel, and local city trucking—and for the economy as a whole during the 1947–60 period.

As to the first question, the gains secured by the six union groups were well in excess of those granted by industry generally between 1947 and 1960. In absolute terms, the increases in straight-time hourly earnings in the six industries ranged from \$1.31 in automobiles to \$1.76 in construction, as against \$1.03 in all manufacturing. The percentage gains in the six industries relative to the all-manufacturing average were somewhat less striking, since the former had started from higher base values. If comparative data on fringe benefits were available, the contrast on both absolute and relative grounds would have been a good deal sharper. The foregoing results seem wholly consistent with the hypothesis that these large unions exerted an important independent influence on industry wage levels during this period—certainly a greater influence than could be explained in terms of market developments alone.

Regarding the second question, there was a striking similarity in the movement of wages and benefits in a wide variety of industries during this period, but whether the settlements reached by the biggest unions were chiefly responsible for this outcome is open to debate. Despite widely contrasting economic trends, average hourly earnings in durable and nondurable manufacturing rose in about the same proportion between 1946 and 1960, each slightly more than doubling over this period. Hourly earnings in trade and related fields also rose by about the same percentage during this time, although mounting demand pressures relative to available supplies of labor could explain much of the increase in these areas. Using 1947 instead of 1946 as a base, the percentage differences in wage increases in durables compared with nondurables were somewhat greater. Thus, while

the influence of the big bargaining settlements was felt in a wide range of industries during the postwar period, this influence appears to have been of only indirect and minor significance in many industries further removed from the big union centers.

Regarding the third question, the rather limited recoveries occurring between 1953 and 1960 were all marked by fairly sharp advances in wage-benefit levels despite persistent unemployment. In the 1954–57 expansion, unemployment of the nonfarm work force averaged slightly over 5 percent and even in the peak year of 1957 it still stood at about this level. A number of bottlenecks developed in particular markets in the course of this recovery, demand pressures being especially severe for certain high-level skills in heavy industry and for certain types of labor in various service lines. Given their minority membership status, unions could at most have only aggravated inflationary tendencies present in this period. Nonetheless, the rise of 14 percent in straight-time hourly earnings of production workers in manufacturing in the face of persistent unemployment during the 1954–57 recovery is hard to explain in terms of market influences alone. In the shorter and weaker recovery of 1958–59, the unemployment average of 6.4 percent was considerably higher than in the preceding recovery period, the index of consumer prices rose about half as much (1 as against 2 percent per year), and straight-time hourly earnings of production workers in manufacturing rose somewhat less than before (3.4 as against 4.7 percent per year).

Changes in wages, employment, and wholesale prices in manufacturing in terms of cyclical turning points for the postwar period, and also on an average monthly basis to allow for differences in the length of the recovery periods, yield essentially the same results as are suggested by straight annual comparison. [From trough to peak during the last two recoveries, manufacturing straight-time hourly earnings rose 16 percent between August 1954 and July 1957 and 7 percent between April 1958 and May 1960. The average monthly changes during those periods were 0.43 and 0.28 percent, respectively.] In both of these recoveries, it seems quite clear that the wage level rose by a good deal more than could be attributed to any pressure of demand on labor supply.

The evidence with respect to the fourth question, concerning the behavior of wage rates in recession periods, is even more striking. On an annual basis, straight-time hourly earnings of production workers in manufacturing increased in all of the four postwar contractions: in 1948-49, by 5 percent; in 1953-54 and in 1957-58, by 3 percent; and in 1960-61, by 4 percent. Data for cyclical turning points of these recessions show a negligible decrease in the November 1948-October 1949 downswing but gains in the next three, with the increases appearing especially marked after 1953 when long-term bargaining agreements became more important. The fact that wage levels not only remained steady but also typically increased in postwar contractions strongly suggests, though it does not prove, that the unions exerted considerable economic influence in the postwar period.

The last question is, Have these very large labor organizations been able to score gains in wage-benefit levels well in excess of what could have reasonably been expected in light of economic trends in their industries? In the case of at least two of the industries—bituminous coal and railroads—the answer is clearly in the affirmative. Real output, employment, and post-tax net profits (as percent of sales) either followed a declining trend or remained at unfavorable levels. The one economic influence conducive to higher wage-benefit levels was the sharp rise in output per production worker man-hour in these two industries in the postwar period, but in the face of falling demand and rising unemployment, this factor could not by itself explain the very substantial increase in wages and benefits. The conclusion is inescapable that the principal explanation lay in the ability of the unions to impose settlements which ran quite counter to economic developments in the two industries.

Postwar economic conditions in the other four industries—automobiles, basic steel, construction, and trucking—were decidedly more mixed, so it becomes less clear whether the unions wielded much influence on wage-benefit levels and, if so, whether they exerted a seriously disturbing economic effect. Each of these industries faced

various problems which severely limited their wage-paying capacity at least on a longrun basis. While enjoying certain highly profitable years, neither automobiles nor basic steel could be characterized as strong-growth industries between 1947 and 1960; both experienced periods of severe unemployment and excess capacity of almost chronic proportions. For about 10 years after the war, however, sales of automobiles and steel were booming, prices were moving higher, and profits were favorable. General conditions became much less favorable after 1957, but by this time the major firms were beginning to reap the benefits of capital expansion and rebuilding programs. Gains in efficiency were especially marked in steel. It seems clear, then, that (1) basic economic trends in both fields were conducive to rising wage-benefit levels, (2) these levels were raised more than they would have been in the absence of unions, and (3) the policies of the two unions concerned had widespread repercussions.

The last two industries—building construction and local city trucking—experienced considerable growth in the postwar period, with total output and employment following a quite definite upward trend. Estimates of changes in output per man-hour in these two fields are very rough, but they indicate that between 1953 and 1960 productivity rose less in construction and trucking than in manufacturing generally. Small firms predominate in both fields, competition is intense, profits are relatively low, and unless brought under some system of control, operating conditions in particular localities can become completely demoralized. These circumstances impose important limitations on union efforts to raise wage-benefit levels in these two industries. Nonetheless, both union groups made striking gains in the postwar period, certainly more than could be expected in the absence of union pressure. These gains had widespread intraindustry repercussions, since many smaller, less efficient firms were not in a position to absorb them. On the other hand, growth trends in the two industries were favorable and this kept the unions' policies from being widely disturbing.

Work Rules Issue in the Basic Steel Industry

JACK STIEBER*

THE AMERICAN STEEL INDUSTRY is an old industry with many customs and traditions. It has an aging labor force characterized by long service; its heavy, durable, and expensive equipment varies little from company to company; and it produces a homogeneous product by processes and methods which have changed slowly over the years. In this environment, it is not surprising to find work practices that go back many years in origin—often to a period before the Steelworkers union was organized. To these practices were added others, established either unilaterally by plant managements or by agreement with local unions, designed primarily to obtain maximum production for war purposes with little concern for efficiency.

In 1947, these practices were given formal recognition by the now famous 2-B provision which is found in labor's agreements with the U.S. Steel Corp. and a number of other major companies. It defines "local working conditions" as "specific practices or customs which reflect detailed application of the subject matter within the scope of wages, hours of work, or other conditions of employment and includes local agreements, written or oral, on such matters." The provision affords protection to local working conditions "which provide benefits that are in excess of or in addition to" benefits in the contract and explains the circumstances under which management may change or eliminate them. In subsequent years, arbitrators have held that 2-B may be applied to a wide variety of practices including crew size, seniority, distribution of overtime, work scheduling and assignment, contracting-out, layoffs, washup time, and lunch periods. The companies have tried to modify or eliminate 2-B, charging that it has frozen inefficiency and waste into steel operations, while the union has defended the provision as a necessary protection against speedup and overloading of employees. Arbitrators under steel agreements, while deciding most grievances alleging violations of 2-B against the union, have generally felt that it has served to establish a balance between "the need for stability, on the

one hand, and for flexibility and growth on the other."¹

It is not the purpose here to review the controversy over work rules in steel or to rehash the 1959 strike. However, two things should be pointed out: (1) the close relationship between work rules and incentives problems in steel and (2) the absence of any relationship between 2-B and automation. The first goes a long way toward explaining why the work-rules issue was injected into the 1959 negotiations; the second may help to put to rest unfounded but persistent assertions that automation was an issue in that strike.

Since the installation of job evaluation in the steel industry, incentives have been a major problem to some companies, particularly to the U.S. Steel Corp. One of the reasons U.S. Steel was willing to spend millions of dollars to eliminate base rate wage inequities both within and between plants was the belief that substantial savings in manpower could be realized by establishing engineered performance standards on incentives. When the union withdrew from the original understanding to identify and eliminate inequities in incentives, the company found itself stymied by the local working conditions clause in its efforts to reduce crews where it felt such reduction was warranted under new incentives. According to 2-B, a "local working condition," including crew size, may be changed or eliminated only when "the basis for the existence" of the condition is changed or eliminated. Arbitrators have generally interpreted this to mean a change in equipment or method of operation. Thus a change in crew size and duty assignment cannot be justified by a time study showing that one or more employees are unnecessary or by evidence that operations can be made more competitive by such a reduction. In such cases, local union agreement must be obtained. A typical example of a justifiable and an unjustifiable management action under 2-B is furnished by the following arbitration issue:

While introducing a new incentive plan in a . . . butt mill, management installed cooling table synchronization and reduced the crew size in the process. At the same time, for purposes of the incentive program, management reduced the spelltime and crew size at a welder station on

*Director, Labor and Industrial Relations Center, Michigan State University.

¹ Pike and Fischer, Inc., *Steelworkers Handbook on Arbitration Decisions* (Pittsburgh, United Steelworkers of America, 1960), p. 59.

the same production line but unaffected by the changed mechanical condition.²

The arbitrator upheld the first action but reversed the second.

This tie-in between the U.S. Steel incentive program—the brain child of R. Conrad Cooper, the chief industry negotiator—and the local working conditions clause put considerable pressure behind an issue which was much less important to some other companies which had weaker or no 2-B type provisions in their agreements.

The claim that 2-B puts a brake on technological change has no basis in fact and has never been made by responsible industry representatives. In fact, by making a change in equipment the surest way to justify a change in a local working condition, 2-B has probably encouraged and hastened technological change in the steel industry.

Often overlooked is the fact that the union cannot by itself establish a local working condition, however reasonable it may be, or change what it believes to be an onerous condition. At one point in the 1959 negotiations, the union offered to modify 2-B to substitute “reasonableness” for past practice as the determining factor in establishing grounds for continuation of a local working condition. Management refused, holding out for a stronger modification, but perhaps also recognizing that “reasonableness” could be a two-way street whereas past practice can only be established with management cooperation.

How serious is 2-B in its effect on efficiency? The answer would require a thorough study of allegedly restrictive local practices—a study which has never been made and is not likely to be made. Garth Mangum decided that the most serious effects of 2-B are to perpetuate management’s past mistakes for a time and to discourage supervisors from making changes which might produce grievances. He concluded that “inefficiencies which cannot be eliminated under the contract within a reasonable time by an alert management are rare.”³

The January 1960 settlement of the steel strike provided for the establishment of two committees: a group to study local working conditions, composed of union and management representatives who were to select a neutral chairman; and a human relations research committee, which was to have no neutral members. The parties were not able to agree on a neutral chairman for the first

committee, and it has been dormant since the end of 1960. The second committee has set up subgroups to study job classifications, incentives, seniority, medical care, arbitration and grievance procedures, and “guides for the determination of equitable wage and benefit adjustments.” The parties have released little information as to progress, but it is doubtful that much will be accomplished toward resolving serious problems.

More promising are the Kaiser-United Steelworkers committees—one to study “problems resulting from automation and technological change and local working conditions,” and another to develop “a long-range plan for equitable sharing . . . of the fruits of the company’s progress.” The first committee is bipartite, the second has three neutral members in addition to company and union representatives. In practice, the tripartite committee has taken over the functions of the first committee. A number of meetings have been held and progress has been reported. The union is eager to arrive at agreements with Kaiser which may then be used as targets in the forthcoming 1962 negotiations with the 11 major steel producers.

* * * * *

The best solution for the problem of work rules which unduly limit efficiency is elimination of the basis for their existence through technological change; the next best way is to bargain or buy them out; the worst approach is to try to force their elimination because they are “bad,” “wrong,” and an infringement on “management rights.” The most serious problems arise where a union resists changing technology or refuses to be bargained or bought out of restrictive rules and practices; then the “persuasion of power” takes over and the results are not always predictable. Fortunately, opposition to technological change has almost no overt and few covert supporters in union leadership ranks. Mass-production industries have been among those to make the widest use of automated equipment without challenge from their unions. The emphasis today is on cushioning the impact of change through financial assistance and other benefits to those affected. The cost of such aid is at least predictable, which is not true of restrictive practices.

² Garth L. Mangum, “Interaction of Contract Administration and Contract Negotiation in the Basic Steel Industry,” *Labor Law Journal*, September 1961, p. 858.

³ *Ibid.*, p. 857.

Union Racial Practices and the Labor Market

RAY MARSHALL*

TECHNOLOGICAL CHANGE has an important effect on the employment opportunities of minorities, who are concentrated disproportionately in those jobs most likely to be replaced by innovations. Sometimes the job is abolished by the introduction of new machinery, and at other times, it is made more attractive. Negroes have been replaced in both cases.

Racial trouble has frequently started when unemployment rose and whites started moving into jobs held by Negroes, or when senior Negroes were laid off while junior whites were retained. Unionism, while not causing Negroes to have equal treatment in plants, might make it possible for them to get the same treatment in layoffs as whites of the same seniority, because seniority clauses in union agreements give Negroes legal rights they would not have in the absence of unions.

Economic conditions also affect the pace at which Negroes can move up the economic ladder. If the labor market is slack and there are few opportunities for advancement, the results of changing the racial practices of unions and employers will be less significant. For instance, the effort exerted over a long period to change racial practices in the oil industry have produced limited results, because nontechnical employment in most companies declined after 1953 and few new employees have been hired or promoted. Though separate lines of progression were broken down in the major companies in this industry, only a few Negroes have moved into better jobs.

Negroes also have found that tight labor markets—such as exist during wars—make it easier for them to move into jobs from which they were previously excluded. It is true that Negroes generally have been the last to be committed to industrial employment during these times and have been more vulnerable than whites to retrenchment during recessions, but it is nevertheless significant that Negroes were able to enter some jobs for the first time during wars. Once in these jobs, they were in a position to fight from within unions and companies to improve their positions.

The ease or difficulty with which a trade may be learned and practiced is a significant consideration in changing union racial practices. If the trade is relatively easy to learn or Negroes can learn it in trade schools, in the Armed Forces, or by "picking it up," the union will have difficulty excluding Negroes or will be forced to lower its economic conditions. In the plumbing and electrical industries, where apprenticeship is important, it is relatively difficult for Negroes to learn the trade because there are few colored craftsmen to train them and whites will rarely take Negro apprentices or trainees if the admission of Negroes is opposed by the union. Therefore, the trades where Negroes have difficulty becoming journeymen because of union exclusion or governmental licensing arrangements will not have many Negro trainees. One of the reasons Negro bricklayers, cement finishers, and plasterers have been able to perpetuate themselves in the South is that there is a sizable number of Negroes who will teach the trade to others. Moreover, the techniques used in these trades are relatively stable, so that new methods cannot be monopolized by whites. Negroes were also allowed to retain some jobs which were difficult to perform or had other undesirable features.

Another labor market factor perpetuating racial job patterns is the employer's preference for white or Negro labor. This preference is influenced by stereotyped ideas as to whether Negroes can do certain kinds of work, have higher rates of turnover, are subject to more wage garnishments, and the like. Negroes have been preferred by white contractors in the South for certain jobs which they have traditionally held, like longshoremen, hod carriers, and cement finishers. Employers sometimes preferred Negroes for the same jobs held by whites because Negroes had lower wages. In the past, Negroes moved into some jobs during strikes because employers thought they would not join unions, a degree of preference which was intensified by Negro leaders who felt that the Negro worker's economic salvation lay in an alliance with employers against unions. Today, many of the strongest Negro community institutions favor unions and exert their influence to prevent Negroes from being used as strikebreakers. Employers no longer feel that they can count on

*Professor of Economics, Louisiana State University.

Negroes to be nonunion, and the general extension of unionism has made this attribute less important to the companies. Moreover, the virtual abolition of racial wage differentials for the same jobs has eliminated another reason why employers preferred Negroes.

Employers' preferences will also be affected by uncertainties concerning the reaction of white workers and the supply of Negroes with necessary skills in case of boycott by white craftsmen. Whether or not whites boycott an employer depends upon the availability of jobs and general market conditions. It will rarely be done in relatively stable industrial jobs; in construction work, on the other hand, it is a simple matter for workers to boycott a particular employer. In longshoring, Negroes can furnish enough workers to replace whites if the latter refuse to work with them, but there are not enough Negro electricians or plumbers to make this possible.

Status is an important consideration for employers as well as workers. Unlike the workers who must compete with Negroes, the employer does not feel that his job will be "diluted" because Negroes will threaten his job or its status; but his status in the community might be jeopardized if he violates prevailing racial standards. This is one reason why so many southern branches of northern plants adopt local racial practices.

Supply of labor is related to the status of the job. In many cases, employers prefer Negroes because they are more easily controlled in low status occupations. Since a sufficiently large supply of whites cannot be found for some of these jobs, employers prefer Negroes who are forced by occupational limitations into these lines. This might give Negroes power to control the jobs and exclude whites, if they can form unions.

The scope of collective bargaining is a factor influencing the union's ability to discriminate against minorities. Organizations which have purely local bargaining arrangements are more likely to discriminate than those that use national bargains, because the international union is usually more conspicuous and it is relatively easy to bring moral pressure to bear on it. There have been some widely publicized cases of racial discrimination by local unions, but as a rule, locals are too insignificant to attract national attention. The widely publicized cases attract attention

precisely because the locals are impervious to moral pressures, and there is usually no agency that can readily focus sufficient economic, physical, or political power on them to produce a change in their policies.

National bargains give the parent organization more power to deal with the local. Since the internationals are more vulnerable to moral power, and since the prevailing moral sentiment in the United States is against discrimination, unions with national bargains will be more likely to cause their locals to conform with egalitarian racial policies.

The level of union wages in a plant covered by the national bargain influences the control that an international union can exert over its local affiliates. If union wages and conditions are much higher than wages prevailing in the local area, the international has more control over the local. In the case of the Memphis local of the United Automobile Workers, for example, segregationist elements did not secede from the international, partly because of national contracts and good wages and conditions; some white members of the Memphis local considered pulling out of the international but were deterred by the realization that the international, not the local, was the certified bargaining agent.

Other factors which influence the international's ability to require its locals to observe equalitarian racial policies include: the effect of enforcement on the international's objectives as interpreted by its leaders and as it influences their official positions; the question of whether the international has some reason to appeal to the Negro community, e.g., organizing a bloc of unorganized Negroes or Negro-labor political considerations; the available alternatives for the local, especially the consideration of whether there is a rival union to which it can secede; the employer's attitude—the employer will be willing to cooperate with the international if he has some reason (government contracts, fear of boycotts) to oppose discrimination by the local; the size and political significance of the local involved; the dues structure and financial strength of the international and the constitutional provisions relating to the ownership of the local's property if it secedes; and the ease with which trusteeships can be imposed upon the local.

The Sense of History and the Annals of Labor

MAURICE F. NEUFELD*

Basic Truth Versus Prompt Utility

For nearly two generations now, as science and industry stretched the aspirations of mankind, the sense of history shallowed, diminished, and all but vanished. This failure of imagination and intellect coincides with a unique crisis in human affairs. When peoples of earth most need global vision, scholars can readily offer separate strings of knowledge, but rarely Ariadne's ball of guidance.

Whether braced by trust that their creations command immediate validity, or fortified by faith that they lead to basic truths beyond prompt utility, contemporary men of learning amiably persist in the nurture of authorized apprentices who reflect blurred versions of their own image. The new men of science, social disciplines, and humanistic arts have come to resemble, in their broader attitudes and interests, the captains and technicians of the world.

The skills of industrial relations suffer all the limitations of scholarship at large. Youthful and unformed, eager for prestige, inwardly concentrated, absorbed by the task of accumulating information, and allured by the mathematical approach to certainty, they think in constricted terms, nearly always in the present tense. The savants of industrial relations remain innocent of mankind's history beyond the very immediate past.

Those who survey the procedures of personnel management lead intellectual lives of only two dimensions. True, they venture out of enclosure to seize upon testing and training, and they often wander forth to sniff the pasture lands of human relations. They seem less impelled by intellectual interest than by short crops at home. Records of their past, so leagued with administrative progress, have yet to be assembled, systematically recorded, carefully analyzed, and synthesized into history.

Colleagues in human relations recognize few limits upon either their capacity or range. Training in social psychology, industrial sociology, and

anthropology serves them well. But in their eagerness for discovery they eschew the partial sense of history which their master crafts achieved and trap themselves all too often in the sirenian morass of case studies. Monographs accumulate and notions of dynamic equilibrium thrive. For the most part, findings prove obvious or trivial in contrast to the ponderous investigations launched.

Year in, year out, the students of collective bargaining rove from one bargaining race track to another, gathering tips, speculating about the winners, and masterminding the results once announced. Away from the course, they delight in administrative orders, arbitral awards, and judicial decisions. They prefer the domestic scene, but when abroad, on occasion, follow routine by also playing the horses there. All of them attain the summit of speculative inquiry when they argue the virtues of free collective bargaining.

Labor economists once flourished within the broad institutional approach to economic analysis. Today, some who follow that tradition at least in part, pursue narrow interests in order to garner fresh knowledge. Insensitive to broad change, they virtually ceded to the general economists the task of dealing with wage-push inflation and the role of unions in emergent economies—two central issues in labor economics during the postwar decades. Other labor economists draw deserved admiration for their attempts to devise large concepts of integrative character. But they too usually ignore history since its waywardness might tend to ruffle the formal elegance of their typologies. For all too many labor economists, the course of economic thought, let alone the sweep of human affairs, remains quite simply a course, taught or taken.

Throughout all the branches of industrial relations, disciplines so essential to the welfare of the contemporary world, the sense of history, with its depth, reach, and contemplative spirit, fails to stir.

Labor's Intellectual Debt

Unions survived and advanced only by responding shrewdly and fast to the practices and strategies initiated by the opposition. Employers always acted; unions reacted. Even when they

*Professor of Economics, Cornell University.

chanced the first step of the encounter, they sought to thwart and divert expected threats. Whenever the labor movement attempted to separate its ultimate purpose from the milieu of work, or whenever it remained on home ground but expanded its goals, the very character of its inherently confined position forced it to turn for basic ideas to that perpetual fountainhead of intellectual energy: middle-class thinkers, writers, religious leaders, politicians, economists, social reformers, idealists, humanitarians, and radicals. Today, when both the immediate industrial aims and larger aspirations of the union movement concern public policy at the highest political levels, the present impasse in its fortunes should provoke no surprise since that predicament traces back to the persistent and indwelling poverty of labor's derivative imagination.

Nineteenth Century Inspirations

Between 1800 and 1829, craftsmen of the growing cities participated, to the extent of their still inconsequential numbers, in the drive for universal white manhood suffrage. But these artisans, like other citizens, turned for warrant to the Declaration of Independence as gospel, the American Revolution as inspiration, and the French Revolution's cry of natural rights and equality of man as dogma.

During the struggle for equal citizenship from 1827 to 1832, the score of demands by enfranchised workers came from Jacksonian politicians and humanitarians. The labor parties adopted their principal plank—free public education—not when they formed, but only after agitation in the community fired them to that purpose. No objective scholar can deny the beneficent influence exerted by these parties. However, labor historians have tended to exaggerate the size and originality of their contribution. No dispassionate historian can fail to emphasize that the leading viable ideas and effective pressures of this crusade came from respected public figures years before the labor parties had started, and continued after their demise until the passage of operative local and State legislation at the end of the 1840's.

Ideas of radical social transformation dominated the minds of thoughtful workers during the 1840's since the prolonged depression stifled the revival of labor unions. But, the few labor leaders of the

1840's and 1850's who cared about such issues as women's rights, the abolition of slavery, or the peace movement looked to the humanitarians of the era for inspiration and argument.

The National Labor Union, after its inaugural congress in 1866, stressed only 1 year the reduction of the working day to 8 hours. At first, inspired by the persuasive economic doctrines of Ira Steward, who like many union leaders of the time read John Stuart Mill and other transitional economists closely, the confederation subsequently lost itself in the greenback brand of monetary reform elaborated by Edward Kellogg almost 20 years earlier. During the 1860's and 1870's, workers also turned to cooperation, first expounded by Robert Owen in the 1820's. Thomas Phillips, a shoemaker from England, took the lead in advancing the cooperative cause, but it was George Jacob Holyoake, a British middle-class Owenite lecturer and historian, who had fired the enthusiasm of Phillips.

When the Knights of Labor embarked upon their national career in 1878, they implied through preamble and platform that the long quest for purpose and structure by American unions would find surcease at last. They hoped to create labor solidarity as a bulwark against the new industrial monopoly. Yet, ironically, they challenged the corporate order not in the mood of dispossessed workers, but in the spirit of the lower middle classes. The careers of Uriah S. Stephens, James L. Wright, Terence V. Powderly, and other dignitaries in the Knights not only shed light "upon the way in which the labor leaders of the midcentury moved in and out of the wage-earning class . . .,"¹ but also thrust into bright relief their commitment, not to a labor federation, but to a popular movement resolved to resurrect a vanishing nation of independent farmers, shopkeepers, and small manufacturers. Inwardly, the Knights yearned to preserve America's rural and small-town past through cooperatives at the very time when the spread of dark satanic mills spawned urban blight and blackened the countryside. Outwardly, they hankered after middle-class respectability through secret rituals, regalia, initiation rites, passwords, and grandiose titles of Masonic provenance.

The AFL rejected outright the mentality of the lower middle classes, but it too borrowed its

¹ Norman J. Ware, *The Labor Movement in the United States, 1860-1895* (New York, D. Appleton & Co., 1929), p. 29.

intellectual equipment from others: it accepted the economic assumptions of the industrial lords of creation. The voluntarism of the AFL thrived on successful collective bargaining, which, in turn, derived its appeal from the sanctified middle-class veneration of contract. It accepted with pride the challenge of *laissez faire*, in the harsh terms laid down by labor's mighty opponents, down to the letter of expedient shifts in dogma.

History can record that the AFL abandoned voluntarism reluctantly. As misery mounted from day to day during the Great Depression, it did not vacate its *laissez-faire* stand against unemployment insurance and old-age pensions until late in 1932. Certain conservative labor leaders continued to oppose minimum-wage legislation until the eve of its enactment in 1938. Nor can the history of the New Deal credit union life with either initiative, fresh thought, or meaningful contribution to the measures which brought food, clothes, rent, and hope to American workers.

The CIO braved the official labor movement, still openly contemptuous and administratively fearful of mass-production workers, with youth, excitement, vigor, drive, and determination to replace autocratic factory rule with industrial democracy, that dream of middle-class progressives before World War I. An aura of its energy and daring, then confused with original ideas and regenerative vision, lingered in the public mind until midcentury. But internal warfare, fringed business unionism, and hardening

into empire brought disenchantment. These developments also laid bare the basic debt of the CIO itself to the intellectual agility of the middle classes within and outside government.

The merger of two federations, stale in appropriated New Deal thought, could not breed, by magic, mental resilience in new times. In all, the widespread failure of labor's imagination has left unions naked to their enemies and, worse yet, to their friends.

The immediate future will see, at best, little modification in the ideas and attitudes of the labor movement since its remaining middle-class allies themselves have become true conservatives; they cling to the concepts of their youth and rehash easy thoughts for the public good as occasion requires.

* * * * *

The annalists of labor may also prefer to remain among the relics of the past. But if they elect, instead, to pursue the sense of history, they must first assume the burden of impartiality. Next, they must interrupt their detailed and essential chronicles and design their findings as part of the economic, social, political, intellectual, and cultural development of the Nation. In addition, they must relate the fortunes of American unions to the ebb and flow of foreign labor movements and trace the reciprocal influences of these institutions. Finally, they must use the English language to enliven and clarify thoughts and events, not to desiccate them.

Workers' education is growing in significance and importance. The more powerful the unions become in their industrial and political activity, the greater will be the need of workers for a fundamental understanding of social problems. Only a systematic study of the social sciences will give them the required knowledge. In addition, the unions have the double task of informing their own members concerning the methods and goals of the trade unions, and of interpreting to other sections of the community their aims and purposes in relation to the welfare of society as a whole.

—Eleanor G. Coit and Mark Starr, "Workers' Education in the United States," *Monthly Labor Review*, July 1939, p. 2.

Summaries of Studies and Reports

Health, Insurance, and Pension Plan Coverage in Union Contracts

THE NUMBER OF WORKERS protected by collectively bargained health and insurance plans¹ and pension plans have more than doubled in the past decade. Workers covered by negotiated health and insurance plans increased from an estimated 7 million in 1950 to over 14 million by the end of 1960.² Comparable estimates for workers covered by pension plans were 5 million in 1950 and 11 million in late 1960. Of all workers under union agreements in 1960, about 78 percent were protected by health and insurance plans and 60 percent by pension plans—sizeable increases over the proportions (47 and 34 percent, respectively) covered in 1950. Over the decade, the number of workers under all union agreements increased by about 20 percent.

Estimates of coverage at the end of 1960 were obtained from national and international unions by questionnaire in connection with the Bureau of Labor Statistics 1961 *Directory of National and International Unions in the United States* (BLS Bull. 1320).³ Government workers represented by 19 national and international unions, whose benefits were established through legislation rather than negotiation, were excluded from all computations.⁴ Coverage for unions not national in scope (and thus excluded from the Bureau's Directory) and for those which failed to respond to the Bureau's questions, was estimated by the Bureau on the basis of other data.

Trends

Almost all of the coverage of negotiated health and insurance and pension plans dates from a postwar year.⁵ From about 0.6 million workers in 1945, when the Bureau first collected coverage data, health and insurance plan coverage under collective bargaining rose to an estimated 14.5 million in 1960, while pension plan coverage increased from a negligible amount to 11.1 million (table 1). The halfway point in both

types of benefits was reached in 1950. Spurred by basic steel and auto negotiations, health and insurance coverage had increased by about 4.4 million workers between 1948 and 1950, and pension coverage by about 3.4 million workers. By the end of 1960, health and insurance plan coverage accounted for about 78 percent of all workers under collective bargaining agreements, and pension plan coverage applied to 60 percent.

The coverage of all employee-benefit plans in private industry, under collective bargaining or not, also rose rapidly during the postwar period.⁶ Since 1950, negotiated health and insurance plan coverage increased proportionately more than nonnegotiated coverage, while pension plan coverage for both categories advanced at about the same rate. In 1960, approximately a third of all workers under private health and insurance plans

¹ Includes one or more of the following: life insurance or death benefits; accidental death and dismemberment benefits; accident and sickness benefits (but not sick leave or workmen's compensation); cash or service benefits covering hospital, surgical, and medical care.

² The increases in coverage of collectively bargained benefits do not represent net increases in total benefit coverage of organized workers in private industry. Many programs existed before they were brought within the scope of the collective bargaining agreement.

³ See "Membership of American Trade Unions, 1960," *Monthly Labor Review*, December 1961, pp. 1299-1308.

⁴ All national and international unions were asked to report the approximate number of workers covered by all collective bargaining agreements (including nonmembers in bargaining units) and the approximate percentage of workers under agreements providing for health and insurance plans and pension plans. The estimates thus supplied included coverage outside the United States, principally in Canada. No attempt was made in this study to exclude Canadian coverage. In 1960, approximately 6 percent of total membership was outside the United States; thus all data on coverage expressed in this article in absolute terms (number of workers) might be subject to a correction of up to 6 percent to exclude coverage outside the United States. The ratios and trends discussed in this study are not believed to be affected to a like extent.

⁵ All estimates in this article include railroad workers, who were excluded from earlier studies prepared by the Bureau. This exclusion was formerly of minor importance, because prior to February 1, 1955, when the first collectively bargained health and insurance plan for nonoperating railroad employees became effective, health and insurance and pension benefits for these workers were provided under Federal legislation rather than under collective bargaining. The 1950 and 1954 coverage data published in the Bureau's earlier reports (BLS Bulls. 1017 and 1187) were adjusted to make them comparable with the data in this article.

⁶ For historical data, see the following BLS bulletins: 946, *Employee Benefit Plans Under Collective Bargaining* (1949); 1017, *Employee-Benefit Plans Under Collective Bargaining, Mid-1950* (1951); and 1187, *Health, Insurance, and Pension Plans in Union Contracts* (1955).

⁷ For detailed coverage data on all health, insurance, and pension plans, see Alfred M. Skolnik, "Trends in Employee-Benefit Plans, 1954-59, Parts I and II," *Social Security Bulletin*, April 1961, pp. 5-17, and May 1961, pp. 3-14.

TABLE 1. ESTIMATED COVERAGE OF HEALTH AND INSURANCE AND PENSION PLANS UNDER COLLECTIVE BARGAINING AGREEMENTS, SELECTED YEARS ¹

Year	Health and insurance plans		Pension plans	
	Number of workers (millions)	Percent of workers under collective bargaining agreements ²	Number of workers (millions)	Percent of workers under collective bargaining agreements ²
1960.....	14.5	78	11.1	60
1954.....	11.1	60	7.1	38
1950.....	7.1	47	5.1	34
1948.....	2.7	18	1.7	11
1945.....	.6	4	(³)	(³)

¹ Includes workers outside the United States, chiefly in Canada, who are covered by agreements of unions having their headquarters in the United States. See text footnote 3.

² Estimates for all years include railroad workers. See text footnote 4.

³ Data not available.

and about half of those with private pension plan protection were covered by collectively bargained plans.

In addition to increasing coverage, labor-management negotiations during the 1950's also brought about many improvements in existing benefits, a broadening of the range of benefits, and a gradual elimination of employee contributions. Improvements in health and insurance plans consisted chiefly of raising benefit amounts, extending coverage to active workers' dependents and to retired workers and their dependents, and, to a lesser extent, adding new types of benefits. Pension plan improvements, in addition to the liberalization of benefit formulas and other existing provisions, included the addition of provisions for early and disability retirement, for death benefits and survivor's options, and for vesting.⁷

The scope of these benefits and their numerous facets generated a high degree of collective bargaining activity, not only because most plans were still in their developmental stages, but also because changes were often necessary to keep pace with rising wages and earnings, increasing costs of benefits, and changes in legislation, particularly the old-age and disability benefit provisions of the Social Security Act. The Bureau's annual analysis of wage settlements during the period 1954-60 reflects this activity. Each year, between a third and a half of contract settlements covering 1,000 workers or more involved establishing or revising health and insurance benefits and between a fifth and a third involved pension benefits.⁸

⁷ For an analysis of these benefits, see the Bureau's series of bulletins on pension plans under collective bargaining (Bulls. 1259 and 1284) and on health and insurance plans under collective bargaining (Bulls. 1250, 1274, 1280, 1293, and 1296).

⁸ *Current Wage Developments*, February 1956, February 1959, July 1960, and July 1961.

Industry Coverage

During the entire postwar period, a large majority of the workers covered by negotiated health and insurance and pension plans were employed in manufacturing industries, although collective bargaining agreement coverage was about the same in nonmanufacturing and manufacturing industries. In 1960, however, nonmanufacturing industries accounted for a greater proportion of total coverage than in 1950, their share of health and insurance plan coverage rising from 28 to 43 percent and of pension coverage from 31 to 36 percent. (See table 2.)

The sharper rise in the nonmanufacturing industry coverage over the past decade stemmed primarily from increases in health and insurance plan coverage for over a million workers and in pension plan coverage for over a half million workers in each of three industry groups: contract construction; transportation and public utilities; and trade, finance, and services. During this period, a health and insurance plan (effective in 1955) covering about half a million nonoperating railroad workers was negotiated. Health and insurance plan coverage in the building construction industry, according to the Bureau's annual survey of union wage rates in large cities, increased from

TABLE 2. ESTIMATED COVERAGE OF HEALTH AND INSURANCE AND PENSION PLANS UNDER COLLECTIVE BARGAINING AGREEMENTS,¹ BY INDUSTRY GROUP, 1960 AND 1950

[Workers in millions]

Industry group	Health and insurance plans		Pension plans	
	1960	1950	1960	1950
Total.....	14.5	7.1	11.1	5.1
Manufacturing.....	8.1	4.8	7.0	3.4
Food, beverages, and tobacco.....	1.0	0.2	0.8	0.1
Clothing, textiles, and leather products.....	1.3	1.4	1.0	.7
Furniture, lumber, wood products, and paper.....	.6	.3	.5	.2
Printing and publishing.....	.2	.1	(²)	.1
Petroleum, chemicals, and rubber.....	.6	.4	.5	.4
Stone, clay, and glass.....	.2	.1	.2	.1
Metals, machinery, and equipment.....	4.3	2.3	3.9	2.0
Nonmanufacturing.....	6.3	2.0	4.0	1.6
Mining and quarrying.....	0.3	0.5	0.3	0.5
Contract construction.....	1.5	(²)	.7	(²)
Transportation and public utilities.....	3.0	1.2	2.1	1.0
Trade, finance, insurance, and services.....	1.4	.3	.9	.1
Agriculture and fishing.....	(²)	(²)	(²)	(²)
Unclassified.....	.1	.3	.1	.2

¹ See footnotes 1 and 2, table 1.

² Fewer than 50,000 workers.

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

about 60 percent of the covered workers in 1954 to 75 percent in 1960, and pension plan coverage increased from less than 15 percent to about 45 percent.⁹ In the same period, health and insurance plan coverage of local trucking workers rose from about 75 to 90 percent, while pension plan coverage rose from 20 to 75 percent.¹⁰ A significant proportion of the increase in pension plan coverage in nonmanufacturing industries resulted from the establishment and expansion of multiemployer pension plans. About half the increase in coverage is accounted for by 375 multiemployer plans covering 1.3 million workers established in nonmanufacturing industries between 1950 and early 1960.¹¹

Most of the increases between 1950 and 1960 in both health and insurance and pension plan coverage in manufacturing industries were concentrated in the metalworking and food industries. In one industry group—clothing, textiles, and leather products—a slight decline in health and insurance coverage is accounted for by a decline in the number of workers under union contracts in textiles. On the other hand, pension plan coverage in that group increased because of the extension of plans—particularly multiemployer plans—in apparel manufacturing. As in nonmanufacturing, many multiemployer pension plans were established after 1950 in manufacturing industries—especially in apparel, food, and printing. They were not, however, as numerous and coverage was about half that of nonmanufacturing.

In 1960, negotiated health and insurance benefits were available to at least 60 percent of the workers under union contracts in every industry group except printing and publishing, agriculture and fishing, and the service industries (table 3). At least 90 percent of the workers under contracts in four manufacturing industry groups and three nonmanufacturing industry groups had health and insurance coverage. Only one industry—communications—had as high a proportion under pension plans.

The largest groups of workers with health and insurance and pension coverage in 1960 were employed in the two industries with the largest number of workers under agreements: metalworking, and transportation and public utilities. Over 10 percent of the workers with health and insurance coverage and 6 percent with pension benefits were in the construction industry; in 1950, few workers in this industry had either type.

Union Coverage

In 1960, three-fifths of the national and international unions had collective bargaining con-

⁹ *Union Wages and Hours: Building Trades, July 1, 1954*, Bull. 1175, pp. 4-5, and *July 1, 1960*, Bull. 1290, p. 5.

¹⁰ *Union Wages and Hours: Motortruck Drivers and Helpers, July 1, 1954*, Bull. 1178, p. 3, and *July 1, 1960*, Bull. 1291, p. 3.

¹¹ Data from forthcoming BLS Bull. 1326 on multiemployer pension plans under collective bargaining. Selected portions of this report appeared in the *Monthly Labor Review*, October 1961, pp. 1092-1099, and February 1962, pp. 148-155.

TABLE 3. RATIO OF HEALTH, INSURANCE, AND PENSION PLAN COVERAGE TO COLLECTIVE BARGAINING AGREEMENT COVERAGE,¹ BY INDUSTRY, 1960

[H designates health and insurance plans; P designates pension plans]

Industry group	Under 30 percent	30 and under 40 percent	40 and under 50 percent	50 and under 60 percent	60 and under 70 percent	70 and under 80 percent	80 and under 90 percent	90 percent and over
Manufacturing.....	—	—	—	—	—	P	H	—
Food, beverages, and tobacco.....	—	—	—	—	—	P	H	—
Clothing, textiles, and leather products.....	—	—	—	P	H	P	—	H
Furniture, lumber, wood products, and paper.....	—	—	—	—	—	—	—	—
Printing and publishing.....	—	—	P	H	—	—	—	H
Petroleum, chemicals, and rubber.....	—	—	—	—	—	H	P	—
Stone, clay, and glass.....	—	—	—	—	—	—	—	—
Metals, machinery, and equipment, except transportation equipment.....	—	—	—	—	—	—	P	H
Transportation equipment.....	—	—	—	—	—	—	P	H
Nonmanufacturing.....	—	—	P	—	—	H	—	—
Mining and quarrying.....	—	—	—	—	—	—	P	H
Contract construction.....	—	P	—	—	H	—	—	—
Transportation.....	—	—	² P	—	—	—	H	—
Communications.....	—	—	—	—	—	—	—	H P
Other public utilities.....	—	—	—	—	—	P	H	—
Trade.....	—	P	—	—	H	—	—	—
Finance and insurance.....	—	—	—	—	—	P	—	H
Services.....	—	—	P	H	—	—	—	—
Agriculture and fishing.....	—	—	P	H	—	—	—	—

¹ See footnotes 1 and 2, table 1.

² The low pension coverage in this industry as compared to the high health and insurance coverage is due to the fact that few railroads workers, who have

the protection of the Railroad Retirement Act, have negotiated pension plan coverage.

TABLE 4. RATIO OF HEALTH, INSURANCE, AND PENSION PLAN COVERAGE TO COLLECTIVE BARGAINING AGREEMENT COVERAGE OF NATIONAL AND INTERNATIONAL UNIONS, 1960 AND 1954¹

Percent of all workers represented who are covered by plans	1960		1954	
	Percent of unions	Percent of all workers covered by collective bargaining agreements	Percent of unions	Percent of all workers covered by collective bargaining agreements
HEALTH AND INSURANCE PLANS				
Total.....	100.0	100.0	100.0	100.0
80 to 100 percent.....	61.2	66.5	38.5	42.3
60 to 79 percent.....	15.2	20.2	8.9	9.5
40 to 59 percent.....	6.7	7.1	17.3	25.8
20 to 39 percent.....	3.0	2.4	8.4	11.8
0 to 19 percent.....	13.9	3.6	26.8	10.6
PENSION PLANS				
Total.....	100.0	100.0	100.0	100.0
80 to 100 percent.....	30.9	35.5	14.5	17.0
60 to 79 percent.....	18.2	28.9	7.8	21.3
40 to 59 percent.....	12.7	7.3	8.9	5.2
20 to 39 percent.....	11.5	15.6	13.4	10.1
0 to 19 percent.....	26.7	12.7	55.3	46.6

¹ Based on data for 165 unions in 1960 and 179 in 1954. Also see footnotes 1 and 2, table 1.

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

tracts providing health and insurance benefits for 80 percent or more of the workers they represented as compared with less than two-fifths in 1954 (table 4). Only 6 percent of all workers under collective bargaining agreements in 1960, as compared to 22 percent in 1954, were represented by unions with contracts providing benefits for less than 40 percent of the workers. Although most unions with low coverage in 1960 were small, a few unions with over 100,000 members were included.

The number of unions providing pension plan coverage for 80 percent or more of their members increased from 15 percent in 1954 to 31 percent in 1960. They included 12 of the 43 large unions that bargain for 100,000 workers or more. At the opposite end, pension benefits were provided less than 20 percent of the workers under collective bargaining agreements of over 25 percent of the unions, including 8 of the 43 large unions. Twenty percent of the unions, including both the operating and nonoperating railroad brotherhoods, had few, if any, members under negotiated pension plans in 1960 as compared with over a third of the unions in 1954.

—DOROTHY R. KITTNER

Division of Wages and Industrial Relations

629432—62—4

Domestic Employment Attributable to U.S. Exports, 1960

EDITOR'S NOTE.—This article summarizes a report of the same title on the results of one phase of a study underway in the Bureau of Labor Statistics on the impact of foreign trade on domestic employment. It presents the findings on the volume and distribution of domestic employment attributable to United States merchandise exports. Another part of the study will contain figures showing the relationship of imports to job opportunities in the United States.

AN ESTIMATED 3.1 million workers were required directly or indirectly to produce, transport, and market the \$20.7 billion¹ of merchandise exported by the United States in 1960 (including mutual security military and economic aid). This estimate includes all American labor involved from the raw material stage to delivery of the export at the foreign port.

Exports of merchandise from the United States involve all sectors of the economy in one way or another. The export of an automobile, for example, requires employment not only in the automobile industry in the manufacture of the automobile, but also in transporting it to the port of export, handling the transaction through an exporting firm or an export sales branch of the manufacturer, loading it on an ocean freighter, shipping it to a foreign country, and insuring the cargo. All of the foregoing may be considered direct employment attributable to exports.

In addition, a substantial amount of employment is created in supporting industries which produce, transport, and market the raw materials and components, such as steel, tires, glass, and upholstery cloth, which go into the making of an automobile. Also to be taken into account is employment resulting from production of the proportionate share of plant and equipment used up or depreciated in the course of producing the automobile and component parts. All of these may be considered the indirect employment

¹ When the value of ocean transportation on U.S. vessels, insurance handled by U.S. firms, and Government export payments are added, the value is \$22.1 billion.

attributable to exports. The estimated indirect employment does not include, however, the employment resulting from the income-generating effects of export-related employment, i.e., employment required to produce food, clothing, housing, etc., purchased by workers whose jobs are attributable to exports. It also excludes government employment.

Briefly, the procedure followed in converting value of exports to employment consisted of (1) assigning commodity exports to the producing industry; (2) deriving indirect output required for these exports from each of the export-support-

ing industries; and (3) converting the direct and indirect output requirements into employment by using output per employee ratios. Methods and sources used in making the estimates are described in greater detail in a technical note included in the full bulletin summarized here.

Of the estimated 3.1 million workers required directly or indirectly to produce, transport, and market the \$20.7 billion of exports, about 941,000 were on farms and 2,140,000 in nonfarm industries. Because of the family nature of much of agriculture, the farm employment estimate covers farm operators, unpaid family workers, and hired

EMPLOYMENT ATTRIBUTABLE TO EXPORTS AND TOTAL EMPLOYMENT¹ IN THE PRIVATE ECONOMY,
BY INDUSTRY GROUP, 1960

[In thousands]

Industry group	Employment attributable to exports			Total employment in the private economy ⁴	Percent of employment attributable to exports		
	Direct ²	Indirect ³	Total		Direct	Indirect	Total
Total employment ¹	1,467.1	1,614.6	3,081.7	52,865.0	2.8	3.1	5.8
Farm.....	539.6	401.8	941.4	7,145.0	7.6	5.6	13.2
Nonfarm.....	927.5	1,212.8	2,140.3	45,720.0	2.0	2.7	4.7
Mining.....	28.3	61.6	89.9	709.0	4.0	8.7	12.7
Manufacturing ⁵	640.6	647.0	1,287.6	16,654.7	3.8	3.9	7.7
Food and kindred products.....	32.9	24.3	57.3	1,778.6	1.8	1.4	3.2
Tobacco manufactures.....	6.0	5.8	11.7	91.8	6.5	6.3	12.8
Textile mill products.....	27.3	20.0	47.3	944.1	2.9	2.1	5.0
Apparel and other finished products.....	17.8	5.7	23.5	1,246.0	1.4	.5	1.9
Lumber and wood products, except furniture.....	11.6	26.4	38.0	624.7	1.9	4.2	6.1
Furniture and fixtures.....	2.8	2.3	5.1	370.9	.8	.6	1.4
Paper and allied products.....	13.1	26.7	39.8	597.1	2.2	4.5	6.7
Printing, publishing, and allied industries.....	6.4	24.6	30.9	894.7	.7	2.8	3.5
Chemicals and allied products.....	46.2	69.5	115.7	804.7	5.7	8.6	14.4
Petroleum refining and related industries.....	6.6	10.1	16.7	237.1	2.8	4.2	7.0
Rubber and miscellaneous plastics products.....	14.0	14.2	28.2	387.0	3.6	3.7	7.3
Leather and leather products.....	6.0	2.9	8.9	373.4	1.6	.8	2.4
Stone, clay, and glass products.....	11.8	17.7	29.5	619.0	1.9	2.9	4.8
Primary metal industries.....	31.4	139.7	171.0	1,187.4	2.6	11.8	14.4
Fabricated metal products.....	28.1	44.2	72.3	1,120.2	2.5	4.0	6.4
Machinery, except electrical.....	154.2	69.8	224.0	1,448.4	10.7	4.8	15.5
Electrical machinery, equipment, and supplies.....	57.1	35.2	92.4	1,326.3	4.3	2.7	7.0
Transportation equipment.....	⁶ 104.4	27.5	131.9	1,687.5	6.2	1.6	7.8
Professional, scientific, and controlling instruments.....	27.0	6.4	33.4	327.3	8.3	2.0	10.2
Miscellaneous manufacturing and ordnance.....	⁷ 36.0	6.9	42.9	594.8	6.1	1.2	7.2
Military (indirect).....		⁸ 67.2	67.2	(?)	(?)	(?)	(?)
Trade ⁹	120.3	78.3	198.6	9,786.0	1.2	.8	2.0
Transportation, including ocean (U.S. ships).....	118.1	95.4	213.5	2,565.0	4.6	3.7	8.3
All other ¹⁰	20.3	120.6	140.9	16,005.0	.1	.8	.9
Employment attributable to replacement of plant and equipment consumed ¹⁰		210.0	210.0	(?)	(?)	(?)	(?)

¹ Covers all nonfarm wage and salary employment (excluding government) and total employment¹ on farms, including farm operators, family workers, and employees. May exceed actual number of persons employed because of dual jobholding.

² Covers employment for producing, transporting, and marketing goods in the form in which exported, e.g., steel, automobiles, etc. Employment required for transportation of goods is included in transportation industry, and employment for marketing in trade industry.

³ Covers employment in the supporting industries which produce, transport, and market the materials, components, etc., which are used to make the products which are then exported. For example, the indirect employment in the steel industry is the employment required to make the steel which is not exported as steel but used to make automobiles, machinery, appliances, and fabricated steel products which are then exported.

⁴ Farm employment estimates for 1960 from *Farm Labor*, U. S. Department of Agriculture, and *Census of Agriculture*, U. S. Department of Commerce, Bureau of the Census; manufacturing employment estimates from 1959 *Survey of Manufactures*, U. S. Department of Commerce, Bureau of the Census; employment for nonmanufacturing industry groups based on 1960 employment estimates by the U. S. Department of Labor, Bureau of Labor Statistics, contained in *Employment and Earnings*, November 1961.

⁵ Includes exports of major military end items such as military vehicles, aircraft, ships, and ordnance including small arms and ammunition. Of the total military direct employment of 65,900 workers, about 39,600 are in the

transportation equipment industry group and 26,300 in ordnance and miscellaneous manufacturing.

⁶ The indirect employment required to produce major military exports was not estimated in detail but as an overall figure and therefore could not be distributed to the individual industry groups. For this reason, the indirect employment shown for military goods industries does not refer to indirect employment in that industry but to indirect employment in the industries supplying materials, parts, components, etc., to the military goods industries. Because the indirect employment resulting from military exports could not be distributed to the individual supporting industries, estimates of indirect employment in each of these industries are understated to some extent and the share of industry employment attributable to exports is also understated.

⁷ Not available.

⁸ Excluding eating and drinking establishments.

⁹ Covers utilities, communications, all business services, forestry, fisheries, agricultural services, and contract construction.

¹⁰ Employment required to replace plant and equipment used up in the course of producing, transporting, and marketing the goods exported was estimated as an overall total and therefore could not be distributed to individual industry groups. Because employment could not be distributed to machinery and construction industries and supporting industries, estimates of indirect employment in each of these industries are understated.

NOTE: Because of rounding, individual values may not add to total.

workers; the nonfarm employment estimate covers wage and salary workers only (excluding government).

The jobs attributable to exports represented almost 6 percent of the total farm and private nonfarm employment in 1960, with export-related farm jobs accounting for 13 percent of total farm employment and export-related nonfarm jobs almost 5 percent of total private nonfarm employment. (See accompanying table.) It required on the average slightly more than one worker in supporting industries for every worker directly involved in making, transporting, or marketing goods for export.

The employment attributable to exports varied, of course, from industry to industry, both in terms of absolute numbers as well as a proportion of total employment in a given industry. In addition, there was interindustry variation in the ratio of direct to indirect employment.

In general, industries with highly fabricated products such as machinery and transportation equipment have a much higher proportion of direct than indirect employment attributable to exports. Conversely, the industries, such as mining, chemicals, and primary metals, which provide the raw material for the more fabricated products to be exported have a much higher ratio of indirect to direct employment attributable to exports.

Although total manufacturing is the single largest sector in the array of export employment, it still represents less than half the total (42 percent). The farm sector accounts for almost one-third (31 percent), more than twice its proportion of total employment in the private economy. Manufacturing also constitutes a larger proportion of export employment than of total employment, but by a smaller margin.

Of the individual manufacturing industry groups, five stand out as making heavy contributions to export employment: chemicals, primary metals, machinery, electrical machinery, and transportation equipment. The share of the machinery and primary metals industries in total export employment would be even higher if it were possible to distribute by industry the indirect employment attributable to military goods production and employment attributable to replacement of plant and equipment.

—EVA E. JACOBS AND RONALD E. KUTSCHER
Division of Productivity and Technological Developments

Earnings in Life Insurance Offices, May-July 1961

ACTUARIES (class A), performing highly complex and specialized studies, averaged \$288.50 a week in May-July 1961, and were the highest paid among the 29 occupations covered by a survey of salaries in life insurance offices conducted by the Bureau of Labor Statistics.¹ Nationwide averages for the remainder of the jobs studied ranged from less than \$60 a week for routine clerical jobs to over \$155 for experienced underwriters and data processing systems analysts and \$190.50 for class B actuaries. Men accounted for about a fourth of the 107,800 nonsupervisory office employees in establishments within the scope of the survey, and substantially outnumbered women in jobs with weekly averages of more than \$100. Regionally, occupational averages tended to be highest in the Pacific and Middle Atlantic regions and lowest in the Southeast region. Virtually all of the workers covered by the study were provided paid holidays and vacations, as well as various types of insurance benefits.

Earnings

The 29 occupational classifications for which earnings data were obtained and reported in the accompanying table accounted for a third of the nonsupervisory office employees within the scope of the survey. Nationwide average weekly salaries for the 14 occupations predominantly staffed by men ranged from \$77 for class B tabulating machine operators to \$288.50 for class A actuaries. The 15 occupations primarily staffed by women accounted for four-fifths of the nearly 36,000 employees for whom earnings data were obtained. Average weekly earnings for these occupations ranged from \$53.50 a week for class B file clerks to \$83 for class B correspondence clerks.

¹ The study was limited to home offices and regional head offices of life insurance companies (part of industry group 631 as defined in the 1957 edition of the *Standard Industrial Classification Manual*, prepared by the U.S. Bureau of the Budget). Local and regional offices not having all or nearly all of the normal life insurance administrative functions, including underwriting, and establishments employing fewer than 50 employees at the time the survey lists were compiled were excluded.

Average weekly earnings, as used in this article, are based on hours for which employees receive their straight-time salaries.

A more comprehensive account of this survey will be presented in BLS Bull. 1324, *Industry Wage Survey: Life Insurance, May-July 1961*.

The Middle Atlantic region accounted for nearly two-fifths of the nonsupervisory employees covered by the study, the Great Lakes and New England regions each about a sixth, and the five others each a tenth or less. Among the occupations studied, average weekly earnings in the Middle Atlantic and Pacific regions were usually above the national level; those in the Great Lakes and New England regions were at or near the national averages, and those in the Border States, Middle West, Southeast, and Southwest regions were most commonly below. The high-wage position of the Pacific region applied to nearly all of the clerical jobs but not to the higher paid occupations. Thus, Pacific region averages for accounting clerks (class A), actuaries (class C), and underwriters (classes A and B) were below the national average.

Twelve metropolitan areas studied separately² accounted for three-fifths of the industry's nonsupervisory office employees. New York City, the largest insurance center, employed nearly 29,000, compared with 7,000 to 8,000 in Boston and Hartford, the two areas next in importance. Among these 12 areas, earnings were highest in New York City and lowest in Dallas. As indicated in the following tabulation, earnings in the highest paid areas were nearly 25 percent above those in the lowest, without any particular concentrations in between.

	Relative pay levels ¹ (United States=100)
New York City.....	110
Houston.....	109
Chicago.....	109
Los Angeles-Long Beach.....	107
Hartford.....	106
Jacksonville.....	98
Boston.....	97
Des Moines.....	95
Minneapolis-St. Paul.....	93
Philadelphia.....	91
Baltimore.....	90
Dallas.....	89

¹ These comparisons are based on occupations for which earnings data were available in each area. For each area, average weekly earnings for men in 11 jobs and for women in 14 jobs were multiplied by the nationwide employment in the respective occupation and the products were totaled. These totals are expressed as percentages of the similar total for the Nation.

Earnings of individuals varied substantially within the same job and locality. In many instances, weekly earnings of the highest paid employees exceeded those of the lowest paid in

the same job and area by \$50 or more. Some employees in comparatively low-paid jobs (as measured by the average for all employees) earned more than some in jobs for which the averages were significantly higher. For example, in New York City, average weekly earnings were \$65 for 540 women keypunch operators and \$87.50 for 132 women class A accounting clerks, but 23 of the keypunch operators had earnings as high as \$80 to \$90 and 33 of the accounting clerks earned as low as \$70 to \$80.

Salaries of individuals performing similar tasks also typically varied within the same establishment. More than four-fifths of the employees were in offices with formal pay systems that included ranges of rates for established classifications.

Establishment Practices

Data were also obtained on certain establishment practices such as work schedules and supplementary benefits.³

Weekly work schedules of 37.5 hours or less applied to 85 percent of the employees in May-July 1961. The Pacific region was the only region in which a majority of the employees were scheduled to work 40 hours a week. The average scheduled weekly hours in the various regions were as follows: Middle Atlantic, 36.5; New England, Border States, and Southeast, 37.0; Great Lakes, 37.5; Southwest and Middle West, 38.5; and Pacific, 39.0.

Paid holidays were provided by all establishments visited. Four-fifths of the employees in the Middle Atlantic region received 12 paid holidays annually, all of the employees in New England received 9 or more days (most commonly 9 full days or 11 full days and 1 half day), and two-thirds of the employees in the Pacific region received 10, 11, or 13 days annually. Holiday provisions in all other regions were less liberal; employees in the Border States region most commonly received 8 or 9 days annually, in the Great Lakes region, 6 or 7 days, and in the Southeast, Southwest, and Middle West regions, 5 or 6 days.

² Separate releases for each of these areas studied (listed in the accompanying tabulation) are available upon request.

³ Minimum entrance rate information was also obtained and appears in Bull. 1324, op. cit.

NUMBER AND AVERAGE STRAIGHT-TIME WEEKLY EARNINGS¹ OF NONSUPERVISORY OFFICE EMPLOYEES IN LIFE INSURANCE OFFICES,² SELECTED OCCUPATIONS AND REGIONS,³ MAY-JULY 1961

Occupation	Number of workers			Average weekly earnings ¹								
	United States ⁴	Men	Women	United States ⁴	New England	Middle Atlantic	Border States	South-east	South-west	Great Lakes	Middle West	Pacific
Actuaries, class A.....	157	155	2	\$288.50	\$286.50	\$272.50	-----	-----	\$324.50	\$316.00	\$254.00	-----
Actuaries, class B.....	265	259	6	190.50	194.00	184.50	\$172.00	-----	172.00	208.00	178.00	-----
Actuaries, class C.....	644	569	75	124.50	134.50	129.00	107.00	\$112.00	115.00	128.00	120.00	-----
Assemblers.....	1,350	56	1,294	58.50	60.50	-----	57.50	-----	56.00	55.00	48.50	\$114.00
Clerks, accounting, class A.....	1,321	235	1,086	82.00	83.50	86.50	72.50	74.00	82.50	87.00	82.00	-----
Clerks, accounting, class B.....	2,199	111	2,088	60.00	62.00	61.50	60.00	58.00	56.50	60.50	60.50	76.50
Clerks, correspondence, class A.....	793	463	330	109.50	105.50	-----	112.00	94.50	97.00	103.50	97.00	67.50
Clerks, correspondence, class B.....	1,282	319	963	83.00	76.00	-----	74.00	62.00	66.50	80.00	70.50	96.50
Clerks, file, class A.....	1,031	39	992	65.00	65.50	-----	62.50	66.50	60.00	67.50	58.00	82.50
Clerks, file, class B.....	3,762	117	3,645	53.50	56.50	55.50	52.50	50.00	48.00	54.00	49.50	-----
Clerks, policy evaluation.....	1,541	144	1,397	66.00	69.50	72.00	64.50	58.00	65.50	65.50	60.50	55.50
Clerks, premium-ledger-card.....	1,679	25	1,654	60.00	63.50	-----	59.50	55.00	56.00	58.00	55.00	72.00
Console operators.....	141	131	10	109.50	103.50	129.00	-----	98.00	98.50	98.00	-----	76.00
Keypunch operators.....	3,074	2	3,072	62.50	66.00	65.00	59.50	56.50	58.00	64.50	58.50	69.50
Premium acceptors.....	734	62	672	62.50	64.50	70.50	-----	55.50	60.50	66.00	57.00	64.00
Programmers, electronic data processing, class A.....	252	217	35	135.50	140.00	-----	-----	134.00	111.50	124.50	125.00	-----
Programmers, electronic data processing, class B.....	363	286	77	113.00	-----	122.50	-----	107.00	89.50	99.00	104.00	141.50
Stenographers, general.....	3,115	-----	3,115	64.50	63.50	67.00	60.50	60.00	63.50	63.50	59.00	75.50
Stenographers, technical.....	471	-----	471	75.00	69.00	80.00	76.50	68.00	77.50	79.00	69.00	84.50
Systems analysts, electronic data processing, class A.....	166	153	13	157.50	150.50	195.50	150.50	168.50	-----	160.00	142.00	-----
Systems analysts, electronic data processing, class B.....	199	182	17	147.00	127.00	171.50	-----	-----	-----	139.00	108.00	-----
Tabulating machine operators, class A.....	568	420	148	94.00	87.00	95.00	89.00	92.50	86.00	95.50	97.50	-----
Tabulating machine operators, class B.....	1,473	864	609	77.00	69.50	82.50	75.00	71.50	76.00	78.50	77.00	85.00
Tabulating machine operators, class C.....	1,092	505	587	64.00	65.00	68.50	59.50	61.00	62.50	59.50	61.00	63.00
Typists, class A.....	1,977	-----	1,977	64.50	66.00	64.50	61.50	61.50	59.50	61.00	60.00	69.50
Typists, class B.....	4,415	3	4,412	56.50	58.00	58.50	57.00	52.00	50.50	58.00	51.50	60.00
Underwriters, class A.....	337	307	30	156.50	148.50	184.50	169.00	155.50	153.50	151.00	136.50	145.00
Underwriters, class B.....	627	532	95	129.00	122.00	151.00	125.50	119.00	126.50	118.00	115.00	122.50
Underwriters, class C.....	596	317	279	99.00	90.50	123.00	92.50	83.00	92.00	96.00	95.50	-----

¹ Average weekly earnings are earnings based on hours for which employees receive their regular straight-time pay and are rounded to the nearest half dollar.

² For industry definition, see text footnote 1.

³ The regions used in this study include: *New England*—Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; *Middle Atlantic*—New Jersey, New York, and Pennsylvania; *Border States*—Delaware, District of Columbia, Kentucky, Maryland, Virginia, and West Virginia; *South-east*—Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, and Tennessee; *South-west*—Arkansas, Louisiana, Oklahoma,

and Texas; *Great Lakes*—Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin; *Middle West*—Iowa, Kansas, Missouri, Nebraska, North Dakota, and South Dakota; and *Pacific*—California, Nevada, Oregon, and Washington.

⁴ Includes data for the Mountain region in addition to those shown separately. Alaska and Hawaii were not included in the study.

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

Paid vacations after qualifying periods of service were provided by all establishments. Provisions applying to a majority of the employees included: 2 weeks after 1 year, 3 weeks after 15 years, and 4 weeks after 20 years of service.

Life, hospitalization, surgical, and catastrophe insurance, financed at least in part by the employer, were available to nine-tenths or more of the office employees. Accidental death and dismemberment insurance, medical insurance, and sick leave (full pay, no waiting period) were also commonly reported.

Pensions—providing regular lifetime payments for the employee upon retirement, in addition to those available under Federal old-age, survivors, and disability insurance—applied to virtually all employees.

Establishments employing a third of the employees provided free lunches. Although this provision was most common in the Middle Atlantic region, it was reported by at least some establishments in nearly all regions.

—CHARLES M. O'CONNOR

Division of Wages and Industrial Relations

Salaries of Firemen and Policemen, 1958-61

MAXIMUM ANNUAL SALARY SCALES of firefighters and patrolmen in cities with 100,000 or more inhabitants rose an average of \$639, or 12.3 percent, in the 3-year period from January 1958 to January 1961 (table 1).¹ Since most of the 175,000 firemen and policemen were already at the maximum of the salary range, an increase in maximum scales resulted in corresponding increases in salaries actually paid to most of these city employees. More than 95 percent of the firemen and police patrolmen were employed in cities where salary scales advanced during this period. Seventy percent of them received increases in at least 2 years, and 20 percent had their salaries increased each year.

The increase in salary scales during these 3 years was smaller than the 14.8-percent rise in the preceding 3-year period and was well below the record 25-percent rise that occurred between January 1946 and January 1949 (table 2). The annual rate of increase in maximum salaries between 1958 and 1961 was 4 percent, compared

with an average of 5 percent over the entire period from the end of World War II to January 1958.

Because most of the largest cities in the country raised salary scales in 1960² and salary increases

¹ This article brings up to date the Bureau of Labor Statistics series on maximum salary scales (excluding longevity rates) for policemen engaged in general police duties (including traffic control) and firemen (excluding drivers and engineers). Comparable data were last published in the *Monthly Labor Review*, October 1958 (pp. 1143-1146); methods used in constructing the indexes of salary scales are discussed in *Wage Movements*, Bull. 2.

The series is based on special salary tabulations prepared by the International Association of Fire Fighters (*Fire Department Salaries and Working Conditions*), the International City Managers Association (*Municipal Yearbook*), and the Fraternal Order of Police (*Survey of Salaries and Working Conditions of Police*). In addition, the BLS obtained supplementary data for some cities for the 1958-61 period by direct inquiry.

The tabulations have been prepared by distributing the total number of firemen by the maximum salary for firefighters in the community and the number of patrolmen according to the increase in their maximum salary scales in that community. Because in most cities pay scales for firefighters and patrolmen are identical, this article does not ordinarily discuss the two groups separately. Variations among communities in the proportion of policemen and firemen rather than differences in pay within the same community largely explain the differences in average salary levels and salary trends between the two occupational groups. The largest cities employ about twice as many patrolmen as firefighters, while the smaller cities (those of 100,000 but fewer than 250,000) have about as many firefighters as patrolmen.

² One-fifth of the firemen and police patrolmen employed in cities of 100,000 or more population worked in New York City which, together with the four other cities of 1 million or more inhabitants, employed 40 percent of all firemen and police patrolmen studied in 1961.

The scheduled workweek in January 1961 for firemen in New York City was 42 hours, while in other cities of 1 million or more inhabitants, it ranged from 48 to 62 hours. Policemen in the largest cities generally worked a 40- to 44-hour week.

TABLE 1. INCREASES IN MAXIMUM ANNUAL SALARY SCALES OF FIREFIGHTERS AND POLICE PATROLMEN,¹ BY CITY-SIZE GROUP AND REGION, 1958-61

City-size group and region ²	Percent ³						Dollars					
	1958-61			Firefighters and police patrolmen			1958-61			Firefighters and police patrolmen		
	Fire-fighters and police patrolmen	Fire-fighters	Police patrolmen	1958-59	1959-60	1960-61	Fire-fighters and police patrolmen	Fire fighters	Police patrolmen	1958-59	1959-60	1960-61
All cities.....	12.3	12.0	12.5	3.0	4.1	4.7	639	621	653	157	220	262
CITY-SIZE GROUP												
1,000,000 and over.....	12.4	12.6	12.5	1.4	5.2	5.4	714	714	714	82	301	331
500,000 and under 1,000,000.....	12.4	12.2	12.2	5.1	2.2	4.6	633	634	633	263	117	253
250,000 and under 500,000.....	12.4	11.9	12.9	4.6	3.6	3.7	606	576	634	223	185	198
100,000 and under 250,000.....	11.8	11.5	11.9	3.3	4.2	3.9	535	524	544	149	197	189
REGION												
Northeast.....	12.0	11.8	12.1	1.6	4.0	6.0	639	624	655	84	215	340
South.....	11.9	11.0	12.6	5.2	2.3	4.0	530	482	572	232	108	190
North Central.....	12.2	12.3	12.1	3.3	4.2	4.2	640	635	643	172	229	239
West.....	14.1	14.2	14.0	4.5	6.3	2.7	818	824	813	259	384	175

¹ Based on data for all cities having a population of 100,000 or more (with the exception of 1 city of 100,000 but under 250,000 inhabitants). Data refer to changes in maximum salaries (excluding longevity rates) for firefighters and police patrolmen on January 1 of each year.

² The regions used in this study are Northeast—Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont; South—Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia; North Central—Illinois, Indiana, Iowa, Kansas, Michigan, Minne-

sota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin; and West—Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

³ Because of weighting methods, the percent change for firefighters and police patrolmen combined may be slightly above or below the changes for both groups considered separately.

Over the period 1953-61, 4 cities provided salary increases for patrolmen but not for firefighters; 3 other communities increased patrolmen's salaries by a larger amount than firefighters' salaries.

TABLE 2. INDEXES OF ANNUAL SALARY SCALES OF FIRE-FIGHTERS AND POLICE PATROLMEN,¹ 1924-61
[Index, 1957-59=100]

Year	Firefighters and police patrolmen	Firefighters	Police patrolmen
1924	38	39	37
1929	42	43	42
1932	43	44	42
1934	42	41	42
1938	45	44	45
1939	45	44	45
1940	45	44	45
1941	45	44	45
1942	46	46	46
1943	47	47	46
1944	49	49	49
1945	52	52	52
1946	53	52	55
1947	57	58	57
1948	61	62	61
1949	66	66	66
1950	68	68	68
1951	72	72	72
1952	77	77	77
1953	82	82	82
1954	85	85	85
1955	87	87	87
1956	91	91	91
1957	96	96	96
1958	101	101	101
1959	104	104	104
1960	108	108	108
1961	113	113	113

¹ Based on data for all cities having a population of 100,000 or more (with the exception of 1 city of 100,000 but under 250,000 inhabitants). Data for 1939 to 1961 are based on maximum salaries (excluding longevity rates) for firefighters and police patrolmen in effect on January 1 of each year; data for earlier years are based on average salaries.

were widespread among smaller cities, the rise occurring in that year was greater than in either 1958 or 1959.³ The average rise in salaries and the proportion of firemen and patrolmen employed where scales were increased during each of the 3 years were as follows:

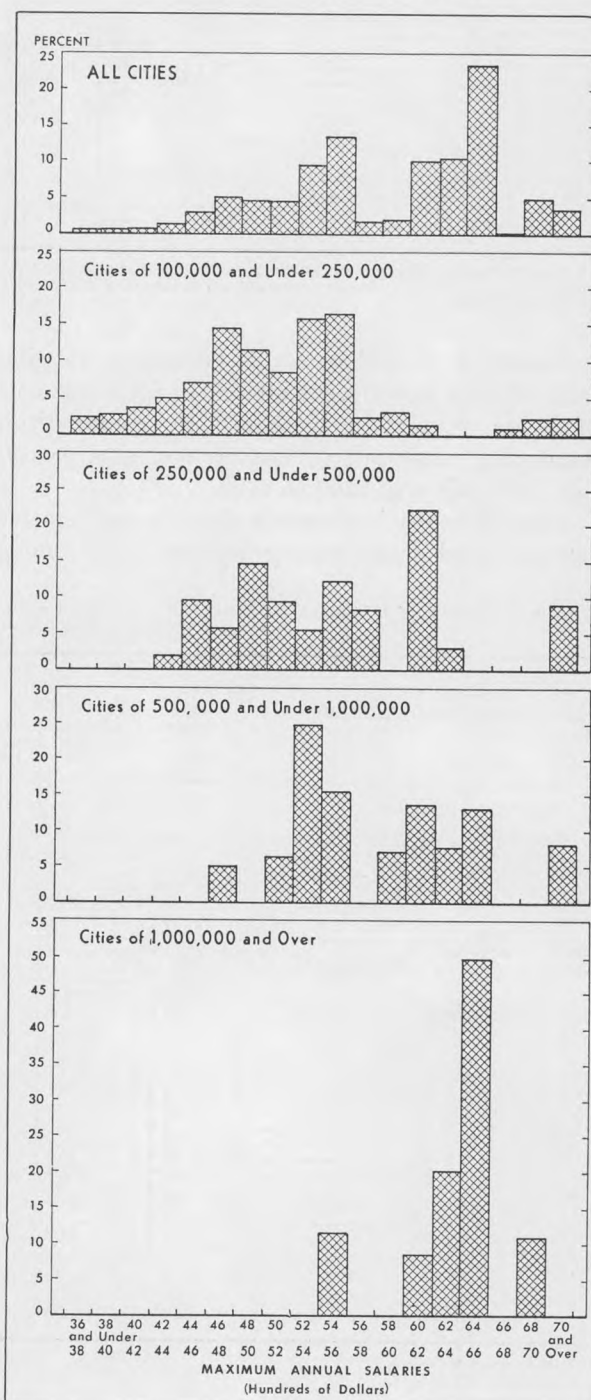
	1958	1959	1960
Average percent increase, all cities...	3.0	4.1	4.7
Percent of workers where scales were increased.....	44.0	68.3	76.1

Intercity Variations in Pay Changes, 1958-61

While the pay scale increases put into effect during the 3-year period varied among cities from 2.6 to 30 percent, there were a few cities in which salary scales were not changed at all; two-fifths of the firemen and policemen were employed where salary rates advanced 10-12½ percent.⁴ One out of eight protective workers was employed where salaries advanced 15-17½ percent, almost as many

where they rose 17½-20 percent, and slightly more where the raise was 5-7½ percent. (See table 3.)

Maximum Annual Salary Scales of Firefighters and Police Patrolmen, January 1961



³ Changes in scales are tabulated in the year in which they became effective, rather than the year in which the decision to change them was made. Changes in scales put into effect between January 1, 1958, and January 1, 1959, are referred to as 1958 changes; between 1959 and 1960, as 1959 changes; etc.

⁴ For ease of reading, in this and subsequent discussions of tabulations, the limits of the class intervals are designated, for example, as 10 to 12½ percent and \$700 to \$800 instead of the more precise terminology "10 and under 12½ percent" and "\$700 and under \$800."

TABLE 3. PERCENT DISTRIBUTION OF FIREFIGHTERS AND POLICE PATROLMEN,¹ BY THE INCREASE IN MAXIMUM ANNUAL SALARY SCALES, 1958-61

Increase in maximum annual salary scale	Firefighters and police patrolmen	Fire-fighters	Police patrolmen	Increase in maximum annual salary scale	Firefighters and police patrolmen	Fire-fighters	Police patrolmen
PERCENT				DOLLARS			
No change.....	3.8	4.7	3.2	No change.....	3.8	4.7	3.2
Under 2.5.....				Under \$100.....			
2.5 and under 5.0.....	4.3	5.8	3.2	\$100 and under \$200.....	1.6	1.9	1.5
5.0 and under 7.5.....	13.0	13.1	12.9	\$200 and under \$300.....	10.0	12.1	8.6
7.5 and under 10.0.....	2.4	2.9	2.1	\$300 and under \$400.....	7.5	7.2	7.6
10.0 and under 12.5.....	40.1	35.6	43.3	\$400 and under \$500.....	3.0	3.9	2.4
12.5 and under 15.0.....	7.0	8.0	6.3	\$500 and under \$600.....	6.4	6.5	6.2
15.0 and under 17.5.....	12.5	14.9	10.7	\$600 and under \$700.....	11.7	11.4	11.9
17.5 and under 20.0.....	11.0	9.2	12.3	\$700 and under \$800.....	34.0	30.9	36.2
20.0 and under 22.5.....	1.7	1.8	1.6	\$800 and under \$900.....	3.5	4.4	2.9
22.5 and under 25.0.....	.1	.2		\$900 and under \$1,000.....	13.7	12.4	14.6
25.0 and under 27.5.....	1.2	1.3	1.1	\$1,000 and under \$1,100.....		1.0	.6
27.5 and under 30.0.....	2.2	1.5	2.7	\$1,100 and under \$1,200.....		3.5	4.3
30.0 and over.....	.7	.9	.6	\$1,200 and over.....	4.0		
Total.....	100.0	100.0	100.0	Total.....	100.0	100.0	100.0

¹ Based on total employment in fire departments and total number of uniformed patrolmen in 1961. For city coverage and definition of salary scales, see footnote 1, table 1.

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

Measured in dollar terms, increases ranging from \$700 to \$1,000 went into effect for about half of these protective workers. In communities employing one-tenth of the firemen and patrolmen, the gain was \$200 to \$300.

Average salary increases in absolute and relative terms varied more among regions than among

city-size groups. Maximum scales rose 12.4 percent between 1958 and 1961 in each of the three largest city-size groups studied and 11.8 percent in the smallest size group. The dollar increase in salaries ranged from \$714 in cities of 1 million or more to \$535 in the smallest cities studied. The West recorded both the greatest percentage and

TABLE 4. PERCENT DISTRIBUTION OF FIREFIGHTERS AND POLICE PATROLMEN BY THE INCREASE IN MAXIMUM ANNUAL SALARY SCALES,¹ CITY-SIZE GROUP, AND REGION,² 1951-61

Increase in maximum annual salary scale	All cities	City-size group				Region			
		1,000,000 and over	500,000 and under 1,000,000	250,000 and under 500,000	100,000 and under 250,000	Northeast	South	North Central	West
PERCENT									
20 and under 30.....	0.2				1.1		1.2		
30 and under 40.....	3.0				8.5		14.3		
40 and under 50.....	40.3	69.3	22.7	19.7	17.4	65.1	25.7	31.2	2.3
50 and under 60.....	17.6		25.3	34.5	31.1	13.8	31.8	19.4	3.9
60 and under 70.....	28.4	30.7	31.2	26.1	22.8	19.2	12.2	40.0	58.8
70 and under 80.....	5.7		12.9	3.0	11.6	1.4	11.6	7.7	6.4
80 and under 90.....	4.2		8.0	9.0	5.1		3.2	1.7	24.6
90 and under 100.....	.5				2.4				4.0
100 and over.....									
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Average change.....	56.5	53.9	60.4	57.5	57.5	52.7	52.1	57.1	73.5
DOLLARS									
\$800 and under \$1,000.....	.7				3.1		3.4		
\$1,000 and under \$1,200.....	2.1			7.7	4.3		9.6		
\$1,200 and under \$1,400.....	2.3			3.6	8.1	1.3	7.6	1.0	
\$1,400 and under \$1,600.....	6.6		6.1	12.7	15.2	3.7	21.7	2.0	2.3
\$1,600 and under \$1,800.....	8.1		7.9	18.6	16.2	4.4	11.1	15.5	
\$1,800 and under \$2,000.....	19.7	19.5	27.3	11.0	18.7	13.2	32.7	29.4	
\$2,000 and under \$2,200.....	29.0	49.7	17.7	13.1	16.4	64.4	1.3	6.6	12.0
\$2,200 and under \$2,400.....	7.9		20.1	14.6	6.1	11.8	2.0	7.4	5.9
\$2,400 and under \$2,600.....	10.2	20.0		6.7	4.1	.7		32.2	10.8
\$2,600 and under \$2,800.....	3.9		12.9	3.0	3.0		10.6	6.0	1.5
\$2,800 and under \$3,000.....	4.6	10.7			.9				36.3
\$3,000 and under \$3,200.....	.3				1.5				2.5
\$3,200 and over.....	3.6		8.0	9.0	2.4				28.6
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Average change.....	\$2,110	\$2,246	\$2,179	\$2,004	\$1,858	\$2,066	\$1,713	\$2,143	\$2,801

¹ See footnote 1, table 1.

² See footnote 2, table 1.

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

dollar gains of any region—14.1 percent and \$818. Maximum salaries rose less in the Southern region than elsewhere—11.9 percent and \$530.

Trends Over the Past Decade

Over the decade from 1951 to 1961, increases in maximum scales varied among cities from 27 to 93 percent, but two-fifths of all firemen and policemen worked where the gain was 40-50 percent, and over one-fourth where increases were 60-70 percent (table 4).

As in the interval from 1958 to 1961, salary increases were more uniform on the average among different sized cities than among regions. Proportionately the greatest rise in salary scales—60 percent—occurred in communities of 500,000 to 1 million inhabitants, and the smallest—54 percent—in cities of 1 million or more. The increase in salaries was the same—58 percent—in the two smallest city-size groups studied.

The average increase in salaries was practically identical in the Northeast and South—52.7 and 52.1 percent, respectively, and not much higher in the North Central States—57.1 percent. In the Western cities, however, average salary scales advanced by about three-fourths—73.5 percent.

In terms of dollars, the rise in salary scales from 1951 to 1961 varied from \$1,850 in communities with a population of less than 250,000 to almost \$2,250 in cities with 1 million inhabitants or more. The advance in salaries was over \$1,700 on the average in the South and \$2,800 in Western communities. More than one-fourth of the firemen and policemen in the Western cities studied were employed where salaries advanced at least \$3,200. Scales of two-thirds of the firemen and policemen in the smallest cities rose less than \$2,000, whereas four-fifths of those in the largest cities were employed where pay increased at least \$2,000 but less than \$3,000.

Comparison With Other Workers

From January 1939 to January 1961, maximum salaries of firemen and patrolmen rose about 150 percent, somewhat more than the Consumer Price Index and basic salary scales and average salary rates of Federal office workers but less than salaries of urban teachers and gross average hourly and weekly earnings of factory production workers.

In the decade 1951-61, salaries of firemen and policemen rose much more than the Consumer Price Index, somewhat more than the pay of factory production workers, and more than basic or average salary rates of Federal office workers. They kept pace with the rise in urban teachers' pay, but the advance in overall average salaries of Federal office workers was somewhat greater. From 1958 to 1961, however, maximum pay scales of firemen and patrolmen increased more than earnings of factory production workers but less than the pay of Federal white-collar workers or of urban teachers, as shown below:

	Percent increase ¹ from—		
	1939 to 1961	1951 to 1961	1958 to 1961
Firemen and policemen:			
Maximum salary scales.....	151	58	12
Urban teachers:			
Average annual salaries ²	174	59	17
Federal Classification Act employees:			
Basic salary scales ³	112	40	19
Average salary rates ³	125	42	19
Average salaries ³	186	63	27
Factory production workers:			
Average hourly earnings.....	266	50	10
Average weekly earnings.....	288	42	11
Consumer Price Index.....	114	17	4

¹ Increases for urban teachers computed as of school years ending in June. All others computed from January to January of each pair of years, except 1939 data for Federal employees which relate to August.

² Includes both changes in salary scales (including cost-of-living adjustments) and changes in pay for individual teachers because of length of service, merit, or improved educational qualifications. Figures for 1961 are preliminary. See also "Salaries of City Public School Teachers, 1957-59," *Monthly Labor Review*, March 1961, pp. 259-262, or BLS Report 194, *Salary Trends: City Public School Teachers, 1925-59*.

³ Basic salary scales reflect statutory changes in salaries; average salary rates show, in addition, the effect of merit or in-grade salary increases; and average salaries also include the effect of changes in the proportion of workers employed in the various pay grades. See also "Federal Classified Employees' Salary Changes, 1958-60," *Monthly Labor Review*, May 1961, pp. 489-492, or BLS Report 200, *Salary Trends: Federal Classified Employees, 1939-60*.

TABLE 5. MAXIMUM ANNUAL SALARY SCALE OF FIREFIGHTERS AND POLICE PATROLMEN IN CITIES OF 500,000 INHABITANTS OR MORE, JANUARY 1961

City	Maximum annual salary scale	City	Maximum annual salary scale
San Francisco.....	\$7,152	Cleveland.....	\$6,000
Los Angeles.....	6,900	Pittsburgh.....	5,900
New York.....	6,581	Philadelphia.....	5,540
Washington, D.C.....	6,450	Boston.....	5,500
Minneapolis.....	6,432	Buffalo.....	5,300
Chicago.....	6,360	Baltimore.....	5,250
Milwaukee.....	6,324	St. Louis.....	1 5,200
Detroit.....	6,057	Houston.....	5,136
Cincinnati.....	6,030	New Orleans.....	4,680

¹ Maximum for patrolmen; maximum for firefighters was \$5,571.

Intercity Variations in Salary Levels, 1961

Maximum annual salary scales for patrolmen and firefighters in January 1961 ranged from \$3,648 in Savannah, Ga., to \$7,152 in San Francisco and Oakland, Calif. The mean salary was \$5,847, and the median about \$200 higher.

Salary scales tended to be higher in large than in small communities (chart) and were highest on the average in West Coast cities and lowest in the South. In cities of 500,000 or more, maximum scales for patrolmen and firefighters ranged from \$4,680 to \$7,152 (table 5), with more than three-fifths of the firemen and policemen in these large cities employed where scales were at least \$6,200. In the smallest communities studied

(those with 100,000 to 250,000 inhabitants), about half the protective workers were employed where the maximum scale was \$4,800–\$5,600 a year. In five cities of this size, including four in the South, maximum salary scales were below \$4,000.

Two-thirds of the policemen and firemen in Western cities were employed where salary scales for these jobs were at least \$6,800. All eight of the California cities with 100,000 inhabitants or more had maximum scales of at least \$6,600. In the South, half of the firemen and patrolmen worked where maximum salaries were below \$5,000 a year.

—HELENE T. LESANSKY

Division of Wages and Industrial Relations

Guides for Noninflationary Wage and Price Decisions

EDITOR'S NOTE.—*The material which follows is a brief excerpt from the Annual Report of the Council of Economic Advisers which was transmitted to the Congress with the Economic Report of the President in January 1962.*

INDIVIDUAL wage and price decisions assume national importance when they involve large numbers of workers and large amounts of output directly, or when they are regarded by large segments of the economy as setting a pattern. Because such decisions affect the progress of the whole economy, there is legitimate reason for public interest in their content and consequences. An informed public, aware of the significance of major wage bargains and price decisions, and equipped to judge for itself their compatibility with the national interest, can help to create an

atmosphere in which the parties to such decisions will exercise their powers responsibly.

How is the public to judge whether a particular wage-price decision is in the national interest? No simple test exists, and it is not possible to set out systematically all of the many considerations which bear on such a judgment.

It is possible, however, to describe in broad outline a set of guides which, if followed, would preserve overall price stability while still allowing sufficient flexibility to accommodate objectives of efficiency and equity. These are not arbitrary guides. They describe—briefly and no doubt incompletely—how prices and wage rates would behave in a smoothly functioning competitive economy operating near full employment. Nor do they constitute a mechanical formula for determining whether a particular price or wage decision is inflationary. They will serve their purpose if they suggest to the interested public a useful way of approaching the appraisal of such a decision.

The General Guides

If, as a point of departure, we assume no change in the relative shares of labor and nonlabor incomes in a particular industry, then a general guide may be advanced for noninflationary wage behavior, and another for noninflationary price behavior. Both guides, as will be seen, are only first approximations.

The general guide for noninflationary wage behavior is that the rate of increase in wage rates (including fringe benefits) in each industry be equal to the trend rate of overall productivity increase. General acceptance of this guide would maintain stability of labor cost per unit of output for the economy as a whole—though not of course for individual industries.

The general guide for noninflationary price behavior calls for price reduction if the industry's rate of productivity increase exceeds the overall rate—for this would mean declining unit labor costs; it calls for an appropriate increase in price if the opposite relationship prevails; and it calls for stable prices if the two rates of productivity increase are equal.

These are advanced as general guideposts. To reconcile them with objectives of equity and efficiency, specific modifications must be made to adapt them to the circumstances of particular industries. If all of these modifications are made, each in the specific circumstances to which it applies, they are consistent with stability of the general price level. Public judgments about the effects on the price level of particular wage or price decisions should take into account the modifications as well as the general guides. The most important modifications are the following:

1. Wage-rate increases would exceed the general guide rate in an industry which would otherwise be unable to attract sufficient labor; or in which wage rates are exceptionally low compared with the range of wages earned elsewhere by similar labor, because the bargaining position of workers has been weak in particular local labor markets.

2. Wage-rate increases would fall short of the general guide rate in an industry which could not provide jobs for its entire labor force even in times of generally full employment; or in which wage rates are exceptionally high compared with the

range of wages earned elsewhere by similar labor, because the bargaining position of workers has been especially strong.

3. Prices would rise more rapidly, or fall more slowly, than indicated by the general guide rate in an industry in which the level of profits was insufficient to attract the capital required to finance a needed expansion in capacity; or in which costs other than labor costs had risen.

4. Prices would rise more slowly, or fall more rapidly, than indicated by the general guide in an industry in which the relation of productive capacity to full employment demand shows the desirability of an outflow of capital from the industry; or in which costs other than labor costs have fallen; or in which excessive market power has resulted in rates of profit substantially higher than those earned elsewhere on investments of comparable risk.

It is a measure of the difficulty of the problem that even these complex guideposts leave out of account several important considerations. Although output per man-hour rises mainly in response to improvements in the quantity and quality of capital goods with which employees are equipped, employees are often able to improve their performance by means within their own control. It is obviously in the public interest that incentives be preserved which would reward employees for such efforts.

Also, in connection with the use of measures of overall productivity gain as benchmarks for wage increases, it must be borne in mind that average hourly labor costs often change through the process of up or down grading, shifts between wage and salaried employment, and other forces. Such changes may either add to or subtract from the increment which is available for wage increases under the overall productivity guide.

Finally, it must be reiterated that collective bargaining within an industry over the division of the proceeds between labor and nonlabor income is not necessarily disruptive of overall price stability. The relative shares can change within the bounds of noninflationary price behavior. But when a disagreement between management and labor is resolved by passing the bill to the rest of the economy, the bill is paid in depreciated currency to the ultimate advantage of no one.

Wage Chronology: Franklin Association of Chicago

Supplement No. 2—1953–61

EDITOR'S NOTE.—*Wage Chronology No. 16: Chicago Printing, summarized changes in wage rates and related wage practices negotiated by both the Chicago Newspaper Publishers' Association and the Franklin Association of Chicago with the International Typographical Union (ITU) and the International Printing Pressmen and Assistants' Union of North America (IPPA) between 1939 and November 1953. For easier use, the chronology is now being divided into two parts—one for each association.*

The following article summarizes the 1953–61 negotiations of the Franklin Association of Chicago with the ITU and the IPPA.¹ The 1954–61 negotiations between the Chicago Newspaper Publishers' Association and the two unions were covered in the November 1961 Monthly Labor Review (pp. 1226–1232).

DURING THE PERIOD from 1953 to 1961, both the International Typographical Union and the International Printing Pressmen negotiated four agreements providing for wage-rate increases. Agreements negotiated in December 1953 and October 1954 provided one-step wage increases of \$4 a week for the compositors and \$6 for the pressmen. Two-year agreements negotiated in June 1956 provided for wage increases of \$3.75 a week for workers represented by the ITU and \$3 for those represented by the Pressmen effective immediately, with increases of \$2.75 and \$3, respectively, to go into effect a year later. Both agreements liberalized a variety of supplementary benefits.

Contracts negotiated in 1958 also were effective for a period of 2 years. The ITU agreement, concluded in November, provided a \$4-a-week wage-rate increase retroactive to June 7, 1958, \$1 retroactive to August 10, and \$3 to be effective in

June 1959. The Pressmen's agreement made a \$3.75-a-week wage-rate increase effective in June 1958 and provided for a \$3 wage-rate increase a year later, subject to the union's option to have the employers' contributions to the pension fund increased in lieu of all or part of the raise.² Both contracts added a paid half holiday, bringing the total to 6½, and improved health and welfare benefits, and the ITU agreement increased the night-shift differential. In November 1958, the union notified the association that it had elected to have the employers' contribution to the pension fund increased by \$3 a week in lieu of the wage-rate increase due in June 1959.

Agreements reached in 1960 also provided for both immediate and deferred wage increases, as well as liberalized fringe benefits. The wage increases provided by the ITU contract totaled \$8.50 a week, with \$4 retroactive to June 1960, \$1 effective in December when the contract settlement was reached, and \$3.50 in 1961. The Pressmen's contract, concluded in late August 1960, provided wage increases totaling \$7 a week, of which \$4 was made retroactive to June and \$3 was scheduled to go into effect in June 1961. The parties also agreed that any improvements in the health and welfare plan which the Franklin Association agreed to with any other union would also apply to the Pressmen. Agreement on other economic terms was not concluded until December 15, 1960.

When the ITU and the association subsequently agreed to additional changes in health and welfare benefits, these changes were extended to members of the IPPA. Both agreements added another paid half holiday, bringing the total to 7, with certain restrictions on the addition in the Pressmen's agreement. The Pressmen's agreement also increased the employers' contribution to the pension plan by \$1 a week.

Both the ITU and the IPPA agreements expire on June 6, 1962.

¹ For data covering 1939–53, see *Monthly Labor Review*, July 1951 (pp. 49–56) and November 1953 (pp. 1203–1206), or BLS Report 215 which presents data for the entire period 1939–61.

² The pension fund, like that in effect for the compositors, had originally been financed solely by union members. These plans had been in effect for more than 30 years.

A—General Wage Changes

Effective date	Increase in hourly rate (cents)	Applications, exceptions, and other related matters
	<i>Compositors, hand and machine</i> <i>Cylinder pressmen</i>	
Dec. 16, 1953 (IPPA agreement of same date).	16.6	
Oct. 7, 1954 (ITU agreement of same date).	11.0	
June 7, 1956 (IPPA and ITU agreements of same date).	10.4 8.3	Deferred wage increases effective June 7, 1957, as follows: <i>Compositors</i> : \$2.75 a week or 7.6 cents an hour. <i>Pressmen</i> : \$3 a week, or 8.3 cents an hour. Deferred increases.
June 7, 1957 (IPPA and ITU agreements of June 7, 1956).	7.6 8.3	
June 7, 1958 (ITU agreement of Nov. 12, 1958, and IPPA agreement, date not available).	11.0 10.3	<i>Compositors</i> : Additional \$1 a week, or 2.8 cents an hour, effective Aug. 10, 1958. Deferred wage increases effective June 7, 1959, as follows: <i>Compositors</i> : \$3 a week, or 8.3 cents an hour. <i>Pressmen</i> : \$3 a week, or 8.3 cents an hour. Union given option to use all or part of increase for pension fund.
Aug. 10, 1958 (ITU agreement of Nov. 12, 1958).	2.8	
June 7, 1959 (ITU agreement of Nov. 12, 1958).	8.3	Deferred increase: <i>Pressmen</i> : All of the \$3 a week deferred increase used to increase employers' contribution to pension fund.
June 7, 1960 (ITU agreement of Dec. 12, 1960, and IPPA wage agreement of Aug. 29, 1960).	11.0 11.0	<i>Compositors</i> : Additional \$1 a week, or 2.8 cents an hour, effective Dec. 12, 1960. Deferred wage increases effective June 7, 1961, as follows: <i>Compositors</i> : \$3.50 a week, or 9.7 cents an hour. <i>Pressmen</i> : \$3 a week, or 8.3 cents an hour.
Dec. 12, 1960 (ITU agreement of same date).	2.8	
June 7, 1961 (ITU agreement of Dec. 12, 1960, and IPPA wage agreement of Aug. 29, 1960).	9.7 8.3	Deferred increases.

B—Hourly and Weekly Rates for Compositors and Pressmen, 1953–61

Effective date	Compositors, hand ¹				Cylinder pressmen ²				
	Day-shift rates		Premium pay for night shifts		Day-shift rates		Premium pay for night shifts—		
	Hourly	Weekly ³	First night shift ⁴	Second night shift ⁴	Hourly	Weekly ³	On 2-shift basis	On 3-shift basis	
							Night-work	First night shift ⁴	Second night shift ⁴
1953: Dec. 16.....					\$3.103	\$112.50	\$0.138	\$0.378	\$0.512
1954: Oct. 7.....	\$3.131	\$113.50	\$0.157	\$0.536					
1956: June 7.....	3.235	117.25	.194	.590	3.186	115.50	.138	.384	.521
1957: June 7.....	3.310	120.00	.199	.600	3.269	118.50	.138	.390	.531
1958: June 7.....	3.421	124.00	.205	.624	3.372	122.25	.138	.398	.543
Aug. 10.....	3.448	125.00	.207	.629					
1959: June 7.....	3.531	128.00	.212	.644	3.372	122.25			
Sept. 14.....			.230	.664					
1960: June 7.....	3.641	132.00	.237	.684	3.483	126.25	.138	.406	.556
Dec. 12.....	3.669	133.00	.257	.710					
1961: June 7.....	3.766	136.50	.264	.729	3.566	129.25	.138	.412	.565

¹ Machine operators received an additional \$1.40 a week, or 3.9 cents an hour.

² Increases shown for cylinder pressmen reflect the changes in basic wage scales for journeymen. The basic rate is paid for work on the following equipment: Second position when running tandem or 4-press beds; 2-color automatic Harris presses; 2-color Harris-Seybold-Potter presses; 2-color Miller presses; 2-color multicolor ticket presses; any two of the following presses in combination: automatic press, Harris single press, Miehle horizontal press, Miehle vertical press, Miller simplex press, Heidelberg press, 2 presses up to 46 by 65 inches, 3 patent inside blanket presses, 1 press with Upham attach-

ments, 1 double cylinder perfecting press, 1 press over 25 by 38 inches and not over 3 job presses, 2 automatic presses, 1 double cylinder flatbed 2-color press. Special rates are paid for work on other types of presses.

³ Based on 36.50-hour week.

⁴ Standard workweek was 35.25 hours (same as day shift) for 1st night shift for commercial compositors and for night shift for cylinder pressmen on 2-shift basis; 33.75 hours for 1st night shift for cylinder pressmen on 3-shift basis; and 32.5 hours for 2d night shift for compositors and pressmen.

⁵ Based on 36.25-hour week.

C—Related Wage Practices ¹

Effective date	Provision	Applications, exceptions, and other related matters
<i>Premium Pay for Work on Sixth Day or Saturday</i>		
Oct. 7, 1954 (ITU agreement of same date).		Increased to: \$6 a week over minimum day scale for work on Saturday as a regular shift.
June 7, 1956 (ITU agreement of same date).	Added: Double time for full shift, as regularly scheduled, guaranteed for work on sixth shift in workweek.	Added: Double time for hours actually worked paid employees who decided not to work entire shift.
June 7, 1957 (ITU agreement dated June 7, 1956).		Increased to: \$6.50 for work on Saturday as regular shift.
June 7, 1958 (ITU agreement dated Nov. 12, 1958).		Increased to: \$7 for work on Saturday as regular shift.
		Increased to: \$7.50 for work on Saturday as a regular shift.
<i>Premium Pay for Work on Sunday</i>		
June 7, 1956 (ITU agreement of same date).	Added: Double time for full shift, as regularly scheduled, guaranteed for work on seventh shift in workweek.	Added: Double time for hours actually worked paid employees who decided not to work entire shift.
<i>Holiday Pay</i>		
Dec. 16, 1953 (IPPA agreement of same date).	No change: Number of holidays ¹ or eligibility requirements.	Provisions in effect and continued:
Oct. 7, 1954 (ITU agreement of same date).	Increased to: <i>Pressmen</i> —Triple time (was double time) for overtime work by night crew on morning of legal holiday.	Paid holidays were New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving, and Christmas.

See footnotes at end of table.

C—Related Wage Practices ¹—Continued

Effective date	Provision	Applications, exceptions, and other related matters
<i>Holiday Pay—Continued</i>		
Dec. 16, 1953 (IPPA agreement of same date). Oct. 7, 1954 (ITU agreement of same date)—Continued		<p><i>Pressmen:</i> Double time for work on Christmas Eve and/or New Year's Eve. Eligibility requirements—To receive holiday pay, employee must have either (a) lost a day's pay because of the holiday and (1) worked the regularly scheduled days preceding and following the holiday, or (2) been laid off within 5 regularly scheduled workdays preceding the holiday, or (3) been absent because of illness or disability for less than 30 days preceding the holiday, or (b) been on vacation on holiday notwithstanding (1) above.</p> <p><i>Compositors:</i> Eligibility requirements—To receive holiday pay, employee must have either (a) lost a day's pay because of the holiday and (1) worked 2 days or more during the 5 workdays preceding the holiday, or (2) worked or been available for work on the regularly scheduled workdays preceding the holiday, or (3) been laid off within 5 regularly scheduled workdays preceding the holiday, or (4) been absent because of illness, physical disability, or reasonably unavoidable cause for less than 30 days preceding the holiday, or (b) been on regularly scheduled vacation on holiday and holiday must fall on a day for which he would have been paid if not on vacation.</p>
June 7, 1956 (ITU agreement of same date). June 7, 1958 (ITU agreement of Nov. 12, 1958, and IPPA agreement, date not available).	<p>Added: Double time for overtime worked past midnight on eve of holiday. Added: Paid half holiday ²-----</p>	<p>Half holiday was Christmas Eve. Employees to receive full shift pay for 4 hours' work.</p> <p><i>Pressmen:</i> Not applicable to employees failing to report for work when ordered on Christmas Eve. Holiday pay provided employees laid off within 10 days (was 5) preceding holiday. Holiday pay not provided extra employees laid off within 5 regularly scheduled workdays preceding holiday who had worked less than 2 shifts.</p>
June 7, 1960 (ITU agreement dated Dec. 12, 1960, and IPPA agreement dated Dec. 15, 1960).	Added: Paid half holiday ² -----	<p>Half holiday was New Year's Eve. Employees to receive full-shift pay for 4 hours' work.</p> <p><i>Pressmen:</i> Not applicable to employees failing to report for work when ordered on New Year's Eve. <i>Compositors:</i> Employees guaranteed 6 paid holidays regardless of day of week on which holiday fell.</p>
<i>Paid Vacations</i>		
Dec. 16, 1953 (IPPA agreement of same date). Oct. 7, 1954 (ITU agreement of same date).	No change in vacation provisions ¹ -----	<p>Provisions in effect and continued: <i>Pressmen:</i> Vacations not cumulative from year to year. <i>Compositors:</i> Vacations mandatory and not cumulative from year to year. Pay provided for holidays falling in vacation period.</p>

See footnotes at end of table.

C—Related Wage Practices ¹—Continued

Effective date	Provision	Applications, exceptions, and other related matters
<i>Paid Vacations—Continued</i>		
June 7, 1956 (ITU agreement of same date).	-----	Added: Absence because of personal illness or injury for 1 week or longer prior to the scheduled vacation period in the calendar year could be used as vacation time if agreed to after employee had returned to work, provided the change did not necessitate other changes in the posted vacation schedule.
June 7, 1958 (ITU agreement dated Nov. 12, 1958).	-----	Added: At request of employee, 5 consecutive days of layoff could be used as vacation time if working card remained at shop during period.
<i>Reporting Time</i>		
Dec. 16, 1953 (IPPA agreement of same date).	No change in reporting time provisions ¹ -----	Provisions in effect and continued: Full day's pay guaranteed men employed after the regular starting time applicable only if not ordered to work the next day.
June 7, 1956 (ITU agreement of same date).	Added: Double time for full shift, as regularly scheduled, guaranteed men employed day or night, when not regularly scheduled to work.	Added: Double time for hours actually worked paid employees who decide not to work entire shift.
June 7, 1958 (IPPA agreement, date not available).	-----	Added: Employees hired from call room guaranteed 2 days' work except where filling an emergency vacancy caused by sickness, accident, or the absence of a regular incumbent.
<i>Callback Allowance</i>		
June 7, 1956 (ITU agreement of same date).	Added: \$3, in addition to overtime rate for hours worked when called from home later than Saturday noon to begin work before regular starting time on Monday.	
<i>Change Shift Guarantee</i>		
June 7, 1958 (ITU agreement dated Nov. 12, 1958).	Regular employees successfully claiming new shifts and new starting times guaranteed against loss of pay when 10 hours had not elapsed between regular shifts.	
<i>Health and Welfare Benefits</i>		
Apr. 1, 1954 (ITU agreement dated Apr. 7, 1953). Aug. 16, 1954 (IPPA agreement dated Dec. 16, 1953).	Companies to provide the following benefits for employees: <i>Life insurance:</i> \$1,000-----	Applicable to all full-time employees immediately, to new employees after 30 days, and to miscellaneous employees after 6 months. Benefits continued for 1 month after temporary layoff or leave of absence; for 3 months during disability. Employees under age 60 totally and permanently disabled to have life insurance continued, provided proof of disability was furnished.

See footnotes at end of table.

C—Related Wage Practices ¹—Continued

Effective date	Provision	Applications, exceptions, and other related matters
<i>Health and Welfare Benefits—Continued</i>		
Apr. 1, 1954 (ITU agreement dated Apr. 7, 1953). Aug. 16, 1954 (IPPA agreement dated Dec. 16, 1953)—Continued	<p><i>Accidental death and dismemberment:</i> \$500 to \$1,000, depending on injury.</p> <p><i>Hospital expenses (room and board):</i> Up to \$10 a day for maximum of 31 days.</p> <p><i>Hospital extras:</i></p> <p><i>Compositors:</i> Up to \$300.</p> <p><i>Pressmen:</i> Up to \$200 plus 75 percent of the next \$1,000, including X-ray, blood plasma, ambulance service, operating room, anesthetics, laboratory fees, drugs, and dressings.</p> <p><i>Surgical benefits:</i> Up to \$300.</p> <p><i>Maternity benefits:</i> Up to \$100 for all hospital confinements due to any one pregnancy.</p> <p><i>Sickness and nonoccupational injury:</i> \$50 a week up to 13 weeks, \$650 maximum for each sickness or accident; payments to start on 1st day of accident and 8th day of illness.</p>	<p>Benefits available immediately for employees insured on effective date of agreement; 9 months after date first insured for other employees.</p> <p>Maximum benefit restored after completion of 1 day's normal employment following illness or accident, however, benefits for a disability resulting from the same or related sickness or accident limited to 13 weeks in any 12 consecutive months.</p> <p>Not applicable for disability resulting from pregnancy or resulting childbirth or miscarriage.</p> <p><i>Compositors:</i> Not applicable to apprentices below the 5th year who received reduced benefits because of lower wage brackets.</p>
Aug. 1, 1955 (ITU agreement dated Oct. 7, 1954). Aug. 16, 1955 (IPPA extension agreement dated Mar. 16, 1955).	<p><i>Occupational injury:</i> \$50 for 1st week, \$25 a week for next 12 weeks, \$350 maximum for each disability, payable from 1st day.</p> <p>Increased to: For employees:</p> <p><i>Life insurance:</i> \$2,000.</p> <p><i>Accidental death and dismemberment:</i> \$1,000 to \$2,000, depending on injury.</p> <p><i>Hospital expenses (room and board):</i> Up to \$11 a day for maximum of 70 days; \$770 maximum.</p> <p><i>Hospital extras:</i> Up to \$220 plus 75 percent of next \$1,000, \$970 maximum.</p> <p><i>Maternity benefits:</i> Up to \$110.</p> <p><i>Sickness and nonoccupational injury:</i> \$55 a week, \$715 maximum for each sickness or accident.</p> <p><i>Occupational injury:</i> \$55 for 1st week, \$30 a week for next 12 weeks, \$415 maximum for each disability.</p> <p>Added: For dependents: <i>Hospital expenses (room and board), hospital extras, surgical benefits, and maternity benefits</i> identical to employee benefits without cost to employee.</p> <p>Added: For retirees:</p> <p><i>Hospital expenses:</i> \$1,000 lifetime maximum, including room and board and hospital extras.</p> <p><i>Surgical benefits:</i> \$300 lifetime maximum.</p>	<p>Eligible dependents to include spouse and unmarried children between 14 days and 19 years of age.</p> <p>Company to pay entire cost of benefits. Applicable to employees retiring from full-time employment at or after age 60 with 3 or more years' continuous service immediately preceding retirement.</p>

See footnotes at end of table.

C—Related Wage Practices ¹—Continued

Effective date	Provision	Applications, exceptions, and other related matters
<i>Health and Welfare Benefits—Continued</i>		
May 1, 1957 (ITU agreement dated June 7, 1956). June 7, 1958 (IPPA agreement, date not available).	Increased to: For employees: <i>Hospital expenses (room and board)</i> : \$13 a day, \$910 maximum. <i>Sickness and nonoccupational injury</i> : \$65 a week, \$845 maximum for each sickness or accident. <i>Occupational injury</i> : \$65 for 1st week, \$40 a week for next 12 weeks, \$545 maximum for each disability.	Added: <i>Compositors</i> : Coverage extended 60 days beyond date of layoff.
May 1, 1959 (ITU agreement dated Nov. 12, 1958, and IPPA agreement, date not available).	Increased to: For employees and dependents: <i>Hospital expenses (room and board)</i> : Up to \$15 a day, \$1,050 maximum. <i>Hospital extras</i> : Up to \$300, plus 75 percent of next \$1,000, \$1,050 maximum. <i>Maternity benefits</i> : Full coverage for hospital expenses, hospital extras, and surgical benefits. Changed to: For employees: <i>Sickness and nonoccupational injury</i> : 60 percent of basic weekly rate, up to \$75, \$975 maximum for each sickness or accident. <i>Occupational injury</i> : Employee to receive difference between workmen's compensation payments and weekly benefits for nonoccupational accident or illness. Added: For employees: <i>Emergency accident treatment</i> : \$50 maximum for emergency treatment, drugs, dressings, medication, X-rays, casts, etc., outside hospital within 24 hours following a nonoccupational accident. Added: For retirees: Benefits extended to spouse.	
May 1, 1961 (ITU agreement dated Dec. 12, 1960, and IPPA agreement dated Dec. 15, 1960).	Increased to: For employees and dependents: <i>Hospital expenses (room and board)</i> : Up to \$17 a day, \$1,190 maximum. <i>Hospital extras</i> : Up to \$340, plus 75 percent of next \$1,000, \$1,190 maximum. Changed to: For employees: <i>Sickness and nonoccupational injury</i> : \$85 a week, \$1,105 maximum for each sickness or accident.	Added: For employees: <i>Emergency accident treatment</i> to include professional services and followup treatment that occurred within 90 days of nonoccupational accident.

See footnotes at end of table.

C—Related Wage Practices¹—Continued

Effective date	Provision	Applications, exceptions, and other related matters
<i>Pension Plan</i>		
Oct. 1, 1954 (IPPA amendment to trust agreement, dated Oct. 7, 1954).	<p>Changed to: <i>Basic benefits</i>: Eligibility requirement—2 months' employment in 12 months immediately preceding application for retirement to employer making payments into fund.</p> <p>Added: <i>Subsidiary benefits</i>: For employees with less than 20 years' service under plan but more than 20 years' creditable service in industry—benefits to equal percentage obtained by dividing years of service under a Local 3 Pressmen's contract by the sum of the years of service under that contract and under the Press Assistants' pension plan after date contributions started to the latter plan.</p> <p>For employees with less than 20 years' combined creditable service under both the Pressmen's and Press Assistants' pension plans after date contributions started—benefits to equal percentage obtained by dividing years of service under Pressmen's pension plan by 20.</p> <p>Increased: <i>Basic benefits</i>: To \$40 a month.</p>	<p>Added: Beneficiary to receive benefits accrued during month retiree dies.</p> <p>Applicable to employees with insufficient service to qualify for Pressmen's benefits but with 20 or more years' combined creditable service under Pressmen's and Press Assistants' pension plans. Applicant must have qualified in all other respects.</p> <p>Employees eligible for subsidiary benefits not to receive benefits under basic plan.</p>
Dec. 1, 1958 (IPPA agreement, date not available).	-----	Employer contribution to pension fund increased to \$4 (was \$1) a week.
June 7, 1959 (IPPA agreement, date not available).	-----	Employer contribution to pension fund increased to \$5 a week.
June 1, 1961 (IPPA agreement dated Dec. 15, 1960).	-----	

¹ The contract provisions summarized here were negotiated and incorporated in earlier agreements but were not shown in the basic report or Supplement No. 1. The inclusion of these provisions under the dates shown does not, therefore, indicate a change in existing practices.

² Actually, compositors received 7.25 hours' pay.

Technical Note

Indexes of Living Costs for Alaskan Cities

JEAN C. BRACKETT*

A SEMIANNUAL INDEX of the cost of goods and services for Anchorage and Fairbanks, Alaska, compared with the cost of the same or equivalent items in Seattle, Wash., was published by the Bureau of Labor Statistics in 1961. Indexes of such costs for October 1960 and May and October 1961 are shown in the accompanying table. The purpose of this article is to describe the concepts and methods used in constructing the index.¹

The intercity indexes of comparative living costs for the Alaskan cities were designed primarily for use in local wage negotiations and contracts. Accordingly, the comparisons were made with Seattle, since traditionally that city has been the base for recruiting wage and clerical workers for employment in Alaska. The indexes, furthermore, were designed to measure the differences in costs for families who were established residents in Anchorage or Fairbanks and who had adapted themselves to the climate, environment, and price levels in these cities.² The indexes do not reflect differences in living costs associated with moving to Alaska. For example, the cost of vacant housing available for rent or sale might vary considerably from the housing costs of established residents. Similarly, the costs for travelers living in hotels or single persons renting rooms and eating in restaurants cannot be measured by an index constructed for families who live in family dwellings and eat most of their meals at home.

Information about the spending patterns of index-type families, hereafter referred to as index families, was obtained in a survey of consumer expenditures in 1959,³ conducted by the Bureau in Anchorage and Fairbanks in the spring and summer of 1960. The survey area included the central city and adjacent residential neighborhoods.

The comparative living cost indexes are designed to measure the cost of consumption items included in the typical expenditure patterns of wage- and clerical-worker families living in Anchorage or Fairbanks in comparison with the cost of equivalent items in Seattle. In addition to differences in price levels, these indexes reflect variations in requirements for fuel and certain items of clothing resulting from differences in climate between Seattle and the Alaskan cities. They also reflect the differences in transportation requirements, associated with the remoteness of the Alaskan cities, for families who travel outside the State, and, in a few instances, the availability of certain items in Seattle and in the Alaskan cities. Thus, the indexes are described as a measure of the relative differences in the costs of equivalent goods, rents, homeowner costs, and services between Seattle and the Alaskan city with which it is being compared. Certain other factors which might also be relevant to the measurement of an equivalent level of living, for example, the relative isolation of the Alaskan cities or the hardship of the climate, have not been taken into account in the construction of the indexes, because there is no objective way in which to evaluate such factors. The length and severity of the cold season, on the other hand, and the additional cost of travel from Alaska to the other States can be measured objectively.

*Of the Division of Prices and Cost of Living, Bureau of Labor Statistics.

¹ In 1961, the Bureau also published semiannual indexes of changes in consumer prices in Anchorage and Fairbanks, which are comparable in concept and methodology with the Consumer Price Index for other United States cities. These indexes are released periodically by the Western Regional Director of the Bureau. The initial release shows the relative importance of the major components of the index in the base reference period (average May–October 1960=100) and the indexes for May and October 1960, and includes a description of their uses and limitations. For an explanation of the Consumer Price Index, see *Techniques of Preparing Major BLS Statistical Series* (BLS Bull. 1168, 1954), pp. 63–81.

² The families represented in these indexes are wage-earner or clerical-worker families of two or more persons who had lived in the State of Alaska at least throughout the year 1959. Families headed by military personnel stationed in Alaska were not included in the index population.

³ A complete report on the surveys of consumer incomes, expenditures, and savings in Anchorage and Fairbanks is scheduled for publication by the Bureau in mid-1962. Similar surveys were conducted in Juneau and Ketchikan in 1961, and a report on the surveys, together with indexes for these cities, will also be published in mid-1962.

Calculation of the Intercity Comparisons

In general, the calculation of the indexes of comparative living costs involved the following steps:

The consumer expenditure data for Anchorage and Fairbanks in 1959 were analyzed to determine the average annual expenditures for individual items and major groups of goods and services by index families in each city. From this analysis, a set of base expenditure weights was derived for each city, and then adjusted for price change to October 1960.⁴

The list of goods and services selected for pricing for these indexes was substantially the same as that used for the national Consumer Price Index, supplemented by items particularly important in Alaska. Prices were obtained for the same or equivalent items in each city from a representative sample of retail outlets. The comparison included mail-order prices for those items typically purchased from mail-order catalogs by index families in Anchorage and Fairbanks. The initial indexes were based on October 1960 prices for the two Alaskan cities, compared with October 1960 prices for food, fuels, and rental housing and November 1960 prices for most other items in Seattle, without adjustment for the difference in the pricing month.

For the place-to-place comparisons, the relative difference in prices for the same or equivalent items in Seattle and in Anchorage or Fairbanks was weighted by the aggregate cost in the appropriate

Alaskan city to obtain a comparable aggregate for Seattle. The relationship of the aggregate cost in the Alaskan city to the aggregate cost in Seattle, then, represented the index of comparative living costs. The computation formula for the comparison between Seattle and Fairbanks (Seattle=100) is as follows:

$$\text{Relative difference} = \frac{PoFQoF}{PoFQo(a)F} \times \frac{PiS}{PiF}$$

Where,

$PoFQoF$ = base expenditure weight, Fairbanks

$PoFQo(a)F$ = base expenditure weight (Fairbanks) adjusted for climatic differences where required (heating fuels, selected clothing items)

PiS = Seattle price in October–November 1960

PiF = Fairbanks price in October 1960

Components of the Index

Housing. Housing costs, including rent and homeownership costs, repairs and maintenance of dwellings, heat and utilities, household operation, and housefurnishings, represented almost two-fifths of the cost of all goods and services in the index in each city. Approximately two-thirds of the index families in each of the Alaskan cities were homeowners, and their costs—payments on mortgage principal and interest, property taxes, insurance, and repairs and maintenance—were included in the place-to-place comparisons in this proportion.⁵ The procedures used in making the cost comparisons for each of these items were as follows:

Differences in the costs of property taxes were based on the market values of comparable homes in each Alaskan city and in Seattle and on the typical ratio of assessed value to market value and the tax rate in each city. Average (median) market values of homes were estimated from data obtained in the Bureau's housing surveys.⁶ Comparability between Seattle and each Alaskan city was maintained by combining Seattle market values by weights derived from the distribution of homes by type, i.e., age and number of rooms in the Alaskan city being compared. In estimating differences in insurance costs, the type of dwelling was held constant, and it was assumed, following general insurance practice, that homes were

⁴ Sales taxes and other fees or taxes required to purchase or maintain consumer goods, such as drivers' licenses and property taxes, are included in the weights. Income taxes and expenditures for life insurance and cash gifts and contributions are not included. Since the expenditure patterns are not identical for the two Alaskan cities, the intercity indexes cannot be used as a precise measure of differences in costs between the two Alaskan cities.

⁵ In 1945 and 1951, the Bureau prepared comparative living cost indexes for Anchorage, Fairbanks, Juneau (1945 only), and Ketchikan (1951 only), which were comparable in concept and general methodology with the 1959 indexes. In the earlier indexes, the comparison of housing costs was based on rental housing only, even though the level of homeownership among Alaskan families was about the same as the current level (65 percent). It was not until 1953, however, that the Bureau broadened the definition of housing in the CPI to include all items of expense connected with the acquisition and operation of a home, and, also, initiated direct pricing of homeowners' current maintenance items. Thus, prices obtained for the CPI in Seattle and the Alaskan cities in 1960 provided the basis for this first attempt by the Bureau to reflect the costs of maintaining an owned home in an index of comparative living costs, despite the absence of data which would permit a direct comparison of principal and interest payments.

⁶ Summary results of the Comprehensive Housing Unit Surveys conducted in the fall of 1959 in Anchorage and Fairbanks were published in mimeograph in April 1961. These data will also be included in the comprehensive report referred to in footnote 3.

INDEXES OF INTERCITY DIFFERENCES IN THE COST OF
EQUIVALENT GOODS AND SERVICES, ANCHORAGE AND
FAIRBANKS, ALASKA, COMPARED WITH SEATTLE, WASH.¹

[Costs in Seattle=100]

Group	Anchorage			Fairbanks		
	Oct. 1961	May 1961	Oct. 1960	Oct. 1961	May 1961	Oct. 1960
All items.....	126	126	127	136	136	136
Food ²	128	127	129	146	145	144
Housing ³	139	140	140	153	154	154
Rental housing ⁴	177	177	178	213	215	219
Apparel.....	112	112	112	122	121	118
Other goods and services ⁵	115	114	117	120	121	122
All items less housing.....	119	118	120	128	128	128

¹ Based on the pattern of expenditures of wage- and clerical-worker families of 2 or more persons in each city who were full-year residents in Alaska. Indexes for 1961 were estimated from the relative changes at the item level in the appropriate Consumer Prices Indexes.

² Includes food at home and away from home.

³ Includes rent, heat and utilities, housefurnishings, household operation, repairs and maintenance, and homeownership costs (mortgage principal and interest, taxes, and insurance).

⁴ Average contract rent for tenant-occupied, 2-, 3-, 4-, and 5-room dwellings meeting defined standards, plus cost of heating fuel, utilities, and specified equipment when the cost of these items is not included in the monthly rent.

⁵ Includes personal care, medical care, transportation, reading, recreation, education, tobacco, alcoholic beverages, and miscellaneous expenses.

insured at 80 percent of value in all cities. Since very few homes in Anchorage or Fairbanks are constructed of brick, rates for frame construction as reported by the insurance rating bureau, were used in all three cities.

Differences in costs for principal payments and mortgage interest should be based on a comparison of these costs over time for houses of various types, with the Seattle values weighted by the appropriate Alaskan distribution by type of dwelling and date of acquisition. Some data of this nature were available for the Alaskan cities from the surveys of consumer expenditures, but none was available for Seattle. Therefore, the differences for such payments for equivalent dwellings were estimated from differences in other homeowner costs—property taxes, insurance, and repair and maintenance costs. This method was adopted as the best indirect measure of differences in mortgage principal and interest costs because costs of repair and maintenance items were based on a direct comparison of prices in each city, and the differences in property taxes and insurance reflected differences in the 1959–60 market values of homes.⁷

Rental housing costs were defined to include contract rent and other items for which the cost is frequently included in rent, such as fuel, gas and electricity, water, garbage and trash removal, and stoves and refrigerators. The relative difference in rental costs between Seattle and each Alaskan

city was based on a weighted average of these costs for tenant-occupied, furnished or unfurnished, 2- 3- 4- and 5-room dwellings which contained only one complete bathroom and were located in structures which had central or other installed heating equipment, had been built since 1920, and were in sound condition. Dwelling units with "luxury" features were not involved in the comparison. Rental housing costs for Seattle were weighted by the proportion of furnished and unfurnished units and the distribution by number of rooms in each Alaskan city.

Average contract rent and data on the proportion of tenants having additional costs for facilities and equipment not included in the contract rent were obtained from the Bureau's regular rent surveys. Estimates of the quantities of electricity used by renter families for whom this item was not included in the contract rent were based on typical electric bills in each of the Alaskan cities. Estimates of the quantity of water consumed and an allowance for stoves and refrigerators—based on a rate of replacement about every 15 years—were derived from quantities developed for the Interim City Worker's Family Budget and the Interim Budget for a Retired Couple.⁸

Estimates of the quantities of fuel used required an adjustment for the length and severity of the cold season, as well as an adjustment for variation in the types of fuel consumed, in each city. The climatic adjustment factors were derived from an analysis of the average quantities of different kinds of fuel used in dwellings with different numbers of rooms in each city, based on reported expenditures for fuel. These average quantities—which showed a consistent relationship by size of dwelling in each city—were converted to British thermal units of effective heating, and the Seattle

⁷ Experimentation indicated that other methods of estimating the place-to-place differential in mortgage principal and interest payments would yield approximately the same "all items" index. For example, when the differences in these homeowner costs were assumed to be the same as the differences in rental housing, the "all items" index was raised 2 points in Anchorage and 3 points in Fairbanks. (Other estimating methods had less effect.) This extreme assumption was rejected, however, because the comparison of rental costs includes differences in the costs of fuel, utilities, and equipment, which are measured separately for homeowners, and because of the substantial differences in the characteristics of rented and owned dwellings in the Alaskan cities. Estimation of the differential in mortgage principal and interest payments from the difference in current interest rates and current market values of homes, as reported in the Comprehensive Housing Unit Surveys, was also rejected because it required the assumption that the differences in the costs of maintaining a home in Seattle and Alaska have been constant over time.

⁸ These budgets are described in the *Monthly Labor Review*, August 1960, pp. 785–808, and November 1960, pp. 1141–1157.

quantities were expressed as a percentage of the quantities consumed in dwellings of the same size in each Alaskan city. The estimated requirements in British thermal units were then reconverted to types of fuel actually used in Seattle, Anchorage, and Fairbanks.

These same quantity relationships were also used to adjust the estimated aggregate fuel costs for homeowners in Seattle to reflect differences in fuel requirements associated with differences in climate. Thus the intercity comparisons measure not only differences in prices but also variations in the cost of living to the extent that this is affected by climate.

The housing cost weights for Anchorage and Fairbanks, to which the intercity price differences in homeownership costs and contract rent and facilities were applied in order to obtain the estimate of total housing costs in Seattle, differ from the weights used in the measurement of current price changes in housing from time to time, that is, in the Consumer Price Indexes for Anchorage and Fairbanks. The Consumer Price Indexes for these cities, like the national CPI, measure changes in the interest contracted for and price of owned homes purchased in current markets, that is, acquisition costs. On the other hand, the place-to-place comparisons measure differences in the costs of maintaining a home, as reflected in principal payments and mortgage interest charges. The place-to-place and time-to-time weights for other housing items also differ because, in the intercity comparisons, the housing costs were adjusted to separate that proportion of the average expenditures for facilities not included in the rent, that is, for fuel, utilities, and selected items of equipment, which were made by renter families from the expenditures by homeowners for these same items. However, the combined weight of these items for both renters and homeowners in the place-to-place comparisons is the same as the weight used in the Consumer Price Indexes. With these exceptions, the weights used in the place-to-place comparisons and the time-to-time indexes were the same.

Differences in living costs for all other housefurnishings and household operation for both homeowners and renters were based on a com-

parison of prices for the same items in Seattle and each of the Alaskan cities.

Food. The comparison of food costs includes both food at home and meals eaten in restaurants. In deriving the index weights for the cost of food consumed at home, the average annual total expenditures for food in Anchorage and Fairbanks were distributed among individual items of food on the basis of the detailed reports on expenditures for individual items purchased during 1 week. The individual items were expanded to an annual total by applying the product of a seasonal quantity index and a food price index to the reported average weekly expenditure for each item. Thus the place-to-place comparisons of food costs reflect the seasonal variation in both quantities consumed and prices paid for individual food items. In the comparison of price differences between Seattle and each of the Alaskan cities, price quotations for items available in Alaska were used in order to reflect the Alaskan expenditure pattern. For example, the comparison of milk prices represented the average for whole milk in Seattle in relation to a weighted average price in Anchorage for whole milk, recombined milk, and fluid milk concentrate, in proportion to their volume of sales in grocery stores in that city. The largest differences in food prices were reported for fresh vegetables.

Apparel. The apparel index reflects differences in clothing requirements owing to climate as well as price differences. The climatic adjustment factors used to modify the index weights for apparel in Seattle were based on an analysis of the average quantities of types of clothing purchased by persons in various sex and age groups in Anchorage, Fairbanks, and Seattle.⁹ Items of apparel serving similar purposes, for example, men's overcoats, topcoats, and jackets, were grouped together in the analysis, since the purchasing patterns in Anchorage and Fairbanks revealed some preference for a more casual manner of dress than was evident from the data for Seattle. A climatic adjustment was made only for those items in which quantitative differences were substantial between Anchorage and Fairbanks on the one hand and Seattle on the other. Seattle quantities for the groups of items selected for adjustment were weighted by the prices for

⁹ This information for Seattle was obtained from the 1950 Survey of Consumer Expenditures in that city.

these items in the comparison city; ratios of these price-weighted quantities were computed for clothing for men and boys and for women and girls, 16 years of age and over, for boys and girls (separately) 2 to 15 years, and for infants under 2 years.

Since Alaskan families customarily purchase many items of apparel—and also some items of housefurnishings and toys and sporting goods—from mail-order catalogs, two cost weights were developed for these items, one reflecting the proportion of family expenditures made locally and the other the proportion made from catalogs. For the latter, price relatives were based on mail-order prices to which applicable sales taxes and shipping charges were added.

Other Goods and Services. Personal care, medical care, transportation, reading, recreation, education, tobacco, alcoholic beverages, and miscellaneous expenses, representing about a third of all expenditures of families in each of the Alaskan cities, are included in the index for other goods and services. Differences in living costs for all other goods and services except transportation were based on a comparison of prices for the same items in Seattle and each of the Alaskan cities.

The comparison of transportation costs was based on the pattern of usage of private automobiles in each of the Alaskan cities and represents the difference in purchase price of comparable new and used cars and in costs of automobile operation. In addition, it includes a comparison of the cost of equivalent public transportation, both within and outside Alaska, in the proportion reported by the families in each Alaskan city. Equivalent interstate public transportation was measured by including in the price comparison of the "same trip" (an average of airplane fares from Seattle to Portland and Seattle to San Francisco), for both the Alaskan and the Seattle families the additional cost for Alaskan families of a round-trip fare from each of the Alaskan cities to Seattle. These distances and this method of transportation were chosen as representative of the average expenditure of families who traveled outside Alaska during the year.

Intrastate air transportation was measured separately, since the cost per mile for travel within Alaska is substantially higher than the cost of travel from Alaska to the other States. For this purpose, the cost per mile of a round-trip air fare from Anchorage to Fairbanks was compared with the cost per mile of a trip of similar length from Seattle to Spokane.

Comparability With Other Living Cost Indexes

The scope and coverage of comparative living cost indexes are defined by the purposes for which they are constructed. Since the intercity indexes for Anchorage and Fairbanks which were compiled by the Bureau in 1945 and 1951 were also designed primarily for use in local wage negotiations involving established families living in the Alaskan cities, they may be compared with the current indexes to determine the trend of the differentials between Seattle and the Alaskan cities over the decade.¹⁰ On the other hand, the current intercity indexes for Anchorage and Fairbanks are not comparable with the cost-of-living indexes prepared by the U.S. Department of State for the U.S. Civil Service Commission.¹¹ The latter indexes are designed to measure the differences in living costs for Federal office-worker families of two persons stationed in these Alaskan cities. The index weights are derived from the expenditure patterns of similar families residing in Washington, D.C., and the price comparisons are made between that base city (Washington, D.C.=100) and each of the Alaskan cities.

Similarly, the Bureau's intercity indexes for Anchorage and Fairbanks are not comparable with indexes based on the cost of the City Worker's Family Budget, which describes a "modest but adequate" standard of living for a family of four persons. The latter indexes are based on a specified standard of living for a family of a certain size, age, and composition, whereas those for Anchorage and Fairbanks are based on the expenditure patterns in these cities.

¹⁰ See footnote 5 for an explanation of the limitations in the earlier indexes which disqualify them as a precise measure of the change in the differentials between Seattle and the Alaskan cities since 1951.

¹¹ The most recent indexes (October 1959) released by the U.S. Civil Service Commission indicate a differential in living costs of 147.8 in Anchorage, 152.0 in Fairbanks, and 133.1 in Juneau (Washington, D.C.=100).

Significant Decisions in Labor Cases*

Labor Relations

Secondary Boycott. The National Labor Relations Board ruled¹ that it would not automatically consider as unlawful the picketing of a neutral employer's premises where employees of a second employer engaged in a labor dispute spend all their working time, even though the second employer has a regular place of business in the locality which could be picketed. In so holding, the Board partially overruled its decision in the *Washington Coca Cola* case,² which had held that picketing of the common situs under such circumstances is necessarily unlawful.

In the present case, when a wholesale and retail tire firm hired an electrical contractor to perform certain work at its place of business, the contractor became involved in a dispute with a union arising out of the arrangement. The union picketed the tire company's place of business but not the nearby office of the electrical contractor, to which its employees normally reported each morning and evening. The picket signs stated the union's grievance against the electrical company and that the union had no dispute with any other contractor. Picketing continued during lunch periods and coffee breaks of the electrical contractor's employees.

The Board reconsidered its decision in the *Washington Coca Cola* case in light of general judicial criticism of its reliance on per se doctrines. The majority further pointed out that the *Coca Cola* rule had been specifically rejected by the courts which have had occasion to pass on its validity. The Board said that it would henceforth consider the particular facts of each case in determining the legality of picketing; the place of picketing would be only one of the factors to be considered in the determination.

In this case, the Board concluded that since employees of neutrals as well as those of the

electrical contractor were working at the tire company's place of business, the picketing, to be lawful, must comply with the standards set forth in the *Moore Drydock* decision.³ Among them was the requirement that the employer involved in the dispute must be engaged in his normal business at the situs of the picketing. The Board ruled that this requirement was not violated by the continuance of picketing during lunch hours and coffee breaks of the contractor's employees. "Otherwise, every common situs picket line, however otherwise observant of *Moore Drydock* standards, would be mechanically converted from lawful to unlawful picketing by picketing unsynchronized with lunch, coffee, or other temporary work interruption occasioned by personal need."

Dissenting members Rogers and Leedom saw no reason to reverse the *Washington Coca Cola* decision. They believed, furthermore, that the picketing in this case was directed at the employees of the tire company and that it should therefore be considered an illegal secondary boycott even under the test adopted by the majority.

Hot Cargo. The NLRB ruled⁴ that a clause in a collective bargaining agreement which required employers to give preference to union-approved subcontractors or those having contracts with the union was void under the hot-cargo provision of the Labor Management Relations Act. The Board ruled further that by giving effect to the clause after the 1959 amendments to the LMRA (which include the hot-cargo ban) became effective, the parties had "entered into" a prohibited contract and therefore had violated this provision.

*Prepared in the U.S. Department of Labor, Office of the Solicitor. The cases covered in this article represent a selection of the significant decisions believed to be of special interest. No attempt has been made to reflect all recent judicial and administrative developments in this field of labor law or to indicate the effect of particular decisions in jurisdictions in which contrary results may be reached based upon local statutory provisions, the existence of local precedents, or a different approach by the courts to the issue presented.

¹ *Local 861, International Brotherhood of Electrical Workers and Plauche Electric, Inc.*, 135 NLRB No. 41 (Jan. 12, 1962).

² *Brewery and Beverage Drivers and Workers, Local 67, International Brotherhood of Teamsters and Bernard Rosenberg and Washington Coca Cola Bottling Works*, 107 NLRB 299 (1953).

³ *Sailors' Union of the Pacific and Moore Drydock Co.*, 92 NLRB 547 (1950).

⁴ *District 9, International Association of Machinists, and Greater St. Louis Automobile Trimmers and Upholsterers Association*, 134 NLRB No. 138 (Dec. 19, 1961).

In this case, an employers' association had entered into a contract containing the disputed clause prior to the effective date of the 1959 amendments. Section 8(e) of the act, which was added by the amendments, makes it an unfair labor practice for employers and labor organizations to enter into contracts whereby the employer agrees to cease or refrain from handling goods of another employer or to cease doing business with any other person. The section also renders all existing or future contracts containing such clauses void and unenforceable.

The Board unanimously concluded that there was no meaningful distinction between contracts which prohibit an employer from handling goods produced by a nonunion firm and those which in effect, require an employer to cease subcontracting with nonunion firms. The Board ruled that both clearly violate the restrictions of 8(e) and are therefore void. It distinguished the disputed clause in the instant case from the more common contract provision which attempts to prohibit or restrict the subcontracting of work ordinarily performed by employees in the bargaining unit in order to protect their jobs. The disputed provision, the Board found, was more than just a limitation of the employer's right to subcontract; it attempted to limit the persons with whom the employer could do business.

Though the contract became operative before the effective date of the 1959 amendments, the Board concluded that the parties had reaffirmed the provision when a mediation panel, composed of representatives of the union and the employer association, had unanimously decided that the clause applied to a member of the association who had challenged it. This reaffirmation constituted an unfair labor practice under section 8(e), the Board ruled. The Board doubted that the Congress, in passing 8(e), had intended that contracts executed prior to the effective date of the 1959 amendments and rendered void thereby would continue to be lawful for unfair labor practice purposes simply because they were executed prior to the effective date of the amendments but reaffirmed thereafter.

Members Fanning and Brown doubted the majority's conclusion that the union and the employer had "entered into" the contract subsequent to the effective date of 8(e). Their actions constituted, rather, an attempt to enforce a pre-

existing contract. Therefore, no unfair labor practice had been committed, in their view.

Bargaining Unit. In two recent cases, the NLRB upset two prior rulings establishing appropriate bargaining units. In *Sheffield Corp.* and *District 12, International Association of Machinists*,⁵ the Board overturned the *Litton Industries* decision,⁶ which had automatically excluded technical employees from production and maintenance units whenever their unit placement was made an issue. Instead, the Board declared its intention to make a judgment as to the appropriateness of including technical employees in production and maintenance units based upon the community of interests of the employees in the proposed unit.

The effect of the *Litton Industries* decision was, according to the Board, to ignore the pragmatic considerations which should properly govern the determination of a bargaining unit and to allow the disagreement of the parties to invoke the automatic application of a strictly mechanical rule. Among those factors which the Board will henceforth consider in determining whether technical employees should be included in production and maintenance units are: (1) the desires of the parties, (2) the history of bargaining, (3) similarity of skills and job functions, (4) common supervision, (5) contact and/or interchange with other employees, (6) similarity of working conditions, (7) type of industry, (8) organization of the plant, (9) whether the technical employees work in separately situated and separately controlled areas, and (10) whether any union seeks to represent technical employees separately.

In *Quaker City Life Insurance Co.* and *Insurance Workers International Union*,⁷ the Board reversed its policy of forbidding the formation of units of insurance agents less than state or company wide in scope, in the absence of unusual circumstances. It declared its intentions to apply the "normal" principles for determining the appropriate bargaining unit.

The Board felt that the rationale behind the rule in the *Metropolitan Life*⁸ case was no longer applicable and that the rule ought therefore to be abandoned. That rule was based, according

⁵ 134 NLRB No. 122 (Dec. 7, 1961).

⁶ *Litton Industries of Maryland, Inc.*, and *International Association of Machinists, District Lodge 67*, 125 NLRB 722 (1959).

⁷ 134 NLRB No. 114 (Dec. 5, 1961).

⁸ 56 NLRB 1635 (1944).

to the Board, upon the belief that rapid growth of union organization among insurance agents would render unnecessary the formation of smaller than companywide or statewide units in order to make collective bargaining available for those agents who desired it. The Board observed that, since such widespread organization of insurance agents had not occurred, the *Metropolitan Life* rule had arrested the organization of insurance agents to an extent never contemplated by the Labor Relations Act or even by the Board which formulated the rules. It, therefore, concluded that there was no longer any reason for applying different rules in the insurance industry from those applied in other areas.

Members Rogers and Leedom dissented because they could see no reason for overturning the rule in the *Metropolitan Life* case.

Preelection Conduct. The National Labor Relations Board ruled⁹ that the date of filing of an election petition shall henceforth be the cutoff date in contested cases for considering preelection conduct alleged to have interfered with the free choice of the employees in a representation election under the LMRA. In so holding, the Board overruled the 1954 *Woolworth* decision,¹⁰ which had held that the Board would not consider conduct prior to the date when it issued its decision and direction of election.

In the present case, the incumbent union and an employer, in the course of a representation election campaign, signed a collective bargaining agreement. The NLRB subsequently issued a decision and direction of election. In the election, which was held 16 days later, the employees voted for the incumbent union. The defeated union challenged the validity of the election, alleging that the employer had interfered with the employees' free choice by entering into a contract which provided increased wages and additional benefits for the employees.

The Board, deciding this case under the rule established in *Woolworth*, refused to set aside the

election, but it declared its intention to establish a new rule for all future cases. In adopting the *Woolworth* rule, the Board had modified the rule previously in effect under the *Great Atlantic & Pacific Tea Co.* decision.¹¹ Under the latter, the Board asserted its unwillingness to consider objections to an election based upon conduct prior to either (1) the execution by the parties of a consent-election agreement or a stipulation for certification upon consent-election or (2) the issuance by the Regional Director of a notice of hearing.

By moving the cutoff date closer to the election, the *Woolworth* case had, according to the Board, eliminated from consideration conduct too remote to have improperly influenced the election. On the other hand, the Board considered that the *Woolworth* rule precluded consideration of much of the activity occurring during the election campaign and thereby enhanced the possibility of intentional delay at the hearing stage by a party seeking to campaign improperly before the cutoff date. Furthermore, the recent delegation of authority in election cases to NLRB Regional Directors markedly decreased the time which elapses between the filing of the petition and the pursuant election. Thus, the date of filing was no longer sufficiently remote from the conduct of the election to necessitate the cutoff date adopted in *Woolworth*, in the Board's view.

Contract Bar in Construction Industry. The NLRB ruled¹² that a contract between a construction firm and a union that presented authorization cards from a majority of the employees was a valid election bar under the LMRA proviso that a prehire contract in the construction industry may not bar an election if the contracting union has not established its majority status in accordance with the act.

One of the unions in this case, claiming to represent a majority of the employees of the construction company's two enterprises, requested the negotiation of collective bargaining agreements. The employer said he would not enter into negotiations until the union presented proof of its majority status. Shortly thereafter, a representative of a second union demanded recognition on the basis of its claim to represent a majority of the carpenters and carpenters' helpers at all the various job sites at which the employer was then working. The employer re-

⁹ *Ideal Electric and Manufacturing Co. and International Union of Electrical Workers*, 134 NLRB No. 133 (Dec. 14, 1961).

¹⁰ *F. W. Woolworth Co. and Retail Clerks International Association, Local 631, AFL-CIO*, 109 NLRB 1446 (Sept. 20, 1954).

¹¹ *The Great Atlantic & Pacific Tea Co. and Retail Clerks Union, Local 1500*, 101 NLRB 1118 (1952).

¹² *Island Construction Co. and International Longshoremen's and Warehousemen's Union, Local 142*, 135 NLRB No. 1 (Jan. 3, 1962).

fused to negotiate with the second union, but agreed to meet with its representatives later.

When the first union later presented evidence of its claim to represent a majority of all the employees, the employer entered into two identical collective bargaining agreements covering both enterprises. The second union then filed its election petition with the Board. It argued that the petition was not barred by the existence of the agreement because of the proviso in section 8(f) of the LMRA which authorizes the execution of contracts in the construction industry before the majority status of the union has been established but provides that such contracts will not bar a petition if the contracting union's majority status has not been established under section 9 of the act, which governs the designation of bargaining representatives. The union also contended that, because of its "substantial claim" for recognition before the contracts were signed, the Board should direct an election in any event.

In dismissing the second union's election petition, the Board pointed out that the first union had properly obtained exclusive representative status under section 9 and that the contract therefore constituted a bar to the petition despite the 8(f) proviso. The Board pointed out that a union gains exclusive representative status either by certification in a Board conducted election under 9(c) or by other voluntary designation pursuant to section 9(a). It saw no reason to distinguish between these two methods of obtaining exclusive recognition.

In this case, the Board found that an employer engaged in the construction industry had entered into agreements with a union which proved its majority status by presenting the employer with authorization cards signed by a majority of the employees—a manner recognized as valid under 9(a). Therefore the agreements entered into pursuant to this recognition constituted a bar to the petition despite the proviso to 8(f).

In rejecting the petitioning union's alternative argument, the Board ruled that the employer's agreement to think over its request for recognition and to meet again constituted no ground for requiring an election in this case. Where an employer lulls a union into a false sense of security

by promising that no contract will be signed or any recognition granted to another union until after an election, the union may obtain an election if the employer violates his promise. In this case, the Board found that no such promise was made.

Discharge of Supervisor. Although the LMRA excludes supervisors from its definition of covered employees, the National Labor Relations Board ruled¹³ that an employer committed an unfair labor practice by discharging a supervisor for her failure to comply with the employer's instructions to report on her husband's union activities.

The supervisor in this case and her husband were employed by the same employer. When the union began to solicit membership among the employees, the husband became an active member. The employer requested that the supervisor obtain from her husband a list of employees who attended union meetings, and she did make an unsuccessful attempt to do so. She subsequently gave a Board investigator a signed statement in connection with the Board's investigation of union allegations concerning the discriminatory discharge of employees. She also gave the employer a similar statement upon his request. Shortly thereafter she was discharged, allegedly because the employer feared that information about union activities she acquired from her husband might be imputed to the employer and render him liable in any future unfair labor practice litigation.

The Board found that the reason given by the employer for his discharge of the supervisor was a pretext. The real reason, according to the Board, was the supervisor's failure to provide her employer with information as to the union activities of her husband and other employees. The discharge therefore violated section 8(a)(1) of the LMRA, which prohibits interference by an employer with the statutory rights of employees to participate in organizational activities. She was ordered reinstated with back pay.

The Board expressly refused to decide whether they would have considered the discharge a violation of 8(a)(1) if the reason for the discharge had been, in fact, the one given by the employer.

¹³ *Brookside Industries, Inc., and Louise J. Moore*, 135 NLRB No. 4 (Jan. 4, 1962).

Chronology of Recent Labor Events

January 11

THE International Ladies' Garment Workers' Union and the National Association of Blouse Manufacturers agreed to a contract covering about 14,000 blousemakers in New York, Connecticut, and New Jersey. The contract provided for a general wage increase of 6 percent and an increase in the minimum rate under the contract to 20 cents above the Federal minimum. (See also p. 310 of this issue.)

THE President's Committee on Labor-Management Policy (Chron. item for Feb. 16, 1961, MLR, Apr. 1961) submitted its first report to the President, which dealt with benefits and problems of automation. The report called for a higher rate of economic growth, possible tax reduction in periods of heavy unemployment, more public works spending, Federal standards for unemployment compensation, support for education and training programs, protection for displaced workers, and other measures. (For excerpts from the report, see pp. 139-144, MLR, Feb. 1962.)

January 12

RULING THAT common situs picketing of a primary employer who has a regular place of business elsewhere will no longer be found automatically unlawful, the National Labor Relations Board partially overruled the 8-year-old *Washington Coca Cola* doctrine. The Board majority attributed its decision in the current case—*Local 861, International Brotherhood of Electrical Workers and Plauche Electric, Inc.*—to recent criticism of its application of rigid per se principles. (See also p. 301 of this issue.)

THE U.S. COURT OF APPEALS in New York City, overruling a lower court, granted an injunction against an NLRB representation election among the Honduran crew members of ships registered in Honduras and operated by a Honduran subsidiary of a U.S. corporation. The court found that the Congress did not intend the National Labor Relations Act to outweigh a treaty signed by the United States and Honduras in 1927. Moreover, the court observed that while the statutory condition for NLRB jurisdiction—that a "question of representation affecting commerce exists"—was satisfied in this case, "we have not heard it suggested that the Board considers its power to extend to the stevedores who load [the] ships in Honduras although they are engaged in 'commerce' quite as much as the seamen who man them." The case was *Empresa Hondurena de Vapores, S.A. v. McLeod*. (See also p. 308 of this issue.)

January 17

PRESIDENT KENNEDY issued Executive Order 10988 guaranteeing civilian employees of the executive branch the right to join unions and defining the scope of participation by employee organizations in the determination of personnel policies and working conditions not set by statute. Informal recognition, with the right to be heard, would be extended to unions representing less than 10 percent of the employees in the unit; formal recognition,

January 1, 1962

THE International Association of Machinists and the Lockheed Aircraft Corp. put into effect an improved pension plan. The minimum pension was increased by 25 cents a month for each year of service after January 1, 1962, and basic monthly pensions for employees earning over \$2.41 an hour were further increased by approximately 2½ cents for each cent over this rate. Other provisions were also liberalized. (See also p. 310 of this issue.)

THE International Brotherhood of Electrical Workers withdrew from the Industrial Union Department, of which it had been a member since 1955. (See Chron. items for Nov. 17 and Nov. 30, 1961, MLR, Jan. 1962.)

January 3

THE NATIONAL LABOR RELATIONS BOARD ruled that a contract with a union which proved its majority status by a showing of authorization cards was a valid election bar under the special proviso in section 8(f) of the Labor Management Relations Act for contracts in the construction industry. The case was *Island Construction Co. and International Longshoremen's and Warehousemen's Union, Local 142*. (See also pp. 303-304 of this issue.)

January 5

HAZARDOUS OCCUPATIONS ORDER No. 16 issued by the Acting Secretary of Labor under the Fair Labor Standards Act went into effect. It raised from 16 to 18 years the legal minimum employment age for minors engaged in roofing operations.

January 6

PRESIDENT JOHN F. KENNEDY and Secretary of Labor Arthur J. Goldberg established a committee of 10 U.S. labor leaders, headed by AFL-CIO President George Meany, to work with the Alliance for Progress on inter-American efforts to develop a progressive program of labor action in Latin America.

January 7

AFL-CIO PRESIDENT MEANY, acting under the disputes settlement plan adopted at the recent AFL-CIO convention (Chron. item for Dec. 13, 1961, MLR, Feb. 1962), announced the establishment of a 42-member panel from which he will designate mediators to attempt settlement of complaints.

with the right to be consulted, would go to units with 10-50 percent organized; and exclusive recognition, with the right to negotiate agreements, would be granted where a majority are organized. (See also pp. III and IV, MLR, Feb. 1962.)

SECRETARY GOLDBERG, chairman of the President's Committee on Migratory Labor, announced that the Committee's "immediate goal" was the passage of pending legislation to require registration of farm labor contractors and crew leaders, to apply the child labor provisions of the Fair Labor Standards Act to children of migratory farm workers, to provide Federal grants for the extension of public health, and educational services to migrants and their families, and to create a National Advisory Council on Migratory Labor. (See also p. 309 of this issue.)

January 18

NEW YORK ELECTRICAL CONTRACTORS and Local 3 of the IBEW reached a settlement which ended an 8-day strike for a 20-hour workweek. The new contract, to be effective for 2 years from July 1, 1962, shortened the basic workweek from 30 hours to 25, increased straight-time wages from \$4.40 to \$4.96 an hour, and guaranteed 5 hours of overtime work each week at time and one-half. Several unresolved issues, including a reported commitment by Local 3 to add 1,000 apprentices over the term of the contract, were referred to arbitration. (See also pp. 309-310 of this issue.)

AN INDEPENDENT LOCAL representing 5,000 Chicago cab-drivers who ousted Teamster Local 777 as their bargaining agent (Chron. item for July 10, 1961, MLR, Sept. 1961) was issued a charter of affiliation by Paul Hall, president of the Seafarers' International Union.

January 20

THE U.S. COURT OF APPEALS in San Francisco, Calif., set aside former Teamster President Dave Beck's conviction on income tax evasion (Chron. item for Feb. 19, 1959, MLR, Apr. 1959). The court ordered a new trial because "almost . . . the entire sum which was unreported as income by Beck was embezzled funds" and therefore did not constitute income. The court upheld his conviction on two counts of aiding and assisting in filing false tax returns for a Teamsters joint council.

January 22

THE PHELPS DODGE CORP. and the Mine, Mill and Smelter Workers (Ind.) agreed to a contract providing a two-step

pay increase totaling 17 to 23 cents an hour and higher shift differentials. The new contract, which runs to July 1, 1964, replaces one due to expire in June 1962. (See also p. 311 of this issue.)

January 26

DELEGATES TO A CONVENTION of the independent Bakery and Confectionery Workers' International Union (Chron. item for June 30, 1961, MLR, Aug. 1961), after electing a reform slate of officers headed by Max Kralstein, voted unanimously to negotiate for merger with the AFL-CIO American Bakery and Confectionery Workers' International Union. (See also p. 307 of this issue.)

THE U.S. COURT OF APPEALS in Washington, D.C., granted the NLRB's petition for enforcement of an order directing the Kohler Co. to bargain with the United Auto Workers following a 6-year strike and to rehire certain illegally discharged strikers (Chron. items for Aug. 26, 1960, and Apr. 23, 1961, MLR, Oct. 1960 and June 1961). Moreover, the court ordered the Board to reconsider its denial of reinstatement to 77 employees fired for strike misconduct, since the Board must also consider the seriousness of the employer's unfair labor practices "in determining whether reinstatement would effectuate the policies of the [Taft] Act." The case was *Local 833, United Automobile Workers v. NLRB*; *NLRB v. Kohler Co.*; *Kohler Co. v. NLRB*.

January 27

WILLIAM A. CALVIN, president of the International Brotherhood of Boilermakers and a vice president of the AFL-CIO, died of a heart attack at his home near Kansas City, Kans.

January 30

THE FEDERAL DISTRICT COURT in Philadelphia enjoined a threatened strike by the Transport Workers Union to obtain guarantees that members' jobs would not be abolished because of the proposed merger between the Pennsylvania and New York Central railroads, holding that the union must first resort to the procedures prescribed in the Railway Labor Act. The court also denied the union's request to enjoin the companies from proceeding with the merger, finding that the Interstate Commerce Commission had exclusive jurisdiction over this matter. The case was *Pennsylvania Railroad Co. v. Transport Workers Union*.

Developments in Industrial Relations*

Union Developments

The annual economic and legislative conference of the AFL-CIO, January 22-25, 1962, devoted its attention to unemployment. In general, the 500 delegates to the conference supported the Government's economic program but declared the administration lacked a sense of urgency in dealing with the problem of the unemployed. AFL-CIO President George Meany declared that the "recession is not over and done with when 4 million Americans can't find jobs, when other millions are working only part time, and when almost a million more who want to work don't even bother to look for the chance because they are so discouraged by the shortage of job opportunities." He urged the Government to implement immediately remedial steps such as a standby public works program, Presidential authority to cut withholding taxes temporarily, and enactment of the Manpower Development and Retraining bills (H.R. 7373 and S. 1991) and laws providing health aid for the aged and assistance to education.

Delegates attending the 26th regular convention of the independent Bakery and Confectionery Workers International Union—in Cleveland, Ohio, on January 23, 1962—voted 1,797 to 837 against merger with the Teamsters union. The vote followed a personal appeal by Teamster President James R. Hoffa. At the closing session of the convention, a new administration was elected on its pledge to "clean up" the union. Elected president was Max Kralstein of New York City, who defeated Harvey Friedman of Cleveland. James Landriscina, named president of the BCW in May 1961, was not a candidate. Mr. Kralstein said the union would act to restore a no-raiding pact with the rival American Bakery and Confectionery Workers (AFL-CIO),¹ and the convention, on January 26, voted unanimously to seek a merger with that union.

Leaders of three construction trades unions—the Bricklayers, Painters, and Plasterers—on January 11 announced they had signed a memorandum of understanding aimed at ending jurisdictional disputes. An administrative committee, consisting of one representative from each of the three unions, was named to help police the agreement and to resolve areas of disagreement in interpretation. Lawrence M. Raftery, president of the Painters union, said one effect of the agreement would permit the unions to initiate an organizing campaign to recruit more than 500,000 unskilled and semiskilled workers. The three unions have a combined membership of about 400,000 workers.

A program designed to promote greater participation of American flag ships in carrying Government-financed cargoes was presented to Secretary of Labor Arthur J. Goldberg on January 23 by representatives of U.S. maritime unions. The proposals were outlined by Paul Hall and Jesse Calhoun, respective presidents of the Seafarers' International Union and the Marine Engineers' Beneficial Association. Their meeting arose from a 15-day picketing of a British flag ship in Lake Charles, La., in protest of ship chartering practices under the Cargo Preference Act. The act provides that 50 percent of all Government-financed cargo must be shipped on American vessels, but its administration, the unions charged, has allowed foreign flag shipping with "substandard conditions" to win many contracts, depriving American seamen of jobs. The picketing, which was upheld by a Louisiana court, ended at the request of Secretary Goldberg when he asked the parties to meet with him in Washington to discuss the matter. To remedy the situation, the unions suggested that the letter of the law be enforced, that the 50-percent figure be treated as "an absolute minimum," that a system of cargo preference to cover commercial cargoes be established, and that provision be included for "some form of construction and operating subsidy for all segments of the U.S. merchant fleet."

The International Longshoremen's Association, expanding its jurisdictional area outside the continental United States, on January 9 announced it had chartered a local in Colon, Panama. The local's membership reportedly includes stevedores

*Prepared in the Division of Wages and Industrial Relations, Bureau of Labor Statistics, on the basis of available information.

¹ See *Monthly Labor Review*, August 1961, p. 890.

on the payroll of the Panama Canal Company (an agency of the U.S. Government). Captain William V. Bradley, president of the ILA, said it was his intention to persuade the Government to turn over the handling of all cargo, except Federal goods, to private stevedoring concerns. Harold Rerrie, president of Local 900 of the American Federation of State, County and Municipal Employees, termed the ILA's action "raiding"; he asserted the Longshoremen's union was not authorized to organize Federal employees in the United States and he saw no reason why they should do so in Panama. (The local is composed of employees of the Panama Canal Company who are not U.S. citizens. These workers were organized by the Government and Civic Employees Organizing Committee, which merged with AFSCME in 1956.)

In Chicago, the Seafarers' International Union on January 18 issued a charter to the independent taxi drivers' union which last July ousted Teamster Local 777, whose president is Joseph P. Glimco, as bargaining agent in National Labor Relations Board elections.² Paul Hall, president of the SIU, said the local would operate under a new transportation services division of the union, to be headed by Dominic A. Abata, who is also president of the local. Mr. Hall promised financial aid and every other form of encouragement for the division's affiliates "to increase their jurisdiction wherever they can."

Reports and Rulings

On January 18, Judge Alexander Holtzoff of the U.S. District Court for the District of Columbia temporarily enjoined the National Labor Relations Board from conducting a representation election among seamen of the Empresa fleet, which is registered in Honduras but operated by Empresa Hondurena de Vapores, S.A., a subsidiary of the United Fruit Co., a New Jersey corporation. The election would have determined whether the seamen wanted to be represented by the National Maritime Union, the Sindicato Maritimo Nacional de Honduras, or neither. The existing bargaining agent, the Sociedad Nacional de Marineros de Honduras, which had sought the injunction, was not to be on the ballot.

Judge Holtzoff's decision followed a similar ruling a week earlier by the U.S. Court of Appeals

for the Second Circuit in a suit filed by the employer. Both courts reasoned that the Congress had not intended that the National Labor Relations Act contravene maritime law or abrogate a 1927 treaty between Honduras and the United States which reserved control over merchant seamen's wages and wage contracts to the flag country, even when its vessels were in the ports or territorial waters of the other nation. The treaty had also been cited by the Department of Justice, which intervened in the suits at the request of the Department of State, following a formal protest against the NLRB's action by the Honduran ambassador to the United States. Just before the NLRB first asserted jurisdiction over certain American-owned ships flying foreign flags about a year ago,³ the State Department had joined the Department of Defense in requesting the Board to decline jurisdiction over American-owned ships registered in Panama, Honduras, and Liberia in order to keep them available to the United States during any national emergency.

The President's Advisory Committee on Labor-Management Policy on January 11 submitted its first report to the President, in which it made recommendations for the solution of some of the problems arising from automation.⁴ The Committee agreed that automation and technological change had led to some displacement of workers, but declared it "impossible, with presently available data, to isolate that portion of present unemployment resulting from these causes." Their proposals emphasized the importance of cooperative ventures between Government and private groups toward achieving a higher rate of economic growth, improving and supporting educational facilities, and adoption of retraining programs including subsistence and transfer payments and other income supplements. Recommendations also called for Federal minimum standards for State unemployment compensation, possible tax reductions in periods of heavy unemployment, and greater spending for public works where necessary. The Committee declared the goal of full employment on a 40-hour week to be "more significant at the present time than the consideration of a general reduction in the hours of work." Separate reports were filed by mem-

² See *Monthly Labor Review*, September 1961, p. 1011.

³ See *Monthly Labor Review*, May 1961, pp. 527-529.

⁴ For excerpts of the Committee's recommendations, see *Monthly Labor Review*, February 1962, pp. 139-144.

bers Henry Ford II and Arthur E. Burns. Mr. Burns called the report "a dubious guide to economic policy."

On January 17, the President's Committee on Migratory Labor approved a program to promote better economic and social conditions for migrant farm workers and their families. The Committee, headed by Secretary of Labor Goldberg, stressed the importance of enacting bills pending in the House of Representatives (and already passed by the Senate) that would provide Federal grants to States for health and education aid to migrant families, curb the use of migrants' children as farm workers, require registration of migrant crew leaders and contractors, and create a National Advisory Council on Migratory Labor. The report's other recommendations included congressional action to bring these workers under the coverage of the minimum wage, unemployment insurance, and labor-management relations laws.

The U.S. Court of Appeals for the District of Columbia on January 26 granted enforcement of an NLRB order that the Kohler Co. of Kohler, Wis., bargain with the United Auto Workers and rehire those among some 1,700 illegally discharged strikers who applied for reinstatement.⁵ In addition, the court ordered the NLRB to reconsider its decision that 77 of those involved in the 6-year strike, which began in April 1954, were lawfully fired for misconduct in the dispute. The court said that the Board must consider the seriousness of the company's unfair labor practices, as well as the strikers' misconduct, in determining whether they should be reinstated. The court also rejected the Board's finding that the company had bargained in good faith during contract negotiations prior to and immediately after the strike because the Board had "improperly ignored" the company's "history of antiunion activities and . . . unfair labor practices . . ."

A 3-to-2 decision by the NLRB on January 12 reversed an 8-year-old rule that automatically barred as unlawful "picketing at the common situs . . . when the primary employer has a regular place of business in the locality which can be picketed." Because of recent criticism of such per se doctrines, the majority said it would henceforth "consider the place of picketing as one circumstance among others" in determining

whether such picketing has an illegal objective. The decision involved Plauche Electric, Inc., of Lake Charles, La., and Local 861 of the International Brotherhood of Electrical Workers.

Wages and Collective Bargaining

An agreement reached in mid-January by Local 3 of the International Brotherhood of Electrical Workers and New York City electrical contractors increased the basic union wage scale on construction work from \$4.40 to \$4.96 an hour and reduced the basic workday from 6 to 5 hours. (A 30-hour basic workweek had been in effect since 1934.) The new agreement provided that the electricians will work a sixth hour at time and one-half, whereas the previous agreement had called for a seventh hour at the premium rate. These changes were deferred to July 1, 1962, and are to continue in effect until June 30, 1964. The agreement also added a third week of vacation after 25 years' employment, to be effective in May 1963, but did not change the employers' contribution for vacations. It ended a brief strike primarily over demands for a 20-hour week and affects about 9,000 electricians.

Under the new agreement, workers will receive \$161.20 for a 30-hour workweek (25 hours at \$4.96 plus 5 hours' overtime at \$7.44) compared with \$165 for a 35-hour workweek under the present contract (30 hours at \$4.40 and 5 hours' overtime at \$6.60). Gross average hourly earnings will be \$5.37 for a 30-hour week, compared with \$4.71 for a 35-hour week under the existing contract. If workers continue to work a 35-hour week, their weekly pay would increase to \$198.40—an average of \$5.67 an hour—20 percent above the existing pay for a 7-hour day.

In exchange for the shorter hours and the higher basic wage scale, an industry representative said the union agreed in principle to two major concessions, to be worked out by July 1, 1962. One was a promise by Local 3's business manager that he would supply an additional 1,000 apprentices, purportedly to eliminate the need for overtime work at premium pay by journeymen. The second was the reported commitment by the union to lower its secondary rate (currently \$3.50 an hour) which applies in areas where there is nonunion competition (e.g., rewiring apartment houses and small alteration and maintenance

⁵ See *Monthly Labor Review*, October 1960, p. 1096.

jobs). The rate, however, would not be reduced to the prevailing nonunion pay level. Theodore W. Kheel was appointed by New York City Mayor Robert Wagner to serve as chairman of a review board to which these and other unsettled issues were referred for arbitration.

Higher wage scales in the New York City laundry industry resulted from an award made on January 9 by Herman Brickman, the industry's impartial chairman. The award, made under reopening clauses of 5-year contracts due to expire in September 1962, provided wage increases of 5 cents an hour for inside production workers and 7½ and 10 cents for maintenance and engineering employees, respectively. Office, clerical, and store employees received wage increases of \$2 and \$3 a week and outside workers—mostly drivers and deliverymen—received general increases of \$3 to \$5 weekly. Minimums were also raised, with the lowest rate—applying to workers in the family, wholesale, and hand laundry divisions—increased to \$1.15 (from \$1.05). The award, affecting about 18,000 workers, also established a third week of vacation.

The National Association of Blouse Manufacturers on January 11 reached agreement with the International Ladies' Garment Workers' Union for about 14,000 blousemakers in New York, Connecticut, and New Jersey. The agreement provided the first general wage-rate increase since 1959 and included a 6-percent increase, which was effective February 5, 1962, and an increase in the minimum hourly wage to 20 cents above the Fair Labor Standards Act minimum. (Formerly the contract required the minimum be 15 cents above the FLSA minimum, which rose from \$1 to \$1.15 in September 1961.) Employer payments to the union health, welfare, vacation, retirement, and severance-pay funds were increased by 0.5 percent. The settlement usually sets the pattern for the agreement between the union and the Slate Belt Apparel Contractors Association covering an additional 4,000 blousemakers in Pennsylvania.

Earlier in January, the same union had reached agreement with the California Sportswear and Dress Association, Inc., on a 3-year contract covering 3,500 workers in 70 shops. The pact did not provide an immediate general wage increase

but included \$2-a-week increases in January of 1963 and 1964. The cutters' minimum wage was increased to \$95 a week from \$85. Increases in other minimum wage rates of 15 to 20 cents an hour were also included in the contract, as were provisions to maintain the basic minimum at least 15 cents above the Federal minimum.

A 2-year agreement between Beechnut Life Savers, Inc., and an independent employee association representing 1,300 production and maintenance employees of the company's Canajoharie, N.Y., plant was ratified by the employees on December 30, 1961. The agreement provided a 3-percent general wage increase effective January 1 of both 1962 and 1963, as well as additional adjustments for individuals and groups, and eliminated most of the bonus systems with compensating increases in base rates. Eligibility provisions for vacations were changed so that all employees with 15 years of service will receive 3 weeks' vacation irrespective of hours worked. Supplemental sick benefits will be paid any employee entitled to workmen's compensation if injured in an accident in which he was not at fault. Maximum paid funeral leave was increased to 4 days, from 3, and the provision for jury duty was improved.

Effective January 1, 1962, an improved pension program went into effect under an agreement negotiated on December 16 by the International Association of Machinists and the Lockheed Aircraft Corp., covering about 40,000 hourly rated employees in all bargaining units represented by IAM, mostly in California, Georgia, and New York. Wages were not an issue in the negotiations; wage agreements are due to expire this summer. Minimum pensions were increased by 25 cents a month, to \$2.25 a month for each year of future service beginning January 1, 1962. For employees earning over \$2.41 an hour, there were additional increases in basic monthly pensions of approximately 2½ cents for each cent over this rate. The limit on years of service for pension credit was raised from 30 to 35. Other changes included establishment of disability retirement benefits, a \$1,000 death benefit, and liberalized vesting and early retirement provisions.

Two locals of the Machinists union on January 2 ratified a 1-year contract covering 3,300 employees of The Stanley Works (handtools, hard-

ware, and cold rolled steel) and its Stanley Tools Division in New Britain and Plainville, Conn. In addition to providing a 2-percent (minimum 5 cents) wage increase, the contract broadened funeral leave eligibility.

Wage increases averaging 8½ cents an hour to be effective February 1 of 1962, 1963, and 1964, were agreed to in late January between the Minneapolis-Honeywell Regulator Co. and a local of the International Brotherhood of Teamsters. The settlement, affecting about 10,000 workers in the Minneapolis-St. Paul area, also provided an additional paid half holiday, bringing the total to 7½, and improved pensions and health benefits. Negotiations had been conducted originally under a wage reopening provision of a contract to expire January 31, 1963; instead the parties agreed to extend the agreement 3 years, to January 31, 1966, with a reopening on wages and other economic matters in 1965.

The Phelps Dodge Corp. and the independent Mine, Mill and Smelter Workers Union concluded negotiations in mid-January on terms of a new contract, over 5 months in advance of the scheduled expiration date of the existing agreement. The settlement, which affected about 2,500 Phelps Dodge employees in Arizona, was the first major agreement to be reached this year in the nonferrous mining and smelting industry. It provided wage increases of 8½ to 11½ cents an hour, effective on both January 21, 1962, and July 1, 1963, and increased shift differentials.

Later in the month, the MMSW reached a settlement with the Magma Copper Co. and its subsidiary, San Manuel Copper Corp., for about 2,400 workers in Arizona. This settlement—also reached in advance of a contract scheduled to expire June 30, 1962, and subject to union membership ratification—called for a general wage increase of 8½ cents an hour plus a ¼-cent increase in the increments between job classes, to be effective January 28, 1962. Similar raises are scheduled for July 1, 1963.

The Corning Glass Works and the American Flint Glass Workers concluded negotiations on December 30 for a 1-year contract covering about 5,000 workers at plants in Corning, Big Flats, Horseheads, and Erwin, N.Y. The pact provided a 3-percent wage increase, with a minimum of 7 cents an hour. The company also agreed to

assume \$2 a month of the employees' contributions for insurance. Early retirement at age 62 (normal retirement age is 65) was provided at actuarially reduced benefits. The contract also established a plan under which the company will refund 75 percent of tuition and laboratory fees to employees who successfully complete courses with an accredited or company-approved educational institution.

An industrywide seniority plan to help protect workers in the glass container industry against plant closings or transfers will be a major demand of the Glass Bottle Blowers Association in imminent negotiations, the union announced in late January. Lee W. Minton, president of the GBBA, said existing contracts provide transfer of seniority rights from one plant to another but only within a company. Other union demands included higher wages and improved pension and health insurance benefits. The union's contract with the Glass Container Manufacturers Institute, Inc., affecting about 6,500 machine operators and mechanics, was to expire February 28.

The Philadelphia Board of Education on January 25 announced yearly salary increases of \$200 to \$400 for about 11,000 public school teachers. The increases, retroactive to January 1, 1962, amounted to \$400 for about 5,600 teachers earning the minimum and maximum rates of pay, and to \$200 a year for some 5,500 teachers receiving intermediate salaries. The new pay scales range from \$4,700, for teachers holding a standard certificate or bachelor's degree, to a maximum of \$8,100, for those with a doctorate.

Other Developments

The Transport Workers Union threatened strike action against two railroads and two airlines to obtain guarantees that proposed mergers would not cost workers their jobs. Early in January, directors of the country's two largest railroads—the Pennsylvania and the New York Central—approved merger terms, subject to stockholder and Interstate Commerce Commission approval. Michael Quill, president of the TWU, said that only a firm commitment from both roads that none of the union's members would lose their jobs if the two systems merged could avert a work stoppage scheduled for February 4, 1962. The TWU also filed suit to block the merger. Both

roads, in turn, sought injunctions against a strike, on the ground that it would violate the Railway Labor Act and cause them irreparable damage. These contentions were upheld by Federal district courts which heard the cases, and temporary restraining orders prohibiting the TWU from striking both roads were issued on January 30 and 31.

American Airlines, Inc., and Eastern Air Lines, Inc., on January 23 announced their intention to merge, declaring "all employees of both companies

would become employees of the merged company." American Airlines, which would become the successor company, said the rights of employees "would be protected by the merger agreement and by the provisions normally specified by the Civil Aeronautics Board in its approval of mergers." The TWU said it would take a strike vote if the companies did not provide guarantees against loss of jobs, but on February 8 a Federal district court in New York issued an injunction barring a strike against American Airlines.

What is known as industrial copartnership, involving profit-sharing and embodying all the vitality there is in the principle of cooperation, offers a practical way of producing goods on a basis at once just to capital and to labor, and one which brings out the best moral elements of the capitalist and the workman. . . . In the United States but little has been done in this direction, but wherever the principle has been tried there have been three grand results: Labor has received a more liberal share for its skill, capital has been better remunerated, and the moral tone of the whole community involved raised. Employment has been steadier and more sure. . . . Each man feels himself more a man. The employer looks upon his employees in the true light, as associates. Conflict ceases and harmony takes the place of disturbances. . . . no strikes have occurred, and no labor troubles have been experienced. This feature, as a suggested remedy for industrial depressions, has . . . much in it of hope for the future. . . .

—*Industrial Depressions, The First Annual Report of the Commissioner of Labor*
(Washington, 1886), pp. 280–281.

Book Reviews and Notes

EDITOR'S NOTE.—*Listing of a publication in this section is for record and reference only and does not constitute an endorsement of point of view or advocacy of use.*

Special Reviews

The Machinists: A New Study in American Trade Unionism. By Mark Perlman. Cambridge, Mass., Harvard University Press, 1961. xvii, 333 pp. \$7.50.

This volume is the fifth in a Wertheim publications series of labor history monographs published under the guidance of Professor John T. Dunlop. The present study is a carefully documented and scholarly history of the International Association of Machinists Grand Lodge (national headquarters) from its inception in 1888 to 1952. It traces the history of the association from its origin as a southern railroad craft union to the fourth largest union in the Nation. Only a few unions have maintained, during the present century, as consistent a record of prominence in the American labor movement as the Machinists. Professor Perlman divides his study into three parts: the history of the Grand Lodge, its government, and its policies.

The Machinists have enjoyed stable leadership. While the political persuasions and the personalities of these leaders naturally differed, the transition from one administration to the next was invariably rather smooth and did not involve abrupt changes in policy. Nevertheless, the union has undergone deep changes. By 1952, the study cutoff date, only 40 percent of the members were classified by the union as skilled workers, and only 1 out of 8 IAM members was part of the "craft elite"—tool and die makers and railroad men—the original mainstay of the union.

Despite its growth and the heterogeneity of its membership, the union has remained dynamic and viable. Perlman believes that this is due

to the union concentration on "bread and butter" issues and its militant insistence upon defending and extending its jurisdiction. This adamant protection of self-interest has led the IAM to continuing jurisdictional fights with other unions and has been the cause for disaffiliation from the American Federation of Labor on two occasions.

The union has concentrated on winning "more" for its members and has avoided social pioneering. This is illustrated by its racial policies. For years the Machinists have barred Negroes. Negro discrimination was dropped officially in 1947 only because of external pressures from fair employment legislation, Federal procurement policies, the Taft-Hartley Act, and the changing views of the American community. When the color bar was finally dropped by the executive council, the action was justified by the union leadership on the basis that Taft-Hartley made it necessary. Even so, segregated locals continued after formal discrimination was eliminated.

The power of the executive council to ban racial discrimination by fiat illustrates the trend toward greater centralization of power in the hands of the national officers, particularly the president. This is in line with developments in other unions. However, as Perlman notes "local autonomy remains important in the IAM. Contracts are still generally negotiated on the local level." A history of the Machinists which concentrates on the activities of the Grand Lodge, therefore, tells only part of the union's story and excludes the most vital and interesting achievements and impact of this great union.

—SAR A. LEVITAN

George Washington University
Washington, D.C.

Labor-Management Contracts at Work: Analysis of Awards Reported by the American Arbitration Association. By Morris Stone. New York, Harper & Brothers, 1961. 307 pp. \$5.50.

Arbitration and Public Policy: Proceedings of the Fourteenth Annual Meeting of the National Academy of Arbitrators, Santa Monica, Calif., January 25-27, 1961. Edited by Spencer D. Pollard. Washington, Bureau of National Affairs, Inc., 1961. 208 pp. \$6.50.

Three years ago, Archibald Cox noted that the records of grievance arbitrations are one of our

Nation's most important treasures of experience and asked that more work be done in collecting from them some general standards for the administration of labor-management contracts. Morris Stone, in *Labor-Management Contracts at Work*, has made a substantial contribution in this direction. He has identified and analyzed some of the standards which shape arbitral opinions by bringing together summaries of the thinking of 150 of the country's leading arbitrators in 10 critical areas of employer-employee relations. Among the subjects covered are discipline, terminations and other work force reductions, seniority and ability, overtime, foremen and supervisory relationships, and problems involving various fringe benefits. In each subject-matter area, he has summarized a number of leading arbitral decisions written within the last 3 years, indicated what appear to have been the major controlling considerations, and shown why different arbitrators seem to have reached different conclusions regarding the interpretation of what appears, at least superficially, to have been similar contract language.

The search for generalizations concerning the administration of labor-management contracts is hazardous for many reasons. Good arbitrators seldom generalize. An infinite variety of detail can influence an ultimate decision, and occasionally an arbitrator may think it advisable not to put some very significant considerations on paper. Finally, history of bargaining and past practice can permit differing interpretation of identical language. Mr. Stone is aware of these difficulties; the reader should be equally cautious. Nevertheless, this volume is an important step toward what may eventually become a kind of common law of collective bargaining contracts.

For a number of years, the National Academy of Arbitrators has published the papers presented at its annual meeting. Many of these have been highly useful to practitioners in the labor-management field; a few have influenced the course of developments in the field. The present volume, *Arbitration and Public Policy*, is a worthy member of the series. The subject matter ranges from Sam Kagel's discussion of recent Supreme Court decisions concerning arbitration to Richard Mitenthal's scholarly analysis of past practice and

the administration of bargaining agreements. (The latter analysis is far different from Stone's in *Labor-Management Contracts at Work*; both are useful.) Two papers, R. W. Fleming's on due process in arbitration and Sylvester Garrett's on lawyers in arbitration, add new fuel to long-smoldering controversies. George Hildebrand's discussion of the use of neutrals in collective bargaining has little to do with arbitration, but it is an important aid to understanding a number of recent developments in significant bargaining situations.

Discussion comments made at the meeting are appended to each paper. The contributions of "discussants" to learned meetings tend to be uneven, at best. These are of an unusually high order.

—CHARLES M. REHMUS
Presidential Railroad Commission

The Man in the Middle. By Nathan W. Shefferman and Dale Kramer. New York, Doubleday & Co., Inc., 1961. 292 pp. \$4.50.

Mr. Shefferman's volume, which was written with the assistance of Dale Kramer, contributes little to our understanding of labor-management relations but throws considerable light on how an individual of skill and ability can build up a substantial business in the field of labor-management relations by establishing close personal ties with leaders on both sides and by assisting individuals on either side to achieve their objectives.

Mr. Shefferman apparently feels that if he gives the reader some interesting inside stories on labor-management relations in this country he will have accomplished the purpose of cleaning up his role in the rather sordid activities revealed during the McClellan Committee Hearings. Admittedly, Mr. Shefferman's stories are quite interesting and no one can question his knowledge of the seamier side of labor-management relations activities.

Several interesting chapters are devoted to an explanation of the rise of Dave Beck and James R. Hoffa to power in the Teamsters union. Mr. Shefferman describes both in glowing terms.

—HARRY WEISS
Deputy Assistant Secretary, International Affairs
U.S. Department of Labor

Study of the Soviet Economy: Direction and Impact of Soviet Growth, Teaching and Research in Soviet Economics. Edited by Nicolas Spulber. Bloomington, Indiana University, 1961. 169 pp. (Russian and East European Series, Vol. 25.) \$3.

The papers included in this book were presented at a conference held at Indiana University in February 1961. Two major subject areas were covered—Direction and Impact of Soviet Growth and Teaching and Research in Soviet Economics.

The first three papers in the section on Soviet growth are the most interesting and should have a broad appeal to the layman as well as to the economist. A paper on "Directions for Future Growth of the Soviet Economy," by Joseph A. Kershaw, sets the theme in its lead sentence, "This subject is at once fascinating and frustrating." Kershaw discusses growth of the Soviet economy, its relationship to recent growth in the United States, and competition in the U.S.S.R. for resources (both physical and human) among the demand sectors of foreign aid, national defense, and consumer living standards. He demonstrates that even if Russian claims are properly discounted, the rate of growth in the U.S.S.R. has been very high and will continue to be so.

A paper by M. Gardner Clark discusses the economics and technology of the Soviet steel industry. His findings are based on firsthand observation as a member of a 1958 delegation to the U.S.S.R., including the editing of the delegation's book-length report. Clark's analysis deals with various phases of steel operation from ore mining through pig iron and steelmaking processes. He indicates that the Soviets have achieved a very high degree of technological advancement and efficiency in certain operations (but not all). A large measure of their success stems from their highly developed cost consciousness and their attention to research and development. The continued superiority of the United States in the rate of output per man-hour is attributed, by Clark, to the know-how in industrial engineering.

Walter Galenson's very interesting paper is entitled, "Economic Relations Between the Soviet Union and Communist China." He disagrees with the prevailing view that "economic assistance to China has been essentially costless to the Russians." He presents information on Sino-

Soviet trade, including a discussion of the advantages to China relative to the U.S.S.R. He acknowledges that economic aid to China represents a small part of Soviet gross national product, but points out that aid and trade exported to China is largely machinery and equipment, transportation equipment, and other goods important to industrial development. The Russians have also been furnishing trained technicians to China. Communist China's exports to the U.S.S.R. have been consumer goods. These trade terms, according to Galenson, have helped substantially in China's economic growth and have lowered the U.S.S.R.'s growth rate. He says, "If the same drain were to continue for the duration of the current Soviet 7-year plan, the growth foregone by the Soviet economy during the plan would be reduced by at least 5 percent from the projected 80 percent, and probably substantially more."

John M. Montias' studious paper on "The Soviet Economic Model and the Underdeveloped Nations" discusses the influence of Soviet economics on the underdeveloped countries and will appeal more to the trained economist than to the layman. He believes that "Soviet ideology carries little weight among economists in underdeveloped countries," but they have been successful in supporting industrialization and furnishing capital goods and technical aid.

The section on "Teaching and Research in Soviet Economics" is primarily of interest to the specialist in Soviet economics or in education, since it deals largely with suggestions for college curriculums on studies of the Soviet Union. The discussants seem to agree that Marx and the Communists have not contributed much to economic theory but that their influence in the world economy is worth serious study. A paper by Robert W. Campbell suggests that research on the Soviet economy has advanced considerably in the last decade, but it needs to be continued.

It is too bad that the book does not include any of the comments of the conference participants on the growth papers. They would be particularly useful to nonexperts on the Soviet economy.

—LEON GREENBERG

Chief, Division of Productivity and
Technological Developments
Bureau of Labor Statistics

Quantity Planning and Price Planning in the Soviet Union. By Hans Hirsch; translated from the German by Karl Scholz. Philadelphia, University of Pennsylvania Press, 1961. 272 pp. \$5.

Economists specializing on the Soviet Union tend to look for Western analogs in the Soviet system, but in doing so important areas of economic analysis are not put in their proper perspective. Fortunately, Mr. Hirsch does not suffer from this shortcoming, for he carefully separates the question of economic accounting from that of consumer sovereignty. His central question is, "What determines how much of each goods will be produced; how is the choice made between short-term and long-term alternatively producible quantities of goods?" He attempts to place this question, not in the context of the Western market-orientated system, but appropriately in the Soviet context of balanced estimates and planned prices.

Another common failing in Western approaches to the study of the Soviet economy is rigid adherence to the conceptual frameworks and analytical methods of Soviet writers. However, such an approach, as Mr. Hirsch appropriately points out, leads to a far greater emphasis on the administration of planning than on the actual decisionmaking process. Mr. Hirsch chose to undertake the difficult task of developing his own framework. Quite appropriately he starts with quantity planning in the balanced estimating procedure. In this physical output planning context, the financial planning is introduced in its proper secondary role. Physical and financial planning in the Soviet economy is then related to its economic decisionmaking context. Finally, the principles of price planning that emerge in the Soviet planning technique are discussed.

With all its value and insight into a very important and complex problem, the book surprisingly falls short of being timely in the sense of providing a current perception of the Soviet debate on the "law of value." A serious debate on economic decisionmaking, permitted by the Soviet leadership, has been raging for several years. This debate has dealt with such topics as new methods for setting prices and determining investment decisions and the use of advanced mathematical techniques in economic planning. A number of Western market-type methods have

been suggested for the reform of Soviet economic planning structure. The Soviet discussants in this debate include Kantorovich, Nemchinov, Belkin, and others. In the West, this debate is being analyzed by Robert Campbell, Herbert Levine, and Wassily Leontief, among others. Had his book been keyed to this important debate, Mr. Hirsch could have contributed substantially to its understanding.

Moreover, Mr. Hirsch does not relate his price policy analysis to the current Soviet debate on price formation. In this area, the consideration of the important Western research on Soviet pricing by Abram Bergson, Lynn Turgeon, R. F. D. Hutchings, and others would have added a richness to his book. Finally, the question of Soviet data used in planning would have benefited by some reference to the very useful work by Gregory Grossman on physical inputs statistics in Soviet planning.

With all these reservations in mind, this reviewer strongly recommends the book to readers interested in the Soviet economy. The decision of the University of Pennsylvania Press to translate this book and make it available to an English reading audience was a happy one. Mr. Hirsch has taken a very sound approach to a basic problem and we are in his debt for providing extremely useful insights.

—JOHN P. HARDT

Research Analysis Corporation
Bethesda, Md.

The Norristown Study. By Sidney Goldstein. Philadelphia, University of Pennsylvania Press, 1961. ix, 366 pp. \$7.50.

For some years now, the borough of Norristown, Pa., which is about 20 miles from Philadelphia, has been the setting for a large-scale community study by students and practitioners in the social sciences. Established at the University of Pennsylvania with the aid of a Ford Foundation grant, the project has generated numerous studies revolving about the relationship between technological change (very broadly defined to include not only changes in plant and machinery but also in ways of doing business and ways of living) and social adjustments to these changes (also broadly defined to include changing attitudes and values).

This volume, which is a progress report on an interdisciplinary research program, presents the origin, concepts, and goals of the project itself, evaluates it as a training ground for graduate students in research in the social sciences, and presents some of its substantive findings to date.

Judging from the materials in the volume, as well as its listing of related Ph.D. theses and papers published, the use of this kind of procedure as a training ground appears fruitful indeed. Given the importance and encompassing nature of the topic, the use of a live setting of a community seen in its historical perspective, and the utilization of a spectrum of techniques, including not only historical research but also household enumeration, case study, and life history approaches, it is not surprising that the result has concreteness and specificity and yet enough elbow room for a meaningful research program in the social sciences.

The substantive findings cover a wide span of topics. They include migration and mobility, fertility, job adjustments to technological change, changing attitudes of workers, and acculturation among various minority groups. The finding that in-and-out migration was quite high in Norristown but apparently confined to a certain sector of the population, most of whom had been the in-migrants of 10 years past, is a provocative one and warrants following up by similar studies. Some findings based on the Norristown study concur in an independent manner with similar findings elsewhere. Among these are points concerning the growing importance of occupational mobility, the readjustment of unemployed workers in the community rather than readjustment by moving, and the changing job structure with increasing emphasis on the more highly trained.

Norristown is now caught up in new changes, especially in its relationship to its suburbs and, in fact, to nearby Philadelphia. With the solid vantage point of the work already done, it is hoped that this project will continue to follow developments in what already is one of the major problems of the 1960's—the adjustments needed in response to accelerating technological change.

—SEYMOUR L. WOLFBEIN
Deputy Assistant Secretary
U.S. Department of Labor

The Farmer's Dilemma. By Stanley Andrews. Washington, Public Affairs Press, 1961. 184 pp. \$4.50.

The farmer's dilemma as described by Stanley Andrews is in reality not his dilemma at all. The real dilemma belongs to the rest of us Americans who must decide whether the Nation is to turn its back on the rural civilization which is "bedded in the American tradition," or whether the Nation shall undertake, as the author suggests, the proper "management of a basic resource to provide, for those who want to remain in agriculture, a decent opportunity to survive." If non-farmers have any real doubt about their choice, Andrews early in his book relieves them of it: "The farm community and the family farm are too much a part of the American scene to relinquish without one more attempt to preserve them."

This book, consequently, is largely devoted to urging adoption of a national farm policy. It is a plea that "we as a Nation take advantage of the resources and the knowledge we have and shape the future . . . rather than drift into the eddies of inaction"

Mr. Andrews focuses on the problems facing U.S. agriculture: the principal problem of "excessive productive capacity, too many resources in terms of land, labor, capital, and advanced technology devoted to agriculture," and "the prodigal use of our productive power which has produced a surplus of agricultural products in almost every year since 1920." We cannot, he holds, eat our way out of our surpluses or dump them on the hungry nations of the world. Food consumption in the United States has not increased as rapidly as has income. Indiscriminate "give-aways" may only antagonize our allies, while failing to impress the recipient nations.

Nor does the author believe that bigness and efficiency will solve our farm problems. There is considerable evidence, he asserts, that the medium-sized family farm makes a larger return to labor than the big farm. Even if the big farm can produce with greater efficiency, it would solve the problem (through eliminating the inefficient) only by creating a more serious social problem for the Nation.

Although *The Farmer's Dilemma* presents neither a dilemma nor a farmer's problem, it is a stimulating (if not balanced), easily read book on

national agricultural problems. It will sharply remind labor specialists, currently concerned about the impact of technological change on the work skills of the manufacturing labor force, that technological change has, and is continuing to have, a profound effect on millions of people who work on farms and, as Andrews contends, will probably have an even greater impact on a traditional part of American culture.

—ROBERT MALAKOFF
Division of Productivity and
Technological Developments
Bureau of Labor Statistics

Automation in the Office. By Ida Russakoff Hoos. Washington, Public Affairs Press, 1961. 138 pp. \$4.50.

The popular subject of automation has been so thoroughly mined, in terms of its general impact and implications, that it may be most difficult to find much of anything new to say about it. In this sense, Mrs. Hoos has done no better than most other writers on automation in the past several years. The author has read the literature in the field, and she has conducted several surveys. Her findings are similar to those who see in automation a serious economic and social problem. In an argumentative style, she attempts to dispel the view that the radical technological change of recent years is merely a magic carpet.

Mrs. Hoos finds that office work is acquiring conditions similar to those of the factory. "Just as on the assembly line girls were 'docked' for the mistakes they made, now office workers' errors are tallied daily," she states. "Thus, the machine operator in the modern office works under conditions similar to those of her blue-smocked sister in the plant."

Not only are there job displacement and changes in job classifications and skills, according to Mrs. Hoos' findings, but the sex composition of the office work force is likewise changing. Many occupations that are usually staffed by women are declining under the impact of automation, while the growing classifications of tabulating machine operators and programmers are primarily filled with men.

Mrs. Hoos ends her book on the note that "the stage of development has been reached where conjecture is no longer adequate to provide a firm basis for analytical diagnosis, positive programs, and policy perspectives." It is to be hoped that conjecture and general findings in the field of automation will give way to detailed studies and analyses of the impacts of radical technological change.

—NAT GOLDFINGER
Assistant Director of Research
AFL-CIO

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	Bull. No.	Pages	Price (cents)
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Omaha, Neb.-Iowa, October 1961----	1303-14	30	25
Sioux Falls, S. Dak., November 1961-----	1303-15	26	25

Wage Chronology: Railroads—Nonoperating Employees' 1920-61. By Albert A. Belman. Washington, U.S. Department of Labor, Bureau of Labor Statistics, 1961. 21 pp. (BLS Report 208.) Free.

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If we are ever to make the money economy under which we live highly efficient in promoting social welfare, we must learn how to control its workings. What wares our business enterprises produce and what goods our families consume are largely determined by existing prices, and the production and consumption of goods are altered by every price fluctuation. What we waste and what we save, how we divide the burden of labor and how we distribute its rewards, whether business enjoys prosperity or suffers depression, whether debts of long standing become easier or harder to pay—all these and many other issues turn in no small measure upon what things are cheap and what are dear, upon the maintenance of a due balance within the system of prices, upon the upward or downward trend of the price changes that are always taking place. But if the prices of yesterday are powerful factors in determining what we shall do and how we shall fare today, what we do and how we fare today are powerful factors in determining what prices shall be tomorrow. If prices control us, we also control them.

—Wesley C. Mitchell, *The Making and Using of Index Numbers* (BLS Bull. 656, 1938), p. 27.

Current Labor Statistics

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¹ This table is included in the January, April, July, and October issues of the *Review*.

NOTE: With the exceptions noted, the statistical series here from the Bureau of Labor Statistics are described in *Techniques of Preparing Major BLS Statistical Series* (BLS Bull. 1168, 1954), and cover the United States without Alaska and Hawaii.

A.—Employment

TABLE A-1. Estimated total labor force classified by employment status and sex

[In thousands]

Employment status	Estimated number of persons 14 years of age and over ¹														Annual average	
	1962		1961													
	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan. ²	1959	1958	
	Total, both sexes															
Total labor force-----	72,564	73,372	74,096	74,345	73,670	75,610	76,153	76,790	74,059	73,216	73,540	72,894	72,361	71,946	71,284	
Civilian labor force-----	69,721	70,559	71,339	71,759	71,123	73,081	73,639	74,286	71,546	70,696	71,011	70,360	69,837	69,394	68,647	
Unemployment-----	4,663	4,091	3,990	3,934	4,085	4,542	5,140	5,580	4,768	4,962	5,495	5,705	5,385	3,813	4,681	
Unemployment rate seasonally adjusted ³ -----	5.8	6.0	6.1	6.7	6.8	6.8	6.9	6.9	7.0	6.9	6.8	6.9	6.7	5.5	6.8	
Unemployed 4 weeks or less-----	1,973	1,723	1,725	1,723	1,814	1,683	1,995	2,857	1,672	1,600	1,729	2,063	2,200	1,658	1,833	
Unemployed 5-10 weeks-----	1,078	830	782	725	638	1,046	1,243	845	851	827	1,097	1,408	1,281	778	959	
Unemployed 11-14 weeks-----	359	306	347	246	374	373	268	303	336	407	806	610	564	335	438	
Unemployed 15-26 weeks-----	581	572	448	517	497	527	608	647	1,008	1,205	1,063	950	696	469	785	
Unemployed over 26 weeks-----	672	661	689	723	760	913	1,026	928	907	923	799	674	643	571	667	
Employment-----	65,058	66,467	67,349	67,824	67,038	68,539	68,499	68,706	66,778	65,734	65,516	64,655	64,452	65,581	63,966	
Nonagricultural-----	60,641	62,049	62,149	61,860	61,372	62,215	62,046	62,035	61,234	60,734	60,539	59,947	59,818	59,745	58,122	
Worked 35 hours or more-----	46,127	48,819	48,896	47,679	47,473	46,080	44,981	47,803	47,927	47,650	47,301	45,341	47,132	45,068	44,873	
Worked 15-34 hours-----	8,003	7,278	7,301	8,380	7,785	6,644	6,837	7,081	7,533	7,536	7,522	8,952	7,414	8,531	7,324	
Worked 1-14 hours-----	4,125	4,057	4,027	3,560	3,369	3,071	3,067	3,466	3,858	3,736	3,900	3,722	3,483	3,172	3,047	
With a job but not at work ⁴ -----	2,386	1,897	1,928	2,240	2,747	6,421	7,162	3,688	1,916	1,811	1,816	1,933	1,789	2,974	2,876	
Agricultural-----	4,417	4,418	5,199	5,964	5,666	6,325	6,453	6,671	5,544	5,000	4,977	7,708	4,634	5,836	5,844	
Worked 35 hours or more-----	2,429	2,658	3,186	4,212	3,835	4,279	4,364	4,405	3,700	3,139	3,122	2,842	2,745	3,852	3,827	
Worked 15-34 hours-----	1,071	953	1,271	1,189	1,243	1,345	1,385	1,577	1,341	1,200	1,195	1,121	1,126	1,356	1,361	
Worked 1-14 hours-----	621	535	479	449	405	517	509	537	393	453	432	505	507	442	457	
With a job but not a work ⁴ -----	296	273	262	114	181	183	195	150	111	209	228	240	256	186	199	
	Males															
Total labor force-----	48,911	49,283	49,563	49,612	49,621	51,281	51,540	51,614	49,753	49,299	49,309	49,109	49,031	49,081	48,802	
Civilian labor force-----	46,105	46,506	46,841	47,059	47,107	48,784	49,058	49,142	47,272	46,812	46,812	46,608	46,539	46,562	46,197	
Unemployment-----	3,034	2,767	2,422	2,307	2,393	2,816	3,092	3,303	3,033	3,270	3,709	3,887	3,717	2,473	3,155	
Employment-----	43,072	43,739	44,418	44,751	44,713	45,968	45,966	45,839	44,238	43,542	43,103	42,721	42,822	44,089	43,042	
Nonagricultural-----	39,165	39,834	40,078	40,127	40,117	40,904	40,874	40,598	39,686	39,244	38,845	38,627	38,796	39,340	38,240	
Worked 35 hours or more-----	32,094	33,612	33,902	33,422	33,192	32,819	32,182	33,758	33,286	32,895	32,506	31,551	32,698	31,715	31,390	
Worked 15-34 hours-----	3,739	3,356	3,356	3,855	3,739	3,280	3,344	3,388	3,603	3,629	3,609	4,356	3,534	4,405	3,736	
Worked 1-14 hours-----	1,843	1,614	1,573	1,434	1,436	1,381	1,344	1,485	1,638	1,596	1,624	1,552	1,460	1,378	1,329	
With a job but not at work ⁴ -----	1,488	1,252	1,250	1,415	1,751	3,425	4,004	1,967	1,160	1,123	1,107	1,188	1,105	1,840	1,784	
Agricultural-----	3,906	3,905	4,340	4,625	4,597	5,064	5,092	5,241	4,553	4,298	4,258	4,094	4,027	4,749	4,802	
Worked 35 hours or more-----	2,221	2,426	2,819	3,520	3,344	3,716	3,758	3,804	3,325	2,889	2,849	2,609	2,530	3,421	3,413	
Worked 15-34 hours-----	861	756	917	713	800	843	813	921	843	831	841	832	813	823	857	
Worked 1-14 hours-----	551	469	366	292	302	361	351	379	289	384	356	438	450	336	353	
With a job but not at work ⁴ -----	274	254	236	100	150	144	170	138	96	194	213	217	233	170	179	
	Females															
Total labor force-----	23,652	24,089	24,534	24,733	24,048	24,329	24,612	25,176	24,306	23,916	24,232	23,785	23,330	22,865	22,482	
Civilian labor force-----	23,616	24,053	24,499	24,700	24,016	24,297	24,580	25,144	24,274	23,884	24,199	23,752	23,298	22,832	22,451	
Unemployment-----	1,629	1,325	1,568	1,627	1,692	1,726	2,048	2,277	1,734	1,692	1,786	1,818	1,669	1,340	1,526	
Employment-----	21,986	22,728	22,930	23,073	22,325	22,571	22,533	22,867	22,540	22,192	22,413	21,934	21,630	21,492	20,924	
Nonagricultural-----	21,476	22,215	22,071	21,733	21,256	21,311	21,172	21,437	21,549	21,490	21,695	21,321	21,023	20,405	19,882	
Worked 35 hours or more-----	14,032	15,206	14,993	14,258	14,282	13,262	12,798	14,044	14,641	14,754	14,794	13,809	14,434	13,352	13,483	
Worked 15-34 hours-----	4,265	3,921	3,946	4,525	4,046	3,364	3,493	3,693	3,930	3,907	3,913	4,596	3,880	4,126	3,589	
Worked 1-14 hours-----	2,282	2,442	2,454	2,126	1,934	1,691	1,723	1,980	2,220	2,141	2,276	2,170	2,023	1,794	1,718	
With a job but not at work ⁴ -----	898	645	678	825	996	2,995	3,158	1,721	756	688	709	744	684	1,134	1,093	
Agricultural-----	511	513	859	1,339	1,069	1,261	1,361	1,430	991	701	718	613	607	1,087	1,042	
Worked 35 hours or more-----	209	230	368	693	491	562	607	602	375	250	273	235	215	431	414	
Worked 15-34 hours-----	211	197	354	476	442	502	572	656	499	369	354	289	314	533	504	
Worked 1-14 hours-----	70	66	113	157	103	156	158	159	103	69	76	67	57	106	104	
With a job but not at work ⁴ -----	21	19	26	15	32	39	26	13	14	15	15	24	22	17	20	

¹ Estimates are based on information obtained from a sample of households and are subject to sampling variability. Data relate to the calendar week ending nearest the 15th day of the month. The employed total includes all wage and salary workers, self-employed persons, and unpaid workers in family-operated enterprises. Persons in institutions are not included.

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

² Beginning in 1960, data include Alaska and Hawaii and are therefore not directly comparable with earlier data. The levels of the civilian labor force, the employed, and nonagricultural employment were each increased by more than 200,000. The estimates for agricultural employment and unemployment were affected so slightly that these series can be regarded as entirely comparable with pre-1960 data.

³ Unemployment as a percent of labor force.

⁴ Includes persons who had a job or business but who did not work during the survey week because of illness, bad weather, vacation, or labor dispute. Prior to January 1957, also included were persons on layoff with definite instructions to return to work within 30 days of layoff and persons who had new jobs to which they were scheduled to report within 30 days. Most of the persons in these groups have, since that time, been classified as unemployed.

NOTE: For a description of these series, see Explanatory Notes (in Employment and Earnings, U.S. Department of Labor, Bureau of Labor Statistics current issues).

TABLE A-2. Employees in nonagricultural establishments, by industry ¹

[In thousands]

Industry	1962		1961											Annual average	
	Jan. ²	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	1960	1959
Total employees.....	53,735	55,505	55,129	55,065	54,978	54,538	54,227	54,429	53,708	53,171	52,785	52,523	52,864	54,347	53,380
Mining.....	637	659	667	668	676	677	672	678	668	657	654	656	666	709	731
Metal mining.....		85.9	87.6	86.3	88.2	85.8	88.4	88.5	87.1	85.8	86.3	86.2	89.9	93.3	83.6
Iron ores.....		27.7	28.2	28.0	28.9	26.5	28.0	27.8	27.4	26.6	27.0	26.6	28.3	33.2	27.7
Copper ores.....		28.4	29.1	28.0	29.5	29.6	29.3	29.5	29.0	28.3	28.2	28.3	30.0	28.3	23.3
Coal mining.....		155.7	156.9	156.2	155.4	153.9	142.9	153.5	153.2	153.3	157.5	163.2	163.9	182.2	196.8
Bituminous.....		146.2	147.2	146.5	145.2	143.7	132.8	143.2	143.0	142.4	147.4	151.6	152.0	168.2	178.3
Crude petroleum and natural gas.....		306.7	306.4	305.5	310.6	314.9	318.0	314.4	309.9	306.1	304.5	304.4	306.3	313.9	330.9
Crude petroleum and natural gas fields.....		174.0	174.8	175.1	177.8	180.6	180.2	178.2	175.4	175.3	175.4	176.9	177.6	181.7	186.4
Oil and gas field services.....		132.7	131.6	130.4	132.8	134.3	137.8	136.2	134.5	130.8	129.1	127.5	128.7	132.2	144.5
Quarrying and nonmetallic mining.....		110.4	116.0	120.3	121.7	122.3	122.5	121.7	117.6	112.2	106.0	102.3	106.2	119.5	119.6
Contract construction.....	2,291	2,574	2,825	2,981	3,021	3,075	3,023	2,971	2,775	2,619	2,454	2,342	2,457	2,882	2,955
General building contractors.....		812.2	881.5	926.2	935.8	961.4	940.8	923.1	860.0	816.6	766.9	728.0	774.6	911.7	960.1
Heavy construction.....		473.7	584.4	652.0	671.3	679.9	668.8	653.8	659.6	615.5	448.0	413.9	438.7	581.3	585.8
Highway and street construction.....		235.4	316.6	372.5	384.3	392.0	383.5	370.5	320.5	282.7	211.3	185.5	199.7	302.4	312.7
Other heavy construction.....		238.3	267.8	279.5	287.0	287.9	256.3	283.3	269.1	252.8	234.7	228.4	239.0	278.9	273.0
Special trade contractors.....		1,287.7	1,359.2	1,402.5	1,413.4	1,433.5	1,413.4	1,394.0	1,325.8	1,286.6	1,241.0	1,199.9	1,243.4	1,388.8	1,409.5
Manufacturing.....	16,363	16,560	16,658	16,607	16,646	16,531	16,268	16,320	16,076	15,904	15,866	15,838	15,933	16,762	16,667
Durable goods.....	9,222	9,303	9,329	9,201	9,189	9,083	9,051	9,106	8,996	8,836	8,775	8,769	8,867	9,441	9,369
Nondurable goods.....	7,141	7,257	7,329	7,406	7,457	7,448	7,217	7,214	7,080	7,068	7,091	7,069	7,066	7,321	7,298
<i>Durable goods</i>															
Ordnance and accessories.....	206.2	206.3	206.8	205.8	204.1	202.1	201.6	199.2	197.6	196.0	196.6	195.8	195.2	187.3	173.0
Ammunition, except for small arms.....		105.6	105.3	104.8	104.0	103.9	104.0	103.0	102.4	102.8	101.5	100.4	99.0	93.9	86.5
Sighting and fire control equipment.....		51.8	52.5	52.5	52.3	51.3	51.1	50.2	49.5	49.6	50.0	50.5	51.6	50.0	45.0
Other ordnance and accessories.....		48.9	49.0	48.5	47.8	46.9	46.5	46.0	45.7	43.6	45.1	44.9	44.6	43.4	41.5
Lumber and wood products, except furniture.....	567.2	588.9	605.8	618.9	630.0	634.0	628.9	630.9	602.8	581.1	558.8	557.4	568.3	636.8	660.9
Logging camps and logging contractors.....		88.3	94.8	99.1	103.2	105.4	104.5	104.3	89.5	80.9	73.6	76.2	77.7	92.6	84.4
Sawmills and planing mills.....		263.3	270.3	276.2	279.3	278.6	278.6	278.9	271.6	263.6	254.6	252.4	259.9	294.7	306.9
Millwork, plywood, and related products.....		139.6	142.3	144.5	147.5	149.5	145.8	146.3	141.7	138.3	134.0	132.1	133.9	146.6	156.1
Wooden containers.....		39.6	39.9	40.3	41.2	41.7	42.6	42.2	40.9	39.9	39.9	39.6	39.5	43.2	43.8
Miscellaneous wood products.....		58.1	58.5	58.8	58.8	58.8	58.3	58.8	57.8	57.4	56.7	57.1	57.3	59.6	59.8
Furniture and fixtures.....	375.9	377.2	379.7	381.6	377.6	374.0	363.1	364.3	359.1	359.5	357.7	357.2	356.5	373.1	384.9
Household furniture.....		268.8	269.3	270.9	267.7	262.7	254.9	255.4	252.6	255.2	252.8	252.8	251.1	281.4	277.5
Office furniture.....		28.3	28.5	28.3	28.1	28.1	27.0	27.2	26.5	26.6	26.7	26.6	27.3	28.3	26.7
Partitions; office and store fixtures.....		35.8	36.9	37.1	35.6	37.4	36.3	36.5	35.7	34.6	36.0	35.9	36.0	39.0	36.7
Other furniture and fixtures.....		44.3	45.0	45.3	46.2	45.8	44.9	45.2	44.3	43.1	42.2	41.9	42.1	45.1	44.2
Stone, clay, and glass products.....	539.9	561.5	576.4	582.6	589.7	590.6	583.5	581.7	569.3	555.6	541.7	531.2	539.1	595.3	601.7
Flat glass.....		29.5	29.4	29.4	29.2	28.6	27.7	26.5	26.7	25.7	26.7	26.7	28.8	31.1	30.7
Glass and glassware, pressed or blown.....		99.6	101.1	101.2	103.8	103.4	101.7	101.7	98.8	99.4	98.1	96.3	96.3	102.9	99.4
Cement, hydraulic.....		38.8	40.3	40.6	41.1	41.7	42.4	42.2	40.9	40.1	37.5	36.5	38.0	42.8	43.9
Structural clay products.....		70.7	71.5	71.8	73.8	74.1	74.1	73.1	71.7	69.9	67.1	64.8	66.1	76.1	77.7
Pottery and related products.....		44.0	44.6	44.8	44.6	43.7	41.6	42.9	42.9	42.9	42.8	43.1	43.2	47.1	47.8
Concrete, gypsum, and plaster products.....		143.1	152.2	157.6	159.9	162.0	160.3	159.5	153.0	145.8	138.3	133.1	137.4	155.4	157.9
Other stone and mineral products.....		120.9	122.1	122.0	122.3	122.5	121.1	121.5	118.9	117.4	115.6	114.5	115.4	124.0	124.6
Primary metal industries.....	1,206.4	1,189.0	1,183.1	1,178.7	1,181.4	1,168.4	1,155.5	1,154.0	1,130.6	1,099.1	1,088.4	1,085.8	1,095.3	1,228.7	1,181.9
Blast furnace and basic steel products.....		625.4	621.6	626.8	631.0	621.7	616.8	609.9	596.8	575.0	563.4	556.9	555.1	652.5	587.5
Iron and steel foundries.....		192.4	191.2	186.0	187.5	187.4	186.2	187.0	184.2	179.9	180.8	182.5	186.9	203.6	211.6
Nonferrous smelting and refining.....		68.8	68.9	68.7	67.6	68.3	68.0	67.8	65.7	65.0	65.5	66.0	68.0	70.8	68.0
Nonferrous rolling, drawing, and extruding.....		177.2	176.7	176.3	174.2	171.8	166.7	169.1	166.1	164.4	164.1	164.9	167.4	175.6	184.5
Nonferrous foundries.....		65.4	64.3	63.0	62.6	61.3	60.0	61.8	60.4	58.9	58.7	59.3	60.7	65.1	68.0
Miscellaneous primary metal industries.....		59.8	60.4	57.9	58.5	57.9	57.8	58.4	57.4	55.9	55.9	56.2	57.2	61.1	62.3
Fabricated metal products.....	1,100.5	1,109.3	1,114.5	1,106.8	1,097.2	1,088.6	1,067.1	1,082.3	1,071.4	1,044.7	1,034.1	1,039.6	1,061.5	1,128.6	1,120.8
Metal cans.....		57.5	58.7	60.4	63.3	64.3	63.6	62.6	61.8	60.6	59.1	57.9	57.1	62.5	62.5
Cutlery, handtools, and general hardware.....		138.0	137.0	135.3	130.1	129.5	125.5	129.2	128.3	121.6	124.6	126.4	130.0	136.0	135.4
Heating equipment and plumbing fixtures.....		76.1	76.7	76.8	76.8	77.4	75.1	75.6	74.6	73.0	73.3	72.4	73.9	79.0	81.0
Fabricated structural metal products.....		324.7	330.7	334.4	338.5	334.0	330.3	330.0	322.5	318.1	312.8	313.5	319.1	334.3	331.9
Screw machine products, bolts, etc.....		85.2	84.4	82.8	81.2	80.7	79.4	79.9	78.5	77.3	77.6	78.6	79.3	85.6	86.7
Metal stampings.....		193.2	192.3	182.2	178.6	175.5	169.4	180.0	181.9	174.6	170.0	173.8	183.7	197.7	189.1
Coating, engraving, and allied services.....		66.6	67.4	67.9	66.9	64.9	63.5	64.6	63.8	61.9	60.3	59.5	59.6	64.2	63.2
Miscellaneous fabricated wire products.....		56.5	56.2	56.3	54.9	54.2	52.9	53.4	53.0	52.0	50.8	51.8	52.2	56.9	56.5
Miscellaneous fabricated metal products.....		111.5	111.1	110.7	106.9	108.1	107.4	107.0	107.0	105.6	105.6	105.7	106.6	112.4	114.6

See footnotes at end of table.

TABLE A-2. Employees in nonagricultural establishments, by industry ¹—Continued

	[In thousands]														
Industry	1962	1961												Annual average	
	Jan. ²	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	1960	1959
Manufacturing—Continued															
Durable goods—Continued															
Machinery.....	1,411.2	1,413.9	1,394.9	1,390.5	1,395.5	1,389.3	1,394.8	1,405.3	1,406.5	1,407.3	1,404.8	1,406.3	1,404.1	1,471.4	1,450.5
Engines and turbines.....		80.0	79.7	80.7	80.8	79.3	77.9	78.4	80.8	81.0	80.1	80.1	81.1	86.8	89.9
Farm machinery and equipment.....		105.9	103.9	103.1	104.9	102.7	108.7	113.9	120.5	124.1	123.5	120.9	116.0	114.1	122.7
Construction and related machinery.....		199.8	192.9	198.6	200.6	201.8	199.6	200.5	199.4	198.0	196.1	195.8	195.4	219.7	225.5
Metalworking machinery and equipment.....		249.2	245.6	242.9	243.3	239.7	240.2	241.9	240.1	244.2	244.8	246.8	246.2	258.2	244.7
Special industry machinery.....		168.7	167.7	165.9	167.4	166.6	166.9	168.7	167.8	167.6	168.6	169.5	169.7	173.8	164.9
General industrial machinery.....		216.1	213.8	213.8	211.3	212.0	213.1	212.3	209.2	206.4	206.9	207.7	209.9	223.0	220.1
Office, computing, and accounting machines.....		151.0	150.6	150.4	149.9	150.5	149.5	149.1	147.9	148.4	147.6	147.9	148.2	145.7	138.1
Service industry machines.....		94.6	92.7	90.3	90.6	89.0	93.8	95.1	98.2	96.8	96.3	96.0	95.2	99.8	97.3
Miscellaneous machinery.....		148.6	148.0	144.8	146.7	147.7	145.1	145.4	142.6	140.8	140.9	141.6	142.4	150.4	147.5
Electrical equipment and supplies.....	1,493.2	1,493.1	1,487.6	1,470.4	1,455.3	1,443.3	1,416.8	1,423.0	1,413.2	1,401.1	1,404.4	1,410.5	1,414.9	1,445.6	1,391.4
Electric distribution equipment.....		162.2	162.1	162.3	161.7	162.3	160.7	160.4	158.8	158.8	159.2	160.3	161.6	163.2	156.8
Electrical industrial apparatus.....		174.1	172.9	170.2	172.9	171.7	170.7	171.2	169.5	167.8	167.9	168.0	169.4	177.4	174.7
Household appliances.....		154.6	155.4	155.4	153.0	150.0	148.7	150.9	150.2	149.4	148.7	148.3	146.6	157.2	157.6
Electric lighting and wiring equipment.....		133.3	132.8	132.3	130.2	130.9	126.7	127.3	126.0	125.5	125.5	126.0	126.4	132.7	133.2
Radio and TV receiving sets.....		125.2	128.7	128.2	125.8	120.6	111.7	107.9	104.2	98.5	100.3	103.4	102.9	111.5	114.4
Communication equipment.....		395.3	390.0	385.2	379.1	375.0	371.9	373.8	372.2	372.5	373.7	375.6	377.5	366.9	336.1
Electronic components and accessories.....		235.1	233.6	230.5	228.6	226.9	222.9	225.8	226.8	225.9	224.8	223.3	222.0	225.2	211.3
Miscellaneous electrical equipment and supplies.....		113.3	112.1	106.3	104.0	105.9	103.5	105.7	105.5	102.7	104.3	105.6	108.5	111.4	107.3
Transportation equipment.....	1,605.7	1,626.7	1,620.1	1,505.1	1,505.2	1,451.9	1,521.5	1,534.9	1,526.4	1,482.4	1,484.3	1,482.2	1,533.1	1,617.3	1,670.4
Motor vehicles and equipment.....		727.8	724.1	619.6	628.3	587.1	660.6	670.0	658.9	613.0	610.3	614.0	664.3	727.6	693.2
Aircraft and parts.....		693.9	686.6	676.4	671.9	660.5	661.4	659.9	661.5	664.0	668.0	664.8	663.1	673.8	755.4
Ship and boat building and repairing.....		141.9	145.7	144.6	141.1	140.7	136.9	140.4	142.7	143.2	143.9	141.5	142.9	141.0	146.4
Railroad equipment.....		36.8	36.8	36.2	36.0	35.4	34.5	35.2	34.2	34.1	35.1	36.5	38.8	43.8	40.9
Other transportation equipment.....		26.3	26.9	28.3	27.9	28.2	28.1	29.4	29.1	28.1	27.0	25.4	24.0	31.1	34.4
Instruments and related products.....	351.7	353.9	354.6	351.7	351.6	348.4	343.5	345.2	342.4	340.2	340.2	341.1	343.9	354.2	345.2
Engineering and scientific instruments.....		72.9	72.9	73.1	73.8	73.0	72.1	73.9	74.3	74.6	75.5	75.4	75.7	75.7	72.3
Mechanical measuring and control devices.....		94.8	94.5	93.0	92.9	91.5	91.2	91.3	91.1	90.5	90.0	90.4	90.8	95.1	92.8
Optical and ophthalmic goods.....		40.8	40.6	40.2	39.9	39.7	39.1	39.4	38.9	38.5	38.2	38.3	38.4	40.6	39.0
Surgical, medical, and dental equipment.....		48.4	48.4	48.0	48.0	47.7	47.3	47.5	47.3	47.2	47.0	47.5	47.4	47.3	45.4
Photographic equipment and supplies.....		69.5	69.3	69.0	69.0	69.4	68.5	68.4	67.3	67.1	67.1	67.6	68.2	69.0	67.5
Watches and clocks.....		27.5	28.9	28.4	28.0	27.1	25.3	24.7	23.5	22.3	22.4	21.9	23.4	26.6	28.2
Miscellaneous manufacturing industries.....	364.5	383.2	405.9	409.1	401.6	392.4	375.0	385.4	376.8	368.7	364.2	362.2	355.0	392.1	388.0
Jewelry, silverware, and plated ware.....		43.1	43.0	43.0	42.5	41.8	39.5	41.0	41.0	41.2	41.4	41.9	42.0	43.2	43.2
Toys, amusement, and sporting goods.....		97.5	115.3	119.9	116.0	112.3	104.7	106.3	102.3	95.9	89.4	85.3	79.3	102.3	98.0
Pens, pencils, office and art materials.....		32.7	32.8	32.8	32.0	32.0	30.9	30.8	30.2	29.9	30.1	30.3	30.3	31.0	30.9
Costume jewelry, buttons, and notions.....		55.6	57.5	56.6	55.8	55.5	52.8	54.5	51.8	50.9	51.9	52.8	51.8	57.5	59.4
Other manufacturing industries.....		154.3	157.3	156.8	155.3	150.8	147.1	152.8	151.5	150.8	151.4	151.9	151.6	158.1	156.5
Nondurable goods															
Food and kindred products.....	1,692.7	1,748.0	1,808.7	1,877.6	1,930.4	1,919.1	1,825.7	1,778.2	1,707.9	1,697.2	1,688.2	1,681.4	1,700.6	1,792.7	1,790.3
Meat products.....		318.3	323.8	320.7	321.0	319.8	322.1	323.7	315.2	309.7	307.7	307.7	313.8	321.1	316.7
Dairy products.....		304.8	307.4	311.6	318.3	325.2	326.1	323.4	313.9	311.1	308.2	304.9	304.6	316.6	317.5
Canned and preserved food, except meats.....		208.5	247.4	304.9		371.8	352.4	264.5	222.9	195.1	196.0	189.6	183.0	241.8	245.1
Grain mill products.....		126.9	127.0	128.3	133.4	134.2	133.8	132.2	126.7	125.0	125.3	124.8	126.2	128.4	133.5
Bakery products.....		303.5	305.3	306.4	306.4	309.8	310.1	309.4	305.1	302.3	303.3	303.0	303.7	307.5	302.2
Sugar.....		40.7	45.1	45.8	31.0	31.1	29.7	29.0	28.7	31.4	29.7	31.2	38.0	36.9	38.2
Confectionery and related products.....		86.5	89.4	89.4	83.2	81.5	71.9	75.9	72.6	72.4	77.7	80.4	78.7	79.6	79.0
Beverages.....		215.1	217.0	222.8	223.3	225.2	227.4	221.1	212.3	210.9	208.5	206.1	207.9	218.2	215.0
Miscellaneous food and kindred products.....		143.7	146.3	147.7	142.0	139.9	140.1	140.6	138.3	138.4	138.2	140.3	141.2	142.8	143.1
Tobacco manufactures.....	88.4	90.9	93.3	108.2	118.0	100.0	76.0	78.2	77.3	78.7	83.3	88.3	92.3	94.1	94.6
Cigarettes.....		37.0	36.9	37.0	37.3	37.5	37.2	37.5	36.6	36.5	36.7	36.9	36.8	37.2	36.7
Cigars.....		24.0	24.8	24.7	24.4	24.1	22.8	24.9	25.1	25.0	25.7	26.4	26.1	27.9	29.5
Textile mill products.....	878.1	887.5	891.6	892.4	891.0	889.0	874.6	887.0	877.8	871.3	865.7	864.5	864.9	914.6	942.9
Cotton broad woven fabrics.....		252.7	252.4	251.7	250.4	249.6	248.5	250.8	249.7	250.5	251.2	252.4	254.4	260.4	264.7
Silk and synthetic broad woven fabrics.....		70.7	70.5	70.6	70.6	70.5	68.7	69.1	68.6	68.7	68.9	69.7	70.7	73.4	74.4
Weaving and finishing broad woolsens.....		50.3	50.5	51.9	53.8	53.9	54.3	55.2	53.7	52.3	51.1	51.0	49.2	56.0	60.4
Narrow fabrics and smallwares.....		27.6	27.3	27.2	27.1	26.6	26.1	26.4	26.4	26.2	25.9	26.1	26.1	27.6	28.5
Knitting.....		210.8	216.3	217.8	216.9	217.4	212.2	216.6	212.7	209.4	204.7	200.5	197.7	214.4	219.6
Finishing textiles, except wool and knit.....		72.1	71.8	70.9	70.8	70.6	69.8	70.9	70.6	70.6	70.4	70.3	70.7	74.3	76.4
Floor covering.....		33.9	33.9	33.7	33.2	32.7	31.0	32.2	32.4	32.1	33.8	34.2	34.4	35.9	37.1
Yarn and thread.....		102.9	102.3	102.1	102.1	102.0	99.6	101.1	99.9	98.7	98.4	98.0	97.6	103.7	108.6
Miscellaneous textile goods.....		66.5	66.6	66.5	66.1	65.7	64.4	64.7	63.8	62.8	61.3	62.3	64.1	69.0	73.3

See footnotes at end of table.

TABLE A-2. Employees in nonagricultural establishments, by industry ¹—Continued

	[In thousands]																
Industry	1962	1961													Annual average		
	Jan. ²	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	1960	1959		
Manufacturing—Continued																	
Nondurable goods—Continued																	
Apparel and related products.....	1,197.7	1,219.0	1,225.1	1,220.8	1,214.3	1,233.9	1,167.5	1,184.6	1,165.3	1,178.5	1,213.7	1,203.2	1,170.1	1,228.4	1,224.9		
Men's and boys' suits and coats.....	118.7	114.2	116.2	117.2	117.9	117.9	112.5	117.5	113.5	112.2	117.9	119.7	120.1	121.5	118.8		
Men's and boys' furnishings.....	310.7	310.3	308.4	308.8	311.1	299.0	303.8	298.5	295.7	295.9	295.7	295.7	289.0	307.5	297.9		
Women's, misses', and juniors' outerwear.....	347.1	351.9	347.8	346.9	356.0	333.0	331.9	335.4	351.1	370.3	361.2	347.0	361.3	369.0	369.0		
Women's and children's undergarments.....	122.8	124.7	123.6	121.2	120.3	112.1	115.6	115.2	116.3	116.2	115.7	112.3	119.7	119.0	119.0		
Hats, caps, and millinery.....	35.3	33.0	35.3	34.4	37.6	32.7	32.5	29.2	31.4	40.2	40.7	36.6	36.2	37.5	37.5		
Girls' and children's outerwear.....	74.4	74.1	75.0	74.1	77.9	77.2	76.4	72.0	69.2	73.8	75.7	72.9	76.1	75.4	75.4		
Fur goods and miscellaneous apparel.....	70.3	74.8	75.1	73.2	73.8	69.2	70.8	67.1	66.5	66.7	65.4	61.3	69.4	71.2	71.2		
Miscellaneous fabricated textile products.....	139.7	142.1	139.4	138.5	139.3	131.8	136.1	134.4	136.1	132.7	129.1	130.9	136.9	136.2	136.2		
Paper and allied products.....	591.7	598.7	598.4	597.0	597.0	595.8	588.5	593.6	583.6	581.1	580.1	578.2	581.9	593.3	584.9		
Paper and pulp.....	225.6	225.3	225.1	226.7	228.1	225.7	227.9	222.9	221.7	221.5	220.9	222.1	224.4	217.7	217.7		
Paperboard.....	66.1	65.7	65.9	66.1	67.1	66.8	68.2	67.1	67.0	67.2	67.1	67.5	69.3	70.6	70.6		
Converted paper and paperboard products.....	128.3	126.9	126.1	126.5	125.0	123.9	123.7	122.6	122.8	122.1	121.2	121.9	124.4	123.2	123.2		
Paperboard containers and boxes.....	178.7	180.5	179.9	177.7	175.6	172.1	173.8	171.0	169.6	169.3	169.0	170.4	175.1	173.3	173.3		
Printing, publishing, and allied industries.....	926.3	934.9	935.5	933.2	929.6	926.0	925.6	924.9	919.2	921.3	924.5	920.6	919.0	917.2	889.5		
Newspaper publishing and printing.....	342.7	341.5	341.3	339.6	339.2	339.8	340.2	338.0	337.7	337.4	335.6	336.3	332.6	320.0	320.0		
Periodical publishing and printing.....	70.2	70.5	70.8	70.7	69.9	70.4	70.4	70.0	71.4	72.2	72.6	72.8	71.0	69.8	69.8		
Books.....	74.0	74.1	74.5	74.4	74.1	72.2	72.6	72.3	72.3	72.0	71.6	71.6	71.1	67.0	67.0		
Commercial printing.....	294.0	293.9	290.8	290.4	288.7	289.0	288.5	287.8	288.3	289.9	287.8	287.5	289.2	283.5	283.5		
Bookbinding and related industries.....	47.2	47.4	47.6	47.7	47.9	47.7	47.0	46.3	46.4	47.0	46.8	46.4	47.0	45.4	45.4		
Other publishing and printing industries.....	106.8	108.1	108.2	106.8	106.2	106.5	106.2	104.8	105.2	106.0	106.2	104.4	106.3	103.8	103.8		
Chemicals and allied products.....	832.0	836.1	834.2	834.4	834.7	838.1	833.1	832.0	831.7	830.9	823.1	815.9	817.9	829.6	809.6		
Industrial chemicals.....	285.3	285.1	284.7	286.1	288.8	288.8	285.8	283.5	282.4	282.0	282.2	283.8	286.8	279.2	279.2		
Plastics and synthetics, except glass.....	156.8	155.6	154.4	153.2	153.7	152.9	152.1	150.8	150.3	149.1	149.0	149.4	153.2	149.1	149.1		
Drugs.....	107.7	107.6	106.9	107.4	108.0	107.3	107.1	105.6	105.3	105.2	105.0	106.4	107.4	104.5	104.5		
Soap, cleaners, and toilet goods.....	98.3	98.6	98.8	98.3	98.2	97.2	97.6	96.0	95.3	94.0	93.5	93.0	92.2	89.0	89.0		
Paints, varnishes, and allied products.....	61.5	61.7	62.4	63.2	64.0	64.0	63.4	62.5	62.0	61.3	61.0	61.4	63.5	62.3	62.3		
Agricultural chemicals.....	41.8	40.7	42.3	42.1	40.6	40.1	43.0	51.3	54.5	51.1	45.1	43.9	44.8	45.3	45.3		
Other chemical products.....	84.7	84.9	84.9	84.4	84.8	83.6	83.0	82.0	81.1	80.4	80.1	80.0	81.8	80.2	80.2		
Petroleum refining and related industries.....	194.5	194.8	197.1	203.5	204.9	207.4	204.5	207.9	205.3	204.0	202.4	201.5	203.0	211.7	215.3		
Petroleum refining.....	163.1	164.2	169.0	170.4	170.4	169.6	169.6	172.9	171.6	172.1	171.8	171.7	172.0	177.6	181.4		
Other petroleum and coal products.....	31.7	32.9	34.5	34.5	35.6	34.9	35.0	33.7	31.9	30.6	29.8	31.0	34.1	34.0	34.0		
Rubber and miscellaneous plastic products.....	379.1	382.9	381.9	380.0	376.6	369.2	361.7	363.6	358.0	351.6	349.2	350.7	355.5	374.0	371.4		
Tires and inner tubes.....	104.4	103.4	103.3	102.7	100.3	101.1	100.5	99.3	98.6	99.2	97.9	101.3	106.8	105.0	105.0		
Other rubber products.....	157.3	156.2	154.4	153.9	150.3	147.0	148.8	146.4	143.0	141.7	144.2	146.6	153.3	153.2	153.2		
Miscellaneous plastic products.....	121.2	122.3	122.3	120.0	118.6	113.6	114.3	112.3	110.0	108.3	108.6	107.6	113.8	113.3	113.3		
Leather and leather products.....	360.5	364.4	363.0	358.7	360.4	369.0	359.7	364.0	353.4	353.5	360.9	364.2	360.5	365.8	374.6		
Leather tanning and finishing.....	33.3	33.4	33.2	33.4	33.2	32.4	33.2	32.9	32.5	32.3	32.4	33.4	34.1	36.4	36.4		
Footwear, except rubber.....	239.8	236.2	232.3	235.4	243.7	240.5	243.0	236.4	235.1	241.3	244.7	243.2	242.6	247.5	247.5		
Other leather products.....	91.3	93.4	93.2	91.6	92.1	86.8	87.8	84.1	85.9	87.3	87.1	83.9	89.1	90.6	90.6		
Transportation and public utilities																	
Railroad transportation.....	823.4	815.5	821.9	825.5	835.0	832.5	826.5	813.3	808.9	807.4	810.7	811.9	886.9	925.2	925.2		
Class I railroads.....	713.9	715.2	720.8	723.4	733.0	730.8	725.5	713.0	708.1	706.0	708.5	710.3	780.5	815.2	815.2		
Local and interurban passenger transit.....	268.4	266.9	267.8	267.9	257.1	257.7	266.0	270.4	272.7	278.3	282.3	283.9	282.6	281.1	281.1		
Local and suburban transportation.....	89.6	89.6	91.1	91.6	91.2	91.0	92.2	92.4	92.1	92.0	92.1	92.3	94.6	96.8	96.8		
Taxicabs.....	108.7	106.6	106.1	104.7	103.7	104.5	104.9	106.3	109.8	116.9	121.1	121.1	120.4	118.9	118.9		
Intercity and rural buslines.....	47.0	47.7	48.0	49.4	50.0	50.1	49.6	48.4	47.5	46.6	46.2	47.7	47.2	47.6	47.6		
Motor freight transportation and storage.....	893.9	912.8	913.4	907.0	891.0	891.0	880.3	852.8	837.1	840.4	832.0	848.7	873.8	848.2	848.2		
Air transportation.....	199.7	199.2	202.0	203.0	202.9	201.2	197.3	196.0	193.6	190.9	191.1	190.5	191.0	179.7	179.7		
Air transportation, common carriers.....	179.5	178.9	180.6	181.1	180.4	178.9	174.4	172.5	171.5	169.4	170.2	169.8	171.6	160.9	160.9		
Pipeline transportation.....	21.6	21.7	21.7	22.0	22.6	22.8	22.7	22.2	22.2	22.1	22.2	22.3	23.1	24.3	24.3		
Other transportation.....	294.6	301.8	299.0	304.7	306.9	314.9	307.0	303.3	303.3	297.9	297.4	292.8	308.0	303.4	303.4		
Communication.....	814.2	818.3	819.5	824.7	832.4	834.5	828.5	824.4	827.6	828.3	829.8	830.8	838.7	836.6	836.6		
Telephone communication.....	684.8	687.6	689.2	693.5	700.8	701.8	697.1	693.7	695.7	696.8	697.2	698.4	706.0	707.1	707.1		
Telegraph communication.....	37.1	37.0	36.7	37.1	37.0	37.1	37.2	37.0	36.9	37.0	37.4	37.6	38.3	39.0	39.0		
Radio and television broadcasting.....	90.4	91.8	91.7	92.2	92.7	93.7	92.3	91.8	93.1	92.6	93.3	92.9	92.4	88.9	88.9		
Electric, gas, and sanitary services.....	604.4	606.3	607.9	616.1	623.0	622.5	616.4	608.5	604.1	606.5	605.6	606.7	613.0	611.6	611.6		
Electric companies and systems.....	249.2	249.6	250.1	253.6	256.2	256.0	254.7	251.3	251.4	251.5	251.6	251.9	254.3	254.3	254.3		
Gas companies and systems.....	152.1	152.4	152.8	154.9	156.7	156.9	154.3	152.6	148.2	151.8	152.0	152.5	153.4	153.7	153.7		
Combined utility systems.....	173.7	174.5	175.1	177.2	178.9	178.5	176.4	174.5	174.4	173.7	172.9	173.1	175.0	173.7	173.7		
Water, steam, and sanitary systems.....	29.4	29.8	29.9	30.4	31.2	31.1	31.0	30.1	30.1	29.5	29.1	29.2	30.3	30.0	30.0		

See footnotes at end of table.

TABLE A-2. Employees in nonagricultural establishments, by industry¹—Continued

Industry	1962					1961										Annual average	
	Jan. ²	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	1960	1959		
Wholesale and retail trade.....	11,285	12,178	11,611	11,450	11,378	11,342	11,327	11,354	11,238	11,162	11,101	11,040	11,233	11,412	11,125		
Wholesale trade.....	3,005	3,058	3,051	3,049	3,035	3,044	3,013	2,990	2,959	2,955	2,904	2,974	2,995	3,009	2,941		
Motor vehicles and automotive equipment.....		219.4	218.0	217.1	217.1	216.7	217.5	215.0	213.6	213.7	211.9	211.8	213.1	213.6	206.9		
Drugs, chemicals, and allied products.....		192.5	192.3	190.5	189.5	190.8	190.5	188.4	186.0	185.3	185.1	184.7	184.0	183.8	176.8		
Dry goods and apparel.....		131.5	131.6	131.2	131.0	132.4	131.5	130.6	129.3	129.2	129.1	130.7	130.2	130.8	125.9		
Groceries and related products.....		498.9	497.7	496.4	486.1	481.7	487.3	493.1	486.7	484.8	489.9	495.2	498.0	494.0	486.8		
Electrical goods.....		207.3	206.1	204.7	204.6	205.1	204.8	203.6	202.4	203.2	203.2	205.0	206.2	208.1	201.2		
Hardware, plumbing and heating goods.....		142.3	143.1	143.0	143.2	143.9	143.6	142.0	142.3	142.1	141.6	141.5	142.2	145.1	146.0		
Machinery, equipment, and supplies.....		488.5	488.1	488.3	489.0	489.2	488.6	484.5	478.9	476.8	477.4	475.6	476.8	479.1	458.6		
Retail trade.....	8,280	9,120	8,560	8,401	8,343	8,298	8,314	8,364	8,279	8,207	8,137	8,066	8,238	8,403	8,184		
General merchandise stores.....		2,051.4	1,686.8	1,576.5	1,526.5	1,488.8	1,480.0	1,501.5	1,488.1	1,468.6	1,463.9	1,420.7	1,500.7	1,563.1	1,581.1		
Department stores.....		1,229.9	994.3	919.6	880.3	861.0	858.5	874.4	866.3	859.5	857.7	833.4	889.2	914.4	896.2		
Limited price variety stores.....		435.7	353.8	333.5	328.8	317.3	311.4	320.0	322.2	313.5	311.1	299.1	313.4	335.4	324.8		
Food stores.....		1,395.5	1,371.2	1,353.8	1,342.7	1,346.1	1,355.0	1,358.9	1,353.7	1,349.2	1,352.5	1,360.7	1,361.5	1,350.1	1,305.0		
Grocery, meat, and vegetable stores.....		1,215.9	1,199.6	1,184.8	1,174.2	1,174.9	1,184.9	1,187.3	1,181.0	1,181.7	1,181.7	1,187.2	1,191.1	1,181.6	1,134.0		
Apparel and accessories stores.....		784.5	676.0	653.2	643.1	612.1	616.5	644.1	637.5	625.9	630.7	633.8	633.0	637.2	608.7		
Men's and boys' apparel stores.....		139.0	111.5	105.7	103.2	102.1	103.4	109.5	102.6	101.5	102.8	101.9	110.4	104.3	97.9		
Women's ready-to-wear stores.....		292.1	257.9	249.4	247.5	236.3	234.7	243.7	245.8	241.1	240.0	225.9	238.7	243.1	235.7		
Family clothing stores.....		127.0	101.8	97.3	95.3	90.7	93.7	95.1	93.3	91.8	92.8	89.4	95.7	94.7	89.5		
Shoe stores.....		133.6	118.8	117.4	117.6	109.0	111.5	117.5	117.4	114.7	115.9	105.0	113.9	119.0	112.8		
Furniture and appliance stores.....		424.0	413.0	408.9	405.4	403.7	402.7	401.8	396.8	399.4	400.2	401.3	406.1	409.2	398.0		
Eating and drinking places.....		1,605.2	1,615.8	1,626.6	1,649.7	1,658.6	1,662.5	1,667.6	1,637.2	1,617.3	1,558.2	1,548.5	1,565.5	1,626.5	1,596.2		
Other retail trade.....		2,859.1	2,797.2	2,781.6	2,775.3	2,788.9	2,797.7	2,790.0	2,765.8	2,746.5	2,731.8	2,740.8	2,771.5	2,811.1	2,744.9		
Motor vehicle dealers.....		657.9	652.4	650.9	648.9	657.1	659.1	655.7	653.4	656.0	657.1	661.2	667.9	674.6	656.1		
Other vehicle and accessory dealers.....		149.8	143.7	141.6	140.4	140.2	142.1	142.5	136.8	134.5	129.9	129.4	130.7	142.8	140.5		
Drug stores.....		393.2	377.5	373.4	373.0	372.3	370.4	371.2	368.3	366.6	367.3	367.0	370.3	369.5	355.2		
Finance, insurance, and real estate.....	2,744	2,758	2,757	2,758	2,770	2,801	2,795	2,766	2,734	2,724	2,710	2,706	2,702	2,684	2,597		
Banking.....		701.2	699.6	697.7	699.6	707.6	704.7	696.3	688.2	688.0	687.9	686.6	684.5	674.7	641.7		
Credit agencies other than banks.....		265.0	263.4	261.6	263.1	264.6	264.3	259.5	262.2	261.4	261.1	261.1	261.8	255.2	242.4		
Savings and loan associations.....		82.3	81.1	80.7	80.1	80.4	80.7	78.7	76.5	76.6	75.6	75.3	75.8	72.4	66.9		
Personal credit institutions.....		143.1	142.9	141.7	144.1	145.2	144.7	144.4	145.1	147.5	147.8	147.8	148.0	146.0	138.5		
Security dealers and exchanges.....		131.6	130.7	130.3	131.0	133.2	132.5	130.5	126.9	123.3	119.7	117.1	115.1	114.2	106.7		
Insurance carriers.....		858.3	858.7	856.8	861.2	866.9	863.9	853.2	853.8	853.4	850.8	846.2	839.0	826.0	818.2		
Life insurance.....		469.4	469.5	468.0	470.1	473.2	471.7	467.4	467.0	467.8	467.3	465.8	463.2	459.0	450.0		
Accident and health insurance.....		52.0	51.9	51.6	51.8	52.3	52.0	52.0	51.5	51.5	51.2	51.0	50.8	50.9	49.9		
Fire, marine, and casualty insurance.....		295.1	295.0	295.3	297.1	298.9	298.0	295.7	293.5	293.6	293.9	293.3	291.4	287.8	277.7		
Insurance agents, brokers, and services.....		199.3	199.3	200.0	200.7	203.4	204.0	201.9	200.0	198.5	197.9	197.0	196.2	196.2	189.7		
Real estate.....		527.2	529.4	536.8	538.8	548.8	548.6	542.3	529.8	522.5	513.6	518.0	521.7	527.3	521.4		
Operative builders.....		29.8	31.6	32.8	33.9	34.5	34.7	34.4	33.6	32.6	31.6	29.5	30.5	36.1	43.3		
Other finance, insurance, and real estate.....		74.9	75.4	75.2	75.9	76.7	76.5	76.2	75.9	76.0	76.2	75.8	76.0	76.7	76.4		
Services and miscellaneous.....	7,507	7,571	7,596	7,618	7,612	7,606	7,631	7,598	7,510	7,448	7,359	7,333	7,313	7,361	7,105		
Hotels and lodging places.....		561.2	563.6	570.3	575.3	570.9	570.6	569.6	559.8	551.8	537.3	536.4	532.1	567.7	547.3		
Hotels, tourist courts, and motels.....		518.6	519.8	523.9	559.1	597.6	597.4	559.7	509.6	506.6	495.6	495.3	491.0	511.1	490.8		
Personal services.....																	
Laundries, cleaning and dyeing plants.....		505.7	509.9	513.5	512.0	510.9	518.5	522.4	514.2	506.8	504.6	500.8	507.2	521.0	529.1		
Miscellaneous business services.....																	
Advertising.....		109.8	111.3	110.7	109.7	109.4	110.4	111.2	109.8	110.7	110.5	111.4	109.2	109.9	105.5		
Motion pictures.....		172.1	176.5	183.0	189.1	190.2	193.4	192.1	189.0	187.9	181.5	178.3	179.6	189.3	194.9		
Motion picture filming and distributing.....		42.1	42.3	42.0	42.2	41.7	43.1	43.3	42.4	42.8	45.9	46.9	47.9	43.5	44.8		
Motion picture theaters and services.....		130.0	134.2	141.0	146.9	148.5	150.3	148.8	146.6	145.1	135.6	131.4	131.7	145.8	150.2		
Medical services.....																	
Hospitals.....		1,156.6	1,157.3	1,154.0	1,148.9	1,149.6	1,152.8	1,142.8	1,132.6	1,130.1	1,130.2	1,126.2	1,119.6	1,105.0	1,062.0		
Government.....	9,045	9,285	9,072	9,030	8,904	8,535	8,534	8,797	8,816	8,787	8,769	8,737	8,672	8,520	8,190		
Federal Government ³	2,280	2,510	2,291	2,283	2,281	2,300	2,294	2,277	2,240	2,233	2,221	2,213	2,208	2,270	2,233		
Executive.....		2,480.8	2,261.9	2,254.3	2,252.6	2,271.2	2,265.0	2,248.1	2,212.1	2,205.0	2,193.8	2,185.7	2,180.5	2,242.6	2,205.2		
Department of Defense.....		955.8	956.6	954.4	948.9	950.0	944.2	942.9	938.0	935.6	933.7	932.8	931.8	940.6	966.2		
Post Office Department.....		809.7	585.7	579.1	584.2	587.0	586.7	581.1	573.7	572.2	567.9	565.9	566.9	586.7	574.5		
Other agencies.....		715.3	719.6	720.0	719.5	734.2	734.1	724.1	700.4	697.2	691.7	687.0	681.8	715.3	664.5		
Legislative.....		23.4	23.4	23.4	23.5	23.6	23.6	23.5	23.1	22.9	22.6	22.5	22.5	22.6	22.5		
Judicial.....		5.4	5.3	5.3	5.1	5.1	5.1	5.1	5.1	5.1	5.0	5.0	5.0	4.9	4.8		
State and local government ⁴	6,765	6,775	6,781	6,747	6,623	6,235	6,240	6,520	6,576	6,554	6,548	6,524	6,464	6,250	5,957		
State government.....		1,690.6	1,699.9	1,702.0	1,665.4	1,623.5	1,613.6	1,664.6	1,680.2	1,668.7	1,661.2	1,654.3	1,638.3	1,592.7	1,541.1		
Local government.....		5,084.6	5,080.7	5,044.6	4,957.1	4,611.4	4,626.0	4,855.4	4,896.2	4,885.1	4,886.6	4,869.6	4,825.8	4,657.0	4,416.2		
Education.....		3,424.5	3,420.9	3,377.0	3,194.2	2,738.1	2,750.6	3,089.1	3,233.0	3,232.0	3,234.7	3,228.0	3,185.9	2,983.3	2,776.8		
Other State and local government.....		3,350.7	3,359.7	3,369.6	3,428.3	3,496.8	3,489.0	3,430.9	3,343.4	3,321.8	3,313.1	3,295.9	3,278.2	3,266.4	3,180.6		

¹ Beginning with the December 1961 issue, figures differ from those previously published for three reasons. The industry structure has been converted to the 1957 Standard Industrial Classification; the series have been adjusted to March 1959 benchmark levels indicated by data from government social insurance programs; and, beginning with January 1959, the estimates are prepared from a sample stratified by establishment size and, in some cases, region. For comparable back data, see *Employment and Earnings Statistics for the United States, 1909-60*, BLS Bull. 1312. Statistics from April 1959 forward are subject to further revision when new benchmarks become available.

In addition, data include Alaska and Hawaii beginning in January 1959. This inclusion increased the nonagricultural total by 212,000 (0.4 percent) for the March 1959 benchmark month, with increases for industry divisions ranging from 0.1 percent in mining to 0.8 percent in government.

These series are based upon establishment reports which cover all full- and part-time employees in nonagricultural establishments who worked during,

or received pay for, any part of the pay period ending nearest the 15th of the month. Therefore, persons who worked in more than 1 establishment during the reporting period are counted more than once. Proprietors, self-employed persons, unpaid family workers, and domestic servants are excluded.

² Preliminary.

³ Data relate to civilian employees who worked on, or received pay for, the last day of the month.

⁴ State and local government data exclude, as nominal employees, elected officials of small local units and paid volunteer firemen.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics for all series except those for the Federal Government, which is prepared by the U.S. Civil Service Commission, and that for Class I railroads, which is prepared by the U.S. Interstate

TABLE A-3. Production workers in nonagricultural establishments, by industry¹

[In thousands]

Industry	1962	1961												Annual average	
	Jan. ²	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	1960	1959
Mining		519	528	529	536	536	530	539	529	518	514	517	526	567	589
Metal mining		70.5	72.0	71.0	72.5	70.1	72.8	72.8	71.9	70.2	70.6	70.5	73.8	76.9	67.2
Iron ores		23.0	23.5	23.3	23.6	21.8	23.4	23.0	22.8	21.9	22.2	21.8	23.4	28.6	23.0
Copper ores		23.3	23.9	22.9	24.2	24.3	24.1	24.4	23.9	23.1	23.0	23.1	24.5	22.6	18.5
Coal mining		137.2	138.5	137.8	137.1	135.2	123.8	135.0	134.4	134.6	137.9	143.8	144.3	161.2	175.7
Bituminous		128.9	130.0	129.2	128.0	126.2	114.8	126.0	125.5	124.9	129.3	133.5	133.6	148.9	159.2
Crude petroleum and natural gas		220.4	220.1	218.9	224.2	228.2	230.7	228.8	224.2	220.7	219.4	219.9	222.0	229.1	245.2
Crude petroleum and natural gas fields		105.5	106.1	106.3	109.0	111.3	111.1	110.5	107.7	107.6	107.6	108.9	110.0	113.8	118.5
Oil and gas field services		114.7	114.0	112.6	115.2	116.9	119.6	118.3	116.5	113.1	111.8	111.0	112.0	115.3	126.7
Quarrying and nonmetallic mining		91.3	97.1	101.0	102.3	102.6	102.7	101.9	98.0	92.6	86.4	82.9	86.3	99.6	100.5
Contract construction		2,166	2,413	2,567	2,603	2,655	2,602	2,550	2,355	2,203	2,042	1,931	2,043	2,458	2,535
General building contractors		693.5	761.0	806.1	815.1	840.0	819.3	800.9	739.1	695.9	647.7	609.1	654.6	788.3	835.4
Heavy construction		403.4	512.8	579.2	597.1	605.2	595.3	579.6	513.5	442.9	374.9	343.0	368.2	509.0	516.5
Highway and street construction		204.1	285.4	340.7	352.0	359.2	351.3	338.0	288.7	231.0	180.4	155.7	169.3	270.6	281.9
Other heavy construction		199.3	227.4	238.5	245.1	246.0	244.0	241.6	224.8	211.9	194.5	187.3	198.9	238.4	234.6
Special trade contractors		1,068.6	1,139.3	1,191.2	1,190.4	1,209.8	1,187.5	1,169.1	1,102.5	1,063.8	1,019.2	978.6	1,020.5	1,160.7	1,183.1
Manufacturing	12,120	12,313	12,414	12,379	12,407	12,274	12,023	12,090	11,875	11,712	11,666	11,642	11,740	12,562	12,596
Durable goods	6,769	6,853	6,883	6,771	6,753	6,641	6,616	6,678	6,582	6,426	6,358	6,351	6,440	7,021	7,031
Nondurable goods	5,351	5,460	5,531	5,608	5,654	5,633	5,407	5,412	5,293	5,286	5,308	5,291	5,291	5,541	5,565
Durable goods															
Ordnance and accessories	96.9	97.7	98.5	98.2	96.7	94.1	93.8	93.1	92.9	90.9	92.2	91.3	91.6	89.4	84.4
Ammunition, except for small arms		41.0	41.2	41.2	40.3	39.5	39.1	39.0	39.1	39.4	38.9	38.6	37.9	37.0	34.5
Sighting and fire control equipment		22.6	23.2	23.3	23.2	22.2	22.6	22.2	21.9	21.7	22.0	21.6	22.9	22.7	21.3
Other ordnance and accessories		34.1	34.1	33.7	33.2	32.4	32.1	31.9	31.9	29.8	31.3	31.1	30.8	29.7	28.6
Lumber and wood products, except furniture	503.4	524.5	541.7	554.7	565.2	567.8	563.3	564.8	536.6	513.5	492.0	490.3	501.7	570.3	594.3
Logging camps and logging contractors		82.2	89.3	93.3	97.6	99.5	98.8	98.3	82.4	73.5	66.1	68.9	71.6	87.1	88.5
Sawmills and planing mills		238.7	245.1	251.2	253.9	253.0	253.2	253.1	246.5	237.5	228.8	226.6	233.6	268.5	281.5
Millwork, plywood, and related products		118.0	120.8	122.8	125.6	127.3	123.5	123.9	119.8	116.4	112.4	110.4	112.0	124.1	133.0
Wooden containers		35.6	36.1	36.6	37.3	37.4	37.7	38.8	38.3	36.8	36.0	35.6	35.5	39.1	39.7
Miscellaneous wood products		50.0	50.4	50.8	50.8	50.6	50.1	50.7	49.6	49.3	48.7	48.8	49.0	51.4	51.7
Furniture and fixtures	311.8	313.2	315.9	317.2	313.6	310.8	299.8	301.0	295.7	296.6	294.1	294.2	293.8	318.9	321.0
Household furniture		230.1	230.8	232.0	229.3	224.9	217.1	217.6	214.8	217.5	214.7	215.2	213.8	232.3	238.3
Office furniture		22.7	22.8	22.6	22.4	22.3	21.3	21.5	20.8	21.0	21.0	21.0	21.7	22.8	21.7
Partitions, office and store fixtures		26.4	27.6	27.7	26.1	28.0	26.8	26.9	26.0	25.0	26.3	26.2	26.4	29.2	27.3
Other furniture and fixtures		34.0	34.7	34.9	35.8	35.6	34.6	35.0	34.1	33.1	32.1	31.8	31.9	34.5	33.7
Stone, clay, and glass products	429.0	450.2	463.3	469.9	477.1	477.4	470.6	469.9	458.1	444.2	431.2	421.2	428.9	483.2	494.0
Flat glass		25.0	25.0	25.1	25.0	24.5	23.6	22.5	22.7	21.7	22.7	22.6	24.7	27.0	29.6
Glass and glassware, pressed or blown		83.6	85.0	85.1	87.9	87.3	85.6	85.6	84.9	83.5	83.4	82.1	80.2	86.9	84.0
Cement, hydraulic		31.0	32.5	32.9	33.3	33.8	34.5	34.4	33.1	32.3	29.8	28.8	30.3	34.9	36.2
Structural clay products		60.3	61.0	61.4	63.4	63.7	63.6	62.8	61.4	59.7	56.8	54.4	56.1	65.9	67.6
Pottery and related products		37.5	38.0	38.2	38.0	37.0	35.1	36.5	36.4	36.3	36.3	36.5	36.4	40.3	41.1
Concrete, gypsum and plaster products		111.2	119.8	124.7	127.2	129.2	127.7	127.0	121.2	114.0	106.9	102.3	106.4	123.5	127.9
Other stone and mineral products		89.2	89.3	89.9	89.9	89.8	88.5	89.4	86.9	85.3	83.7	82.7	83.6	91.8	93.4
Primary metal industries	975.5	961.0	953.4	949.8	954.6	904.2	927.2	926.1	904.3	872.6	861.0	858.5	866.5	992.0	953.2
Blast furnace and basic steel products		507.2	502.4	507.9	513.3	503.5	498.0	491.8	479.4	458.0	446.3	439.7	437.5	529.3	471.0
Iron and steel foundries		162.5	161.2	155.9	157.8	157.3	156.2	157.1	154.6	150.0	150.7	152.4	156.4	172.4	181.3
Nonferrous smelting and refining		52.9	52.9	52.9	52.0	52.5	52.2	52.1	50.3	49.6	49.8	50.4	52.2	54.9	51.9
Nonferrous rolling, drawing, and extruding		136.5	135.7	135.1	133.5	131.0	126.1	128.3	125.2	123.5	123.0	124.0	126.3	133.6	142.9
Nonferrous foundries		54.3	53.3	52.2	51.8	50.5	49.4	50.8	49.6	47.8	47.6	48.1	49.4	53.7	56.6
Miscellaneous primary metal industries		47.6	47.9	45.8	46.2	45.4	45.3	46.0	45.2	43.7	43.6	43.9	44.7	48.2	49.5
Fabricated metal products	841.9	852.0	855.9	847.7	839.2	831.3	809.4	825.4	816.4	789.6	780.4	784.4	804.4	869.0	867.1
Metal cans		48.3	49.2	51.2	54.2	55.1	54.5	53.7	53.2	52.0	50.6	49.3	48.5	54.1	54.6
Cutlery, handtools, and general hardware		109.2	108.4	107.0	101.8	100.9	97.1	101.1	100.4	93.5	96.4	98.0	101.7	107.3	107.5
Heating equipment and plumbing fixtures		56.1	56.7	56.8	57.0	57.2	55.2	55.4	54.6	52.9	53.6	52.5	53.8	58.7	61.2
Fabricated structural metal products		229.7	235.0	238.4	242.0	237.9	234.1	234.1	227.2	223.0	218.3	219.3	224.0	238.1	236.8
Screw machine products, bolts, etc.		67.2	66.3	65.0	63.4	63.0	61.5	62.1	60.8	59.7	60.0	60.9	61.4	67.2	69.1
Metal stampings		157.9	156.8	145.4	142.6	140.9	134.0	144.7	146.5	139.1	134.6	137.7	146.7	160.7	163.3
Coating, engraving, and allied services		55.3	56.1	56.8	55.8	53.7	52.5	53.6	53.0	51.3	49.7	48.9	49.0	53.8	53.3
Miscellaneous fabricated wire products		45.0	44.7	44.8	43.5	42.6	41.3	42.0	41.7	40.6	39.4	40.3	40.8	45.5	45.6
Miscellaneous fabricated metal products		83.3	82.7	82.3	78.9	80.0	79.2	78.7	79.0	77.5	77.8	77.5	78.5	83.6	86.0

See footnotes at end of table.

TABLE A-3. Production workers in nonagricultural establishments, by industry ¹—Continued

Industry	1962	1961												Annual average	
	Jan. ²	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	1960	1959
Manufacturing—Continued															
<i>Durable goods—Continued</i>															
Machinery.....	974.0	979.0	959.5	955.1	959.6	949.9	956.7	967.0	970.9	971.8	968.4	970.1	967.5	1,030.4	1,025.9
Engines and turbines.....	52.6	51.9	52.4	52.2	50.2	49.0	49.6	51.6	51.9	50.9	50.9	51.7	51.7	56.1	59.5
Farm machinery and equipment.....	73.4	71.4	70.3	71.7	69.0	75.2	79.0	86.1	89.5	88.8	86.5	81.8	79.6	79.6	89.2
Construction and related machinery.....	130.8	123.5	129.3	130.7	131.4	129.6	130.4	129.6	127.9	126.0	125.4	124.6	144.5	148.6	148.6
Metalworking machinery and equipment.....	185.3	181.6	179.0	179.9	175.6	176.5	178.6	176.8	180.9	181.2	183.1	182.4	194.0	183.9	183.9
Special industry machinery.....	116.5	115.6	114.2	115.5	115.2	115.1	116.9	116.4	116.1	117.0	117.8	118.3	122.3	116.3	116.3
General industrial machinery.....	147.2	145.4	145.3	143.0	143.4	144.6	144.3	141.5	139.0	139.2	140.1	142.2	154.9	154.6	154.6
Office, computing, and accounting machines.....	95.9	95.4	95.4	95.0	94.4	94.0	94.4	94.1	94.2	93.2	94.0	94.4	95.2	92.6	92.6
Service industry machines.....	64.4	62.5	60.0	60.2	58.7	63.2	64.5	67.7	66.8	66.4	66.0	65.1	69.7	68.2	68.2
Miscellaneous machinery.....	112.9	112.2	109.2	111.4	112.0	109.5	109.3	107.1	105.5	105.7	106.3	107.0	114.2	112.9	112.9
Electrical equipment and supplies.....	1,015.6	1,014.3	1,012.5	997.0	982.1	968.3	943.5	950.4	942.7	930.6	933.5	938.9	946.5	986.9	967.0
Electric distribution equipment.....	107.4	106.9	106.8	106.3	106.0	104.8	104.6	103.3	103.2	103.8	104.9	106.1	108.3	104.7	104.7
Electrical industrial apparatus.....	118.7	117.9	115.0	116.9	115.4	114.8	115.4	113.9	111.9	111.9	112.2	113.2	121.5	122.4	122.4
Household appliances.....	118.3	119.1	119.4	117.1	113.8	112.6	114.8	114.3	113.3	112.8	112.0	110.3	120.7	122.1	122.1
Electric lighting and wiring equipment.....	104.2	104.1	103.5	102.0	101.8	97.9	98.8	97.5	97.3	97.2	97.5	98.0	103.6	104.4	104.4
Radio and TV receiving sets.....	94.2	97.7	97.5	95.1	90.4	81.8	78.1	74.3	68.3	69.1	71.8	73.2	82.2	85.6	85.6
Communication equipment.....	210.4	208.0	204.4	199.3	196.1	193.2	195.7	195.9	197.1	199.1	201.2	204.9	201.4	185.9	185.9
Electronic components and accessories.....	174.5	173.1	170.4	167.8	165.2	161.4	163.7	164.5	163.5	162.1	160.7	159.3	164.4	159.6	159.6
Miscellaneous electrical equipment and supplies.....	86.6	85.7	80.0	77.6	79.6	77.0	79.3	79.0	76.0	77.5	78.6	81.5	84.9	82.5	82.5
Transportation equipment.....	1,107.4	1,127.2	1,123.8	1,021.4	1,013.0	961.2	1,032.9	1,049.6	1,043.7	1,005.9	999.0	998.5	1,047.4	1,132.7	1,181.0
Motor vehicles and equipment.....	569.0	564.0	469.3	469.9	429.8	504.8	514.9	504.5	463.8	454.2	457.4	503.4	566.5	538.5	538.5
Aircraft and parts.....	392.7	390.0	383.0	378.7	368.2	369.5	371.3	373.8	377.4	380.1	379.3	380.2	392.5	462.6	462.6
Ship and boat building and repairing.....	119.0	122.2	120.9	117.1	116.1	112.5	115.4	118.4	118.7	119.3	116.6	117.8	116.6	122.0	122.0
Railroad equipment.....	25.6	25.9	25.3	24.8	24.5	23.5	24.2	23.4	23.3	23.9	25.1	27.3	32.0	29.3	29.3
Other transportation equipment.....	20.9	21.7	22.9	22.5	22.6	22.6	23.8	23.6	22.7	21.5	20.1	18.7	25.1	28.5	28.5
Instrument and related products.....	224.4	227.0	228.7	225.7	225.9	222.5	217.5	220.5	218.9	216.7	217.4	217.4	221.0	232.0	230.1
Engineering and scientific instruments.....	38.6	38.8	38.8	39.7	39.5	38.4	40.5	41.2	41.4	42.4	42.0	42.8	42.8	41.4	41.4
Mechanical measuring and control devices.....	62.4	62.5	60.8	60.8	59.1	58.8	59.2	58.8	58.4	58.3	58.7	59.3	63.3	62.5	62.5
Optical and ophthalmic goods.....	30.3	30.3	29.8	29.5	29.2	28.6	29.2	28.9	28.9	28.4	28.3	28.4	30.7	29.9	29.9
Surgical, medical, and dental equipment.....	33.6	33.6	33.3	33.3	33.1	32.5	32.8	32.8	32.7	32.6	32.9	32.9	33.1	31.8	31.8
Photographic equipment and supplies.....	40.0	40.1	39.8	39.9	39.8	39.1	39.3	38.8	38.7	38.7	38.9	39.6	41.1	41.3	41.3
Watches and clocks.....	22.1	23.4	23.2	22.7	21.8	20.1	19.5	18.4	17.1	17.2	16.6	18.0	21.1	23.2	23.2
Miscellaneous manufacturing industries.....	288.6	307.3	329.8	333.9	326.3	317.4	300.9	309.8	301.5	293.2	288.7	286.4	279.6	316.0	313.2
Jewelry, silverware, and plated ware.....	33.8	33.8	34.1	33.6	33.0	30.8	32.0	32.0	32.1	32.2	32.6	32.6	33.9	33.8	33.8
Toys, amusement, and sporting goods.....	80.2	98.0	103.2	99.2	95.8	88.3	89.5	85.7	79.4	73.1	69.2	63.6	86.4	82.9	82.9
Pens, pencils, office and art materials.....	24.4	24.5	24.4	23.7	23.6	22.7	22.5	21.9	21.7	22.0	22.2	22.3	23.0	22.9	22.9
Costume jewelry, buttons, and notions.....	46.5	48.2	47.4	46.3	46.0	43.5	44.8	42.2	41.3	42.3	43.0	42.0	47.3	49.1	49.1
Other manufacturing industries.....	122.4	125.3	124.8	123.5	119.0	115.6	121.0	119.7	118.7	119.1	119.4	119.1	125.4	124.6	124.6
<i>Nondurable goods</i>															
Food and kindred products.....	1,107.5	1,160.0	1,219.6	1,286.1	1,334.8	1,317.9	1,226.4	1,184.2	1,120.7	1,114.1	1,104.4	1,100.6	1,121.2	1,211.3	1,222.0
Meat products.....	256.3	261.3	259.0	258.9	257.6	259.0	260.3	252.4	247.0	244.7	244.5	250.3	257.9	255.2	255.2
Dairy products.....	154.4	156.5	159.9	165.8	171.5	172.6	171.6	164.5	162.9	160.0	158.1	158.5	169.7	175.3	175.3
Canned and preserved food, except meats.....	171.6	210.2	266.5	332.5	313.2	226.3	186.1	158.4	160.0	153.6	147.1	149.9	206.1	209.4	209.4
Grain mill products.....	88.3	87.9	89.4	93.8	94.0	93.9	92.6	88.1	86.4	86.7	86.5	87.8	89.8	93.3	93.3
Bakery products.....	173.8	176.1	176.5	175.6	177.8	178.2	177.3	173.3	171.3	171.7	172.0	172.5	176.6	176.4	176.4
Sugar.....	35.0	39.2	39.6	25.1	24.8	23.6	22.9	22.7	25.7	23.8	25.5	32.5	30.3	31.3	31.3
Confectionery and related products.....	68.4	71.4	72.1	66.4	64.1	55.2	59.1	55.9	55.6	60.2	62.6	62.9	63.5	63.3	63.3
Beverages.....	113.7	115.8	120.9	120.1	120.8	123.3	119.6	112.8	111.9	110.1	108.3	109.9	118.3	118.0	118.0
Miscellaneous food and kindred products.....	98.5	101.2	102.2	96.6	94.2	94.3	94.7	92.6	93.3	93.6	96.0	96.9	99.0	99.7	99.7
Tobacco manufactures.....	77.2	79.6	81.9	96.4	106.5	88.7	65.0	67.2	66.4	68.0	72.4	77.4	81.4	83.3	84.0
Cigarettes.....	31.3	31.2	31.3	31.7	32.0	31.6	32.0	31.3	31.3	31.5	31.6	31.7	32.2	31.7	31.7
Cigars.....	22.3	23.0	22.9	22.6	22.3	21.1	23.1	23.3	23.2	23.9	24.6	24.3	26.0	27.7	27.7
Textile mill products.....	792.3	801.5	804.7	805.9	804.4	802.2	788.1	800.3	791.4	784.9	779.0	778.1	778.3	826.7	855.0
Cotton broad woven fabrics.....	236.4	235.9	235.4	234.0	233.1	232.0	234.1	233.4	233.9	234.7	236.1	238.0	244.1	248.4	248.4
Silk and synthetic broad woven fabrics.....	64.0	63.7	63.8	63.8	63.7	62.1	62.6	62.1	62.1	62.1	63.1	64.2	66.9	68.2	68.2
Weaving and finishing broad woollens.....	44.6	44.6	45.7	47.6	47.7	48.1	48.9	47.6	46.0	45.1	44.9	42.9	49.5	53.9	53.9
Narrow fabrics and smallwares.....	24.3	23.9	23.9	23.8	23.2	22.8	23.0	23.0	22.8	22.8	22.6	22.6	24.1	24.9	24.9
Knitting.....	190.5	195.9	197.3	196.3	196.8	191.5	196.3	192.3	189.2	184.3	180.4	177.7	194.3	199.4	199.4
Finishing textiles, except wool and knit.....	62.0	61.7	61.0	60.8	60.7	60.0	61.1	60.8	60.8	60.6	60.3	60.9	64.1	66.2	66.2
Floor covering.....	28.4	28.3	28.2	27.9	27.4	25.9	27.0	27.1	26.9	28.4	28.8	29.0	30.4	31.5	31.5
Yarn and thread.....	95.3	94.9	94.7	94.8	94.6	92.2	93.5	92.3	91.3	90.8	90.7	90.2	95.9	100.6	100.6
Miscellaneous textile goods.....	56.0	55.8	55.9	55.4	55.0	53.5	53.8	52.8	51.9	50.3	51.2	52.8	57.5	61.9	61.9

See footnotes at end of table.

TABLE A-3. Production workers in nonagricultural establishments, by industry ¹—Continued

[In thousands]															
Industry	1962	1961												Annual average	
	Jan. ²	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	1960	1959
Manufacturing—Continued															
<i>Nondurable goods—Continued</i>															
Apparel and related products.....	1,066.7	1,086.8	1,092.2	1,087.3	1,081.5	1,100.4	1,033.7	1,050.3	1,033.3	1,045.8	1,082.1	1,071.4	1,039.2	1,094.2	1,090.6
Men's and boys' suits and coats.....	106.8	102.6	104.1	105.0	105.8	100.6	105.3	101.7	99.8	105.5	107.4	107.6	107.6	108.9	106.3
Men's and boys' furnishings.....	281.6	281.6	279.3	279.9	282.1	270.5	275.1	270.0	267.4	268.1	267.6	261.1	279.6	271.3	
Women's, misses', and juniors' outerwear.....	313.0	317.1	313.2	312.3	321.5	297.7	296.9	301.2	316.5	335.7	326.8	312.5	325.8	331.8	
Women's and children's undergarments.....	109.1	110.9	109.9	107.7	107.1	98.9	102.6	102.2	103.4	103.4	102.4	99.6	106.2	105.8	
Hats, caps, and millinery.....	31.5	29.2	31.5	30.6	33.8	29.0	28.8	25.5	27.5	36.3	36.9	32.9	32.4	33.6	
Girls' and children's outerwear.....	66.6	66.5	67.2	66.3	69.8	69.1	68.4	64.1	61.5	65.8	67.5	64.9	67.5	66.9	
Fur goods and miscellaneous apparel.....	61.2	65.1	65.7	64.0	64.5	59.8	60.9	57.2	57.0	57.8	56.6	52.6	60.2	61.9	
Miscellaneous fabricated textile products.....	117.0	119.2	116.4	115.7	115.8	108.1	112.3	111.4	112.7	109.5	106.2	108.0	113.6	113.1	
Paper and allied products.....	470.3	476.9	477.6	477.0	476.2	475.0	467.4	473.7	464.4	462.1	460.8	459.4	462.9	474.0	470.1
Paper and pulp.....	182.4	182.2	182.0	183.2	184.3	182.2	184.9	180.1	179.2	178.8	178.3	179.5	181.9	177.3	
Paperboard.....	53.4	53.2	53.4	53.3	54.1	53.8	55.1	54.4	54.2	54.3	54.2	54.6	56.4	57.8	
Converted paper and paperboard products.....	97.7	96.9	96.7	96.9	95.8	94.2	94.6	93.6	93.8	93.1	92.5	93.2	95.7	95.7	
Paperboard containers and boxes.....	143.4	145.3	144.9	142.8	140.8	137.2	139.1	136.3	134.9	134.6	134.4	135.6	140.1	139.4	
Printing, publishing, and allied industries.....	594.0	601.6	603.7	602.2	599.2	594.2	593.7	593.7	590.3	592.2	594.3	591.2	591.4	591.5	575.6
Newspaper publishing and printing.....	178.2	177.6	177.2	175.5	174.2	175.0	176.2	175.4	175.1	174.5	173.2	174.4	172.4	167.1	
Periodical publishing and printing.....	28.8	29.2	29.7	29.6	28.5	29.0	29.1	29.2	30.3	30.7	30.7	30.9	29.8	28.9	
Books.....	44.6	45.1	45.4	45.9	45.1	43.4	44.2	44.2	43.8	43.7	43.6	43.6	43.0	40.6	
Commercial printing.....	233.7	234.3	232.0	231.8	230.1	229.6	228.4	227.8	228.5	229.9	228.1	228.0	229.5	224.6	
Bookbinding and related industries.....	38.3	38.4	38.5	38.5	38.7	38.6	37.9	37.1	37.3	37.7	37.5	37.2	38.1	37.0	
Other publishing and printing industries.....	78.0	79.1	79.4	77.9	77.6	78.1	77.9	76.6	77.2	77.8	78.1	77.3	78.8	77.4	
Chemicals and allied products.....	507.5	510.7	509.6	509.9	509.0	509.2	506.1	507.0	509.1	508.7	502.0	495.2	496.6	510.8	505.9
Industrial chemicals.....	165.5	165.6	165.2	165.4	166.5	166.1	164.8	163.8	162.7	162.7	163.0	164.7	169.0	167.5	
Plastics and synthetics, except glass.....	106.9	105.8	104.4	103.1	103.4	102.9	102.8	101.6	100.9	100.0	99.8	100.1	103.5	102.2	
Drugs.....	58.7	58.6	58.1	58.7	58.8	58.9	58.8	57.7	57.3	57.4	57.4	57.5	58.8	58.3	
Soap, cleaners, and toilet goods.....	59.3	60.1	60.2	60.1	59.6	58.9	59.2	58.0	57.6	56.3	55.7	55.5	56.1	54.7	
Paints, varnishes, and allied products.....	35.0	35.2	35.8	36.4	36.8	36.9	36.4	35.8	35.2	34.2	34.1	34.6	36.7	36.4	
Agricultural chemicals.....	28.1	27.3	28.7	28.2	26.8	26.1	28.9	37.2	40.5	37.3	31.3	30.2	31.0	31.7	
Other chemical products.....	57.2	57.0	57.5	57.1	57.3	56.3	56.1	55.0	54.5	54.1	53.9	54.0	55.6	55.0	
Petroleum refining and related industries.....	123.3	123.3	125.6	131.5	132.7	134.7	131.6	134.3	132.1	131.0	129.7	129.3	131.0	137.7	139.8
Petroleum refining.....	101.4	102.3	106.7	107.9	108.8	106.4	108.8	108.0	108.4	108.4	108.8	109.3	113.1	115.2	
Other petroleum and coal products.....	21.9	23.3	24.8	24.8	25.9	25.2	25.5	24.1	22.6	21.3	20.5	21.7	24.6	24.6	
Rubber and miscellaneous plastic products.....	293.2	296.6	295.9	294.4	291.5	284.1	277.2	278.7	273.7	267.8	265.5	266.0	271.1	288.7	288.7
Tires and inner tubes.....	76.4	75.1	75.2	74.9	72.4	73.5	72.6	71.3	70.7	71.3	69.9	73.4	78.2	77.4	
Other rubber products.....	124.2	123.5	121.8	121.6	118.1	114.7	116.7	114.6	111.5	110.1	112.1	114.5	120.8	121.3	
Miscellaneous plastic products.....	96.0	97.3	97.4	95.0	93.6	89.0	89.4	87.8	85.6	84.1	84.0	83.2	89.7	90.1	
Leather and leather products.....	318.6	322.6	320.1	317.1	318.6	326.9	317.9	322.2	311.4	311.2	318.2	321.9	317.8	322.9	333.4
Leather tanning and finishing.....	29.4	29.4	29.3	29.3	29.0	28.3	29.1	28.8	28.3	28.0	28.4	29.3	29.9	32.3	
Footwear, except rubber.....	214.6	210.1	207.1	210.3	218.4	215.3	217.7	210.9	209.4	215.4	218.9	217.2	216.4	222.6	
Other leather products.....	78.6	80.6	80.7	79.0	79.5	74.3	75.4	71.7	73.5	74.8	74.6	71.3	76.5	78.5	
Transportation and public utilities:															
Local and interurban passenger transit:															
Local and suburban transportation.....	84.9	84.9	86.3	87.0	86.4	86.2	87.4	87.4	87.3	87.1	87.3	87.4	89.2	91.5	
Intercity and rural buslines.....	43.7	44.4	44.7	46.1	46.8	46.9	46.4	45.2	44.3	43.5	43.3	44.8	44.6	44.9	
Motor freight transportation and storage.....	816.9	835.6	836.6	831.7	816.2	816.3	805.9	778.4	764.1	763.2	757.8	775.2	801.8	779.1	
Pipeline transportation.....	18.3	18.3	18.3	18.5	19.1	19.3	19.2	18.8	18.8	18.8	18.8	19.0	19.8	21.0	
Communication:															
Telephone communication.....	559.0	560.9	562.4	566.7	574.0	575.5	571.1	568.3	569.9	571.3	571.7	573.2	581.9	585.4	
Telegraph communication.....	27.1	27.0	26.7	27.0	26.9	27.0	27.0	26.8	26.8	26.8	27.0	27.3	27.9	28.4	
Radio and television broadcasting.....	76.6	77.7	77.9	78.3	78.8	79.6	78.3	77.5	78.8	78.0	78.6	78.2	77.9	74.8	
Electric, gas, and sanitary services:															
Electric companies and systems.....	531.6	533.4	534.8	543.0	550.0	549.9	544.0	536.6	533.2	536.0	535.1	536.7	543.6	544.3	
Gas companies and systems.....	213.2	213.7	214.3	217.4	220.2	220.1	218.9	216.0	216.2	216.6	216.9	217.5	220.2	221.4	
Combined utility systems.....	135.2	135.4	135.9	138.0	139.9	140.0	137.6	135.9	132.3	135.3	135.4	136.2	137.3	137.9	
Water, steam, and sanitary systems.....	157.8	158.5	158.6	161.3	162.8	162.7	160.6	158.7	158.7	158.4	157.5	157.7	159.4	158.6	
	25.4	25.8	26.0	26.3	27.1	27.1	26.9	26.0	26.0	25.7	25.3	25.3	26.7	26.5	

See footnotes at end of table.

TABLE A-3. Production workers in nonagricultural establishments, by industry ¹—Continued

	[In thousands]														
Industry	1962	1961												Annual average	
	Jan. ²	Dec. ²	Nov.	Oct.	Sept	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	1960	1959
Wholesale and retail trade ⁴		9,547	8,974	8,806	8,716	8,672	8,658	8,676	8,599	8,549	8,554	8,502	8,676	8,810	8,592
Wholesale trade		2,639	2,635	2,632	2,620	2,631	2,600	2,580	2,552	2,550	2,559	2,569	2,591	2,610	2,558
Motor vehicles and automotive equipment		185.6	184.1	183.4	183.3	182.7	182.7	181.9	180.6	180.6	178.9	179.1	180.5	181.5	175.7
Drugs, chemicals, and allied products		161.1	161.9	160.2	159.5	160.2	160.2	158.5	157.2	156.8	156.9	156.6	155.8	155.6	149.8
Dry goods and apparel		110.9	111.0	110.5	110.6	112.6	111.7	111.1	109.9	110.7	110.8	111.7	111.5	112.0	108.7
Groceries and related products		443.1	441.6	440.3	430.1	425.2	431.6	436.9	431.5	429.1	434.6	439.0	442.5	439.1	433.6
Electrical goods		182.0	180.7	179.2	179.1	180.1	179.5	178.3	177.0	178.2	179.2	179.9	181.1	183.6	178.5
Hardware, plumbing and heating goods		123.3	124.2	124.3	124.6	125.3	125.0	123.6	123.7	123.7	123.1	123.1	123.9	127.7	129.2
Machinery, equipment, and supplies		417.0	417.3	417.7	418.6	419.2	418.9	415.2	410.1	408.0	408.8	407.3	408.5	412.0	396.2
Retail trade ⁴		6,908	6,339	6,174	6,096	6,041	6,058	6,096	6,047	5,999	5,995	5,993	6,085	6,201	6,084
General merchandise stores		1,926.3	1,562.2	1,453.5	1,405.2	1,368.6	1,360.5	1,378.5	1,365.0	1,347.1	1,346.9	1,303.8	1,383.6	1,447.9	1,421.1
Department stores		1,152.4	919.2	844.3	806.6	786.9	786.4	801.7	793.9	787.9	787.1	762.6	817.9	843.6	828.5
Limited price variety stores		414.9	332.8	312.8	308.5	297.1	291.6	297.4	299.0	291.2	292.1	279.8	294.2	316.8	307.9
Food stores		1,309.4	1,285.8	1,269.5	1,257.3	1,290.7	1,270.4	1,272.6	1,268.5	1,265.4	1,268.4	1,276.2	1,277.6	1,273.1	1,219.9
Grocery, meat, and vegetable stores		1,138.4	1,122.4	1,108.3	1,096.8	1,097.6	1,108.1	1,109.0	1,103.5	1,103.8	1,104.7	1,110.2	1,114.6	1,106.5	1,057.0
Apparel and accessories stores		723.1	615.6	592.6	582.7	553.6	558.5	583.9	579.1	568.5	574.0	557.8	575.5	582.3	557.2
Men's and boys' apparel stores		128.8	101.6	95.8	93.5	92.5	93.7	99.0	92.9	92.0	93.2	92.6	100.4	95.6	89.8
Women's ready-to-wear stores		269.7	236.1	227.5	225.2	215.2	214.0	222.3	224.6	220.4	219.8	205.7	217.9	223.3	217.3
Family clothing stores		119.7	94.5	90.1	88.2	83.6	86.6	88.1	86.3	84.9	85.9	82.7	89.2	88.1	83.5
Shoe stores		120.0	105.2	104.0	104.2	95.9	98.2	104.1	104.7	102.0	103.1	92.4	101.0	106.3	100.8
Furniture and appliance stores		382.6	372.4	367.8	364.4	362.5	361.6	360.8	355.7	358.1	358.9	359.8	364.9	368.9	359.9
Other retail trade ⁴		2,566.9	2,503.4	2,490.5	2,486.5	2,497.9	2,507.4	2,500.2	2,478.2	2,480.2	2,446.9	2,455.7	2,483.6	2,528.3	2,475.7
Motor vehicle dealers		574.9	570.5	568.9	567.9	576.5	578.5	575.6	573.8	576.4	578.4	582.5	588.9	596.2	579.6
Other vehicle and accessory dealers		129.1	122.9	120.9	119.2	118.6	120.9	121.8	116.1	114.5	109.7	109.4	110.2	123.1	121.3
Drug stores		369.2	349.7	348.6	348.6	348.1	346.1	347.4	344.5	342.9	344.3	343.2	348.4	347.5	336.2
Finance, insurance, and real estate:															
Banking		596.8	595.6	593.8	596.4	604.1	602.2	593.3	585.4	585.0	585.1	584.0	582.5	575.9	547.9
Security dealers and exchanges		123.4	122.6	122.3	122.9	125.2	124.7	122.8	119.2	115.7	112.1	109.6	107.6	107.0	99.9
Insurance carriers		776.5	777.7	775.9	780.8	787.0	784.7	778.2	773.8	774.6	774.1	771.8	768.1	763.9	746.8
Life insurance		428.3	429.3	427.9	430.4	433.8	432.7	428.4	427.6	428.5	427.6	426.0	423.7	420.7	412.7
Accident and health insurance		46.8	46.7	46.3	46.5	47.1	46.8	46.8	46.4	46.3	46.1	45.8	45.7	46.0	45.3
Fire, marine, and casualty insurance		264.7	264.7	264.9	266.8	268.9	268.1	266.0	263.6	263.8	264.4	264.2	262.8	260.3	252.4
Services and miscellaneous:															
Hotels and lodging places:															
Hotels, tourist courts, and motels		489.7	491.7	496.6	530.5	568.7	568.0	533.0	482.7	480.4	469.6	469.8	465.1	485.0	465.9
Personal services:															
Laundries, cleaning and dyeing plants		371.9	376.0	379.5	379.2	379.7	385.2	388.4	381.0	374.5	373.1	370.4	376.3	389.2	396.6
Motion pictures:															
Motion picture filming and distributing		27.0	27.1	26.7	27.1	27.2	28.2	28.0	27.4	27.7	29.4	30.4	31.5	29.0	30.6

¹ For comparability of data with those published in issues prior to December 1961 and coverage of these series, see footnote 1, table A-2.

For mining, manufacturing, and laundries, cleaning and dyeing plants, data refer to production and related workers; for contract construction, to construction workers; and for all other industries, to nonsupervisory workers.

Production and related workers include working foremen and all nonsupervisory workers (including leadmen and trainees) engaged in fabricating, processing, assembling, inspection, receiving, storage, handling, packing, warehousing, shipping, maintenance, repair, janitorial and watchmen services, product development, auxiliary production for plant's own use (e.g., power plant), and recordkeeping and other services closely associated with the above production operations.

Construction workers include working foremen, journeymen, mechanics, apprentices, laborers, etc., engaged in new work, alterations, demolition,

repair and maintenance, etc., at the site of construction or working in shop or yards at jobs (such as precutting and preassembling) ordinarily performed by members of the construction trades.

Nonsupervisory workers include employees (not above the working supervisory level) such as office and clerical workers, repairmen, salespersons, operators, drivers, attendants, service employees, linemen, laborers, janitors, watchmen, and similar occupational levels, and other employees whose services are closely associated with those of the employees listed.

² Preliminary.

³ Data relate to nonsupervisory employees except messengers.

⁴ Excludes eating and drinking places.

TABLE A-4. Employees in nonagricultural establishments, by industry division and selected groups, seasonally adjusted ¹

	[In thousands]												
Industry division and group	1962	1961											
	Jan. ²	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.
Total.....	54,434	54,495	54,525	54,385	54,304	54,333	54,335	54,182	53,894	53,663	53,561	53,485	53,581
Mining.....	643	656	665	661	666	665	672	669	670	666	668	667	672
Contract construction.....	2,586	2,698	2,719	2,758	2,754	2,770	2,776	2,795	2,742	2,766	2,792	2,765	2,773
Manufacturing.....	16,451	16,518	16,466	16,361	16,323	16,381	16,392	16,373	16,275	16,119	16,023	15,962	16,021
Durable goods.....	9,218	9,251	9,213	9,112	9,105	9,131	9,138	9,114	9,058	8,904	8,820	8,797	8,863
Ordinance and accessories.....	206	205	206	208	203	202	202	200	199	196	196	196	195
Lumber and wood products, except furniture.....	595	600	602	600	603	603	604	606	602	601	595	591	596
Furniture and fixtures.....	376	374	373	372	370	371	370	368	366	365	361	358	356
Stone, clay, and glass products.....	557	567	570	574	573	578	575	573	569	561	557	551	556
Primary metal industries.....	1,202	1,185	1,178	1,174	1,179	1,174	1,170	1,151	1,135	1,101	1,085	1,084	1,092
Fabricated metal products.....	1,094	1,098	1,097	1,091	1,090	1,094	1,082	1,085	1,084	1,057	1,040	1,041	1,055
Machinery.....	1,408	1,418	1,412	1,409	1,400	1,404	1,401	1,396	1,398	1,395	1,388	1,394	1,401
Electrical equipment and supplies.....	1,483	1,472	1,456	1,455	1,428	1,444	1,442	1,442	1,439	1,422	1,416	1,411	1,405
Transportation equipment.....	1,562	1,592	1,579	1,496	1,528	1,530	1,559	1,560	1,537	1,487	1,468	1,455	1,491
Instruments and related products.....	351	352	351	349	350	349	349	347	346	342	340	341	343
Miscellaneous manufacturing industries.....	384	388	389	384	381	382	384	386	383	377	374	375	373
Nondurable goods.....	7,233	7,267	7,253	7,249	7,218	7,250	7,254	7,259	7,217	7,215	7,203	7,165	7,158
Food and kindred products.....	1,776	1,782	1,791	1,787	1,769	1,770	1,773	1,775	1,772	1,787	1,794	1,785	1,785
Tobacco manufactures.....	87	87	87	91	96	90	88	90	89	90	92	91	91
Textile mill products.....	883	886	884	882	880	882	887	887	884	877	870	869	870
Apparel and related products.....	1,199	1,212	1,203	1,204	1,194	1,213	1,208	1,210	1,196	1,204	1,201	1,182	1,171
Paper and allied products.....	594	597	593	591	589	592	593	592	588	585	585	583	584
Printing, publishing, and allied industries.....	927	929	928	925	927	929	932	929	925	924	925	922	920
Chemicals and allied products.....	835	839	837	835	832	835	836	834	828	824	822	819	821
Petroleum refining and related industries.....	197	197	197	204	202	205	203	206	206	205	204	204	205
Rubber and miscellaneous plastic products.....	375	377	373	370	372	372	272	371	365	356	351	350	352
Leather and leather products.....	360	361	360	360	357	362	362	365	364	363	359	360	359
Transportation and public utilities.....	3,906	3,904	3,927	3,929	3,939	3,939	3,942	3,914	3,903	3,901	3,919	3,922	3,931
Wholesale and retail trade.....	11,400	11,363	11,374	11,365	11,363	11,410	11,437	11,392	11,355	11,320	11,252	11,296	11,347
Wholesale trade.....	3,002	3,004	3,015	3,022	3,020	3,020	3,022	3,011	3,001	2,988	2,991	2,989	2,992
Retail trade.....	8,398	8,359	8,359	8,343	8,343	8,390	8,415	8,381	8,354	8,332	8,261	8,307	8,355
Finance, insurance, and real estate.....	2,769	2,772	2,771	2,764	2,756	2,757	2,748	2,747	2,739	2,732	2,732	2,731	2,727
Service and miscellaneous.....	7,637	7,640	7,611	7,580	7,567	7,546	7,533	7,471	7,436	7,425	7,463	7,460	7,439
Government.....	9,042	8,944	8,992	8,967	8,936	8,865	8,835	8,821	8,774	8,734	8,712	8,682	8,671
Federal.....	2,331	2,243	2,324	2,320	2,313	2,309	2,301	2,288	2,270	2,251	2,248	2,235	2,258
State and local.....	6,711	6,701	6,668	6,647	6,623	6,556	6,534	6,533	6,504	6,483	6,464	6,447	6,413

¹ For coverage of the series, see footnote 1, table A-2.² Preliminary.NOTE: The seasonal adjustment method used is described in "New Seasonal Adjustment Factors for Labor Force Components," *Monthly Labor Review*, August 1960, pp. 822-827.TABLE A-5. Production workers in manufacturing industries, by major industry group, seasonally adjusted ¹

[In thousands]													
Major industry group	1962	1961											
	Jan. ²	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.
Manufacturing.....	12,194	12,269	12,225	12,129	12,104	12,156	12,164	12,145	12,060	11,910	11,812	11,755	11,820
Durable goods.....	6,762	6,805	6,766	6,676	6,673	6,699	6,709	6,682	6,637	6,491	6,403	6,377	6,447
Ordinance and accessories.....	96	97	98	99	97	95	95	93	93	91	92	91	91
Lumber and wood products, except furniture.....	531	536	538	536	539	538	538	540	535	533	528	523	530
Furniture and fixtures.....	312	311	310	308	306	309	307	305	303	302	297	295	294
Stone, clay, and glass products.....	445	454	457	461	460	464	462	461	458	449	446	440	445
Primary metal industries.....	973	959	944	943	950	944	944	924	911	876	859	858	864
Fabricated metal products.....	836	842	838	831	833	838	824	828	828	802	786	786	799
Machinery.....	969	982	974	971	965	967	966	959	962	959	953	958	963
Electrical equipment and supplies.....	1,066	996	983	983	957	972	968	968	967	950	944	939	937
Transportation equipment.....	1,063	1,091	1,084	1,011	1,037	1,039	1,073	1,072	1,052	1,010	983	971	1,006
Instruments and related products.....	223	225	226	223	224	225	223	222	221	218	217	217	220
Miscellaneous manufacturing industries.....	308	312	314	310	305	308	309	310	307	301	298	299	298
Nondurable goods.....	5,432	5,464	5,459	5,453	5,431	5,457	5,455	5,463	5,423	5,419	5,409	5,378	5,373
Food and kindred products.....	1,182	1,189	1,200	1,196	1,184	1,182	1,183	1,188	1,183	1,197	1,202	1,195	1,197
Tobacco manufactures.....	76	76	77	79	85	80	77	78	78	79	81	80	80
Textile mill products.....	798	800	797	796	794	795	800	800	798	790	784	783	784
Apparel and related products.....	1,067	1,079	1,073	1,073	1,063	1,081	1,072	1,076	1,063	1,069	1,068	1,050	1,039
Paper and allied products.....	472	475	473	471	469	472	472	473	468	466	466	464	465
Printing, publishing, and allied industries.....	596	597	597	594	595	596	601	597	595	594	595	594	593
Chemicals and allied products.....	511	513	511	509	507	510	513	510	505	500	499	497	499
Petroleum refining and related industries.....	124	124	126	132	131	134	130	132	132	132	131	131	133
Rubber and miscellaneous plastic products.....	289	291	288	285	287	287	287	286	279	271	267	266	267
Leather and leather products.....	317	320	317	318	316	320	320	323	322	321	316	318	316

¹ For definition of production workers, see footnote 1, table A-3.² Preliminary.NOTE: The seasonal adjustment method used is described in "New Seasonal Adjustment Factors for Labor Force Components," *Monthly Labor Review*, August 1960, pp. 822-827.

TABLE A-6. Unemployment insurance and employment service program operations ¹

[All items except average benefit amounts are in thousands]

Item	1961												1960
	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.
Employment service: ²													
New applications for work.....	713	866	859	793	845	818	1,018	873	808	895	949	1,065	820
Nonfarm placements.....	448	511	596	607	603	501	551	520	440	417	342	365	378
State unemployment insurance programs: ³													
Initial claims ^{4 5}	1,658	1,406	1,219	1,081	1,248	1,501	1,229	1,368	1,468	1,709	1,919	2,381	2,175
Insured unemployment ⁶ (average weekly volume).....	2,017	1,662	1,502	1,558	1,744	1,958	1,991	2,328	2,779	3,168	3,394	3,266	2,639
Rate of insured unemployment ⁷	5.0	4.1	3.7	3.8	4.3	4.8	4.9	5.7	6.8	7.8	8.4	8.1	6.6
Weeks of unemployment compensated.....	6,621	5,869	5,644	5,772	7,310	6,992	8,273	9,835	10,656	13,334	11,935	11,975	9,105
Average weekly benefit amount for total unemployment.....	\$34.10	\$33.67	\$33.30	\$33.12	\$33.36	\$32.91	\$32.92	\$33.46	\$34.18	\$34.37	\$34.45	\$34.34	\$34.18
Total benefits paid.....	\$218,477	\$190,883	\$180,938	\$185,008	\$237,168	\$223,978	\$264,448	\$320,089	\$362,539	\$461,543	\$399,264	\$397,609	\$300,204
Unemployment compensation for ex-service-men: ^{8 9}													
Initial claims ⁴	20	22	24	25	30	29	26	26	29	35	33	39	36
Insured unemployment ⁶ (average weekly volume).....	49	47	47	52	58	60	61	71	83	91	91	86	71
Weeks of unemployment compensated.....	192	193	202	221	263	236	291	326	380	370	355	355	279
Total benefits paid.....	\$6,044	\$6,081	\$6,344	\$6,886	\$8,174	\$7,271	\$8,984	\$10,190	\$11,980	\$11,618	\$11,002	\$11,017	\$8,597
Unemployment compensation for Federal civilian employees: ^{9 10}													
Initial claims ⁴	13	12	13	10	11	15	12	12	13	12	13	19	14
Insured unemployment ⁶ (average weekly volume).....	31	29	28	28	31	32	31	33	36	40	41	40	35
Weeks of unemployment compensated.....	118	118	116	118	139	115	142	148	167	160	162	164	142
Total benefits paid.....	\$4,138	\$4,128	\$4,053	\$4,136	\$4,878	\$3,932	\$4,913	\$5,090	\$6,228	\$5,504	\$5,534	\$5,605	\$4,817
Railroad unemployment insurance:													
Applications ¹¹	13	15	14	19	26	100	9	6	6	10	13	38	21
Insured unemployment (average weekly volume).....	77	77	74	77	74	83	83	100	107	106	113	123	103
Number of payments ¹²	167	172	174	167	200	164	224	253	203	270	242	266	226
Average amount of benefit payment ¹³	\$80.13	\$80.51	\$79.72	\$80.70	\$80.61	\$77.88	\$78.43	\$80.01	\$79.57	\$81.60	\$80.99	\$82.69	\$82.46
Total benefits paid ¹⁴	\$13,363	\$13,807	\$13,770	\$13,558	\$16,173	\$12,713	\$17,551	\$20,485	\$16,273	\$22,274	\$19,706	\$22,208	\$18,793
All programs: ¹⁵													
Insured unemployment ⁶	2,175	1,817	1,653	1,719	1,907	2,136	2,175	2,543	3,046	3,403	3,638	3,515	2,847

¹ Data relate to the United States (including Alaska and Hawaii) except where otherwise indicated.² Includes Guam, Puerto Rico, and the Virgin Islands.³ Includes data for Puerto Rico, beginning January 1961 when the Commonwealth's program became part of the Federal-State UI system.⁴ Initial claims are notices filed by workers to indicate they are starting periods of unemployment. Excludes transitional claims.⁵ Includes interstate claims for Puerto Rico and the Virgin Islands for the entire period.⁶ Number of workers reporting the completion of at least 1 week of unemployment.⁷ The rate is the number of insured unemployed expressed as a percent of the average covered employment in a 12-month period.⁸ Excludes data on claims and payments made jointly with other programs.⁹ Includes Puerto Rico and the Virgin Islands.¹⁰ Excludes data on claims and payments made jointly with State programs.¹¹ An application for benefits is filed by a railroad worker at the beginning of his first period of unemployment in a benefit year; no application is required for subsequent periods in the same year.¹² Payments are for unemployment in 14-day registration periods.¹³ The average amount is an average for all compensable periods, not adjusted for recovery of overpayments or settlement of underpayments.¹⁴ Adjusted for recovery of overpayments and settlement of underpayments.¹⁵ Represents an unduplicated count of insured unemployment under the State, Ex-servicemen and UCFE programs and the Railroad Unemployment Insurance Act.

SOURCE: U.S. Department of Labor, Bureau of Employment Security for all items except railroad unemployment insurance, which is prepared by the U.S. Railroad Retirement Board.

B.—Labor Turnover

TABLE B-1. Labor turnover rates, by major industry group ¹

[Per 100 employees]

Major industry group	1961												1960	Annual average	
	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960	1959
	Accessions: Total ³														
Manufacturing:															
Actual.....	2.5	3.3	4.3	4.7	5.3	4.4	5.0	4.2	4.0	4.0	3.2	3.7	2.3	3.8	4.2
Seasonally adjusted.....	3.6	4.0	4.4	5.7	4.1	4.0	3.9	4.2	4.4	4.6	3.8	4.0	3.3	3.1	3.1
Durable goods.....	2.6	3.2	4.0	4.3	4.9	3.9	4.5	4.2	4.2	4.3	3.2	3.8	2.2	3.5	4.2
Ordnance and accessories.....	1.6	2.7	3.3	3.6	2.7	2.8	3.3	2.5	2.6	2.2	2.5	2.7	2.4	2.6	3.1
Lumber and wood products, except furniture.....	2.3	3.2	4.1	5.0	5.1	5.3	8.8	7.1	7.6	5.4	4.2	5.4	2.3	4.8	5.5
Furniture and fixtures.....	2.6	3.7	4.9	5.1	5.9	5.3	4.4	3.7	3.6	3.5	3.0	3.1	2.1	3.9	4.5
Stone, clay, and glass products.....	1.7	2.5	3.2	3.2	4.0	3.7	4.9	4.4	4.4	5.0	3.4	3.0	1.7	3.4	4.0
Primary metal industries.....	2.9	2.3	2.9	3.1	3.5	3.1	4.1	4.8	4.1	4.1	2.9	3.4	2.1	2.4	3.1
Fabricated metal products.....	2.6	3.4	4.4	5.0	5.6	4.6	4.7	4.8	4.8	5.0	3.5	4.3	2.5	3.9	4.7
Machinery.....	2.5	2.8	3.2	3.4	3.3	3.0	3.6	2.9	3.0	3.0	2.6	3.3	2.1	2.9	3.6
Electrical equipment and supplies.....	2.9	3.5	4.3	4.6	4.7	3.4	4.0	3.2	3.2	2.9	2.8	3.5	2.0	3.2	4.0
Transportation equipment.....	1.9	2.6	3.3	3.2	3.5	2.8	3.4	2.6	2.1	1.9	1.9	2.4	1.5	2.4	2.9
Instruments and related products.....	2.4	4.3	6.3	6.9	7.6	6.1	5.9	5.7	5.7	5.5	4.7	5.6	2.2	5.3	5.5
Miscellaneous manufacturing industries.....	2.4	4.3	6.3	6.9	7.6	6.1	5.9	5.7	5.7	5.5	4.7	5.6	2.2	5.3	5.5
Nondurable goods.....	2.4	3.5	4.6	5.2	5.8	5.0	5.5	4.3	3.6	3.6	3.2	3.5	2.5	4.1	4.3
Food and kindred products.....	2.8	4.3	6.9	8.4	9.8	7.7	8.3	5.7	4.9	4.4	3.5	3.9	3.3	6.0	6.2
Tobacco manufactures.....	2.9	3.4	3.5	15.3	22.0	6.8	2.9	4.5	1.4	2.2	1.7	5.0	5.8	5.6	5.4
Textile mill products.....	2.1	3.2	3.9	4.1	4.4	3.6	3.9	4.0	3.6	3.4	2.9	2.9	1.9	3.2	3.5
Apparel and related products.....	3.3	5.3	5.8	5.2	6.4	6.9	6.3	4.9	5.2	5.7	5.8	3.5	3.5	5.3	5.7
Paper and allied products.....	1.7	2.2	2.9	3.0	2.8	2.9	4.0	2.7	2.4	2.3	2.0	2.3	1.5	2.6	2.8
Printing, publishing, and allied industries.....	2.0	2.6	3.3	3.8	3.1	3.0	4.0	2.6	2.2	2.6	2.3	2.5	2.0	3.0	3.0
Chemicals and allied products.....	1.3	1.7	2.1	2.2	2.0	2.0	3.1	2.2	2.3	2.5	1.7	1.8	1.2	2.0	2.2
Petroleum refining and related industries.....	.4	.9	1.2	1.3	1.2	1.4	2.6	1.8	1.3	1.0	.8	1.1	.6	1.2	1.3
Rubber and miscellaneous plastic products.....	2.1	2.9	3.8	4.5	5.1	3.9	4.6	4.8	4.1	3.4	2.7	3.6	1.8	3.1	3.6
Leather and leather products.....	3.4	4.9	5.1	4.8	5.3	6.5	6.0	5.8	3.9	4.0	4.5	5.2	3.7	4.8	4.8
Nonmanufacturing:															
Metal mining.....	2.0	2.7	2.7	2.5	2.3	2.1	3.9	2.8	3.1	1.9	2.5	3.8	1.8	3.4	3.6
Coal mining.....	1.2	1.9	2.3	3.0	3.4	3.6	1.3	1.9	.8	1.6	1.5	1.6	1.2	1.6	2.2
Accessions: New hires															
Manufacturing:															
Actual.....	1.4	1.9	2.7	3.0	3.1	2.5	2.9	2.1	1.8	1.6	1.4	1.5	1.0	2.2	2.6
Seasonally adjusted.....	2.5	2.4	2.5	2.2	2.3	2.2	2.1	2.1	2.0	1.9	1.7	1.8	1.8	1.8	1.8
Durable goods.....	1.4	1.9	2.5	2.6	2.6	2.1	2.4	1.8	1.6	1.4	1.2	1.3	.9	1.9	2.5
Ordnance and accessories.....	1.2	1.7	2.2	2.7	1.9	2.1	2.6	1.8	1.8	1.5	1.6	1.9	1.6	1.8	2.4
Lumber and wood products, except furniture.....	1.6	2.2	3.3	3.9	4.3	4.1	5.8	4.7	3.9	2.4	1.5	1.9	1.2	3.4	4.2
Furniture and fixtures.....	1.8	3.0	3.8	4.1	4.4	3.6	2.9	2.2	1.8	2.0	1.4	1.4	1.1	2.8	3.4
Stone, clay, and glass products.....	.8	1.5	2.0	2.1	2.5	2.2	2.9	2.1	1.8	1.7	1.1	1.0	.6	2.0	2.6
Primary metal industries.....	.9	.9	1.2	1.3	1.4	1.0	1.3	.9	.6	.5	.4	.5	.4	.8	1.7
Fabricated metal products.....	1.4	2.0	2.8	3.0	3.2	2.4	2.7	2.1	1.8	1.5	1.3	1.3	1.0	2.1	2.7
Machinery.....	1.3	1.6	1.8	1.8	1.8	1.5	2.1	1.4	1.3	1.5	1.1	1.4	.9	1.7	2.3
Electrical equipment and supplies.....	1.8	2.4	3.0	3.1	2.9	1.9	2.2	1.5	1.5	1.3	1.2	1.4	1.0	2.0	2.6
Transportation equipment.....	1.3	1.8	2.2	2.2	1.9	1.5	1.8	1.3	1.3	1.3	1.1	1.1	.9	1.7	1.9
Instruments and related products.....	1.3	1.9	2.6	2.4	2.2	2.0	2.3	1.5	1.2	1.1	1.1	1.4	.9	1.7	2.3
Miscellaneous manufacturing industries.....	1.6	3.3	5.1	5.3	5.9	3.8	3.8	3.5	2.8	2.6	2.3	2.5	1.4	3.4	3.5
Nondurable goods.....	1.4	2.0	3.0	3.6	3.8	3.1	3.4	2.4	1.9	1.9	1.6	1.7	1.2	2.5	2.8
Food and kindred products.....	1.4	2.1	4.3	5.6	6.1	4.8	5.2	3.1	2.4	2.0	1.5	1.7	1.4	3.5	3.6
Tobacco manufactures.....	1.1	1.4	2.2	9.7	13.4	2.2	1.3	.5	.6	.8	2.1	1.4	2.9	3.0	3.0
Textile mill products.....	1.4	2.2	2.7	2.9	3.1	2.4	2.7	2.5	1.9	1.6	1.3	1.3	.9	2.0	2.4
Apparel and related products.....	1.8	2.9	3.5	3.4	4.0	3.7	3.6	3.2	2.8	2.9	2.7	2.5	1.5	3.2	3.6
Paper and allied products.....	1.0	1.5	2.1	2.3	2.0	1.9	2.9	1.7	1.3	1.2	1.0	1.0	.7	1.8	2.1
Printing, publishing, and allied industries.....	1.4	2.0	2.6	3.0	2.4	2.3	2.9	1.8	1.7	1.9	1.7	1.9	1.4	2.4	2.4
Chemicals and allied products.....	.8	1.1	1.5	1.5	1.4	1.5	2.3	1.4	1.4	1.5	1.0	.9	.6	1.4	1.6
Petroleum refining and related industries.....	.3	.5	.9	1.0	.8	1.1	2.1	1.1	.7	.5	.5	.5	.4	.8	.8
Rubber and miscellaneous plastic products.....	1.1	1.7	2.5	3.0	2.8	2.2	2.4	1.9	1.4	1.3	1.1	1.0	.6	1.7	2.4
Leather and leather products.....	2.1	2.9	3.3	3.2	3.7	3.6	3.6	2.9	1.9	1.9	2.1	2.9	2.1	2.9	3.2
Nonmanufacturing:															
Metal mining.....	.9	1.3	1.3	1.3	1.2	1.1	2.3	1.3	.9	.8	.9	1.3	1.0	1.9	1.9
Coal mining.....	.5	.9	.9	.8	.7	.7	.3	.3	.2	.2	.3	.8	.3	.4	.4

See footnotes at end of table.

TABLE B-1. Labor turnover rates, by major industry group ¹—Continued

[Per 100 employees]

Major industry group	1961												1960	Annual average	
	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960	1959
	Separations: Total ²														
Manufacturing:															
Actual.....	3.8	4.0	4.1	5.1	4.1	4.1	3.6	3.5	3.4	3.9	4.7	4.7	4.8	4.3	4.1
Seasonally adjusted.....	3.9	3.9	3.6	4.1	3.8	4.3	4.0	3.8	3.5	4.2	4.5	4.7	4.9	-----	-----
Durable goods.....	3.5	3.6	3.7	4.3	3.9	4.3	3.5	3.3	3.1	4.2	4.2	5.1	5.0	4.3	4.0
Ordnance and accessories.....	1.8	2.2	2.2	3.0	2.4	2.1	2.3	2.1	1.9	2.4	2.2	2.3	1.9	2.4	2.3
Lumber and wood products, except furniture.....	5.8	5.8	5.4	6.7	6.2	5.9	4.3	4.0	3.7	4.8	6.1	6.1	6.8	6.1	5.4
Furniture and fixtures.....	3.8	4.2	4.7	4.9	4.6	4.3	3.3	4.3	3.5	4.3	4.0	5.1	4.8	4.6	4.4
Stone, clay, and glass products.....	4.8	3.9	4.0	4.4	3.7	2.2	3.0	2.8	3.2	3.2	4.0	5.3	5.5	4.1	3.8
Primary metal industries.....	1.9	2.9	3.0	3.0	2.7	2.2	2.3	2.2	2.2	3.2	3.5	4.4	4.9	4.0	2.5
Fabricated metal products.....	3.9	4.3	4.5	5.0	4.5	4.5	4.3	3.5	3.1	4.4	5.2	6.7	6.4	4.8	4.7
Machinery.....	2.1	2.7	3.1	3.8	3.5	3.4	3.4	3.2	2.9	3.2	2.8	3.4	3.1	3.4	3.1
Electrical equipment and supplies.....	3.0	3.1	3.2	4.0	3.1	3.0	3.1	2.8	2.8	3.5	3.2	3.9	3.4	3.5	3.2
Transportation equipment.....	-----	3.6	3.6	4.4	4.2	8.2	4.3	4.0	3.9	5.7	6.6	7.3	5.9	5.2	5.5
Instruments and related products.....	2.9	2.7	2.5	3.8	2.6	2.4	2.4	2.0	2.3	2.3	2.2	2.9	2.4	2.7	2.4
Miscellaneous manufacturing industries.....	10.1	7.3	5.7	5.8	5.9	5.1	4.3	4.7	4.3	5.0	4.3	5.6	10.4	5.9	5.3
Nondurable goods.....	4.3	4.4	4.6	6.0	4.5	3.9	3.7	3.7	3.8	3.6	3.5	4.2	4.7	4.4	4.2
Food and kindred products.....	6.8	7.5	6.9	9.7	6.8	5.0	4.8	4.3	4.6	4.4	4.3	5.5	6.6	6.0	6.1
Tobacco manufactures.....	6.3	11.1	13.5	7.2	3.2	2.1	2.1	2.9	6.3	5.3	7.0	3.4	6.2	5.9	5.1
Textile mill products.....	2.9	3.2	3.6	4.5	3.9	3.4	3.1	3.1	3.1	3.3	3.1	3.9	3.8	3.7	3.5
Apparel and related products.....	5.7	4.8	5.4	6.5	5.2	6.1	5.5	6.6	6.5	5.2	5.1	6.1	6.8	6.1	5.6
Paper and allied products.....	2.7	2.4	2.9	4.3	2.9	2.5	2.3	2.2	2.2	2.4	2.4	2.9	2.9	2.9	2.7
Printing, publishing, and allied industries.....	2.8	2.6	3.1	4.1	3.1	2.5	2.8	2.6	2.5	2.5	2.6	2.8	3.0	2.8	2.8
Chemicals and allied products.....	1.7	1.9	2.0	3.1	2.2	1.7	2.2	2.4	1.8	1.6	1.6	2.0	2.0	2.1	2.0
Petroleum refining and related industries.....	1.5	2.2	1.9	2.8	2.2	1.7	1.4	1.0	1.0	1.1	1.1	1.6	1.6	1.6	1.4
Rubber and miscellaneous plastic products.....	2.9	3.5	3.8	4.1	3.4	3.1	3.1	2.8	2.7	4.0	4.3	4.5	4.4	3.9	3.4
Leather and leather products.....	5.8	4.2	5.2	6.1	5.8	5.6	4.2	4.3	5.1	5.1	4.5	4.9	5.3	5.0	4.7
Nonmanufacturing:															
Metal mining.....	3.3	4.3	2.9	4.1	2.9	2.3	1.8	2.4	2.2	2.8	2.4	5.1	6.6	3.8	3.4
Coal mining.....	2.0	1.6	2.4	1.8	1.7	5.8	1.4	2.3	2.6	3.4	3.5	1.7	5.0	3.6	3.8
Separations: Quits															
Manufacturing:															
Actual.....	0.9	1.1	1.4	2.3	1.7	1.2	1.2	1.1	1.0	0.9	0.8	0.9	0.7	1.3	1.5
Seasonally adjusted.....	1.4	1.3	1.3	1.3	1.2	1.1	1.2	1.2	1.0	1.1	1.1	1.1	1.1	-----	-----
Durable goods.....	.8	1.0	1.2	1.9	1.4	1.0	1.0	.9	.8	.8	.6	.7	.6	1.1	1.3
Ordnance and accessories.....	.7	.8	1.0	1.8	1.2	1.0	1.0	.9	.9	.8	.8	.9	.7	1.0	1.2
Lumber and wood products, except furniture.....	1.2	1.4	2.1	3.6	2.9	2.2	2.2	2.0	1.7	1.3	1.0	1.2	1.0	2.3	2.6
Furniture and fixtures.....	1.2	1.5	1.9	2.5	2.3	1.6	1.3	1.4	1.2	1.1	.8	1.0	.9	1.7	1.9
Stone, clay, and glass products.....	.5	.8	1.1	1.8	1.5	1.0	1.0	.9	.8	.7	.6	.7	.6	1.1	1.4
Primary metal industries.....	.4	.5	.6	1.0	.7	.5	.5	.4	.4	.4	.3	.3	.3	.6	.8
Fabricated metal products.....	.8	1.0	1.3	2.1	1.5	1.0	1.0	.9	.8	.7	.6	.6	.6	1.1	1.4
Machinery.....	.7	.7	.9	1.4	1.1	.8	.9	.7	.7	.7	.5	.6	.5	.9	1.1
Electrical equipment and supplies.....	1.0	1.2	1.4	2.1	1.5	1.0	1.1	.9	.9	.8	.8	1.0	.7	1.2	1.4
Transportation equipment.....	-----	.8	.9	1.4	1.0	.7	.8	.7	.7	.7	.6	.6	.5	.9	1.1
Instruments and related products.....	1.0	1.0	1.2	2.2	1.3	.9	1.0	.8	.8	.8	.7	.8	.7	1.1	1.3
Miscellaneous manufacturing industries.....	1.0	1.9	2.5	3.4	2.7	1.6	1.7	1.6	1.4	1.3	1.1	1.2	1.1	1.9	1.9
Nondurable goods.....	1.0	1.3	1.6	2.7	2.1	1.4	1.5	1.3	1.2	1.1	1.0	1.1	.9	1.6	1.7
Food and kindred products.....	.9	1.3	1.9	3.6	2.6	1.5	1.5	1.4	1.1	1.0	.9	1.0	.9	1.7	1.9
Tobacco manufactures.....	.6	.6	.9	2.2	1.3	.8	.7	.6	.9	.8	.6	.9	.7	1.0	1.1
Textile mill products.....	1.2	1.6	1.8	2.6	2.3	1.6	1.6	1.5	1.3	1.2	1.0	1.1	.9	1.6	1.7
Apparel and related products.....	1.5	1.9	2.2	2.8	2.7	2.3	2.1	2.0	1.8	1.8	1.5	1.7	1.3	2.3	2.3
Paper and allied products.....	.6	.8	1.1	2.3	1.4	.9	.9	.8	.7	.7	.6	.7	.6	1.2	1.3
Printing, publishing, and allied industries.....	1.1	1.3	1.5	2.5	1.7	1.4	1.4	1.2	1.1	1.1	1.1	1.3	1.1	1.5	1.5
Chemicals and allied products.....	.5	.5	.7	1.7	1.0	.6	.8	.6	.6	.5	.5	.5	.4	.8	.8
Petroleum refining and related industries.....	.2	.4	.5	1.1	.7	.5	.5	.4	.4	.3	.3	.4	.3	.5	.5
Rubber and miscellaneous plastic products.....	.7	1.1	1.3	2.0	1.6	1.0	1.1	1.0	.9	.8	.7	.8	.6	1.1	1.3
Leather and leather products.....	1.5	1.9	2.3	3.2	2.9	2.2	2.1	1.9	1.7	1.7	1.5	1.7	1.4	2.2	2.2
Nonmanufacturing:															
Metal mining.....	.6	.8	.9	2.0	1.6	.9	.9	1.0	.8	.7	.6	.9	.9	1.5	1.5
Coal mining.....	.3	.4	.5	.5	.4	.5	.2	.3	.2	.3	.2	.1	.2	.3	.3

See footnotes at end of table.

TABLE B-1. Labor turnover rates, by major industry group ¹—Continued

[Per 100 employees]

Major industry group	1961												1960	Annual average	
	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960	1959
	Separations: Layoffs														
Manufacturing:															
Actual.....	2.4	2.2	2.0	2.0	1.7	2.3	1.7	1.8	1.9	2.3	2.6	3.2	3.6	2.4	2.0
Seasonally adjusted.....	1.9	1.8	1.7	2.2	1.9	2.5	2.2	2.0	1.9	2.3	2.9	2.9	2.9	2.4	2.0
Durable goods.....	2.1	2.0	1.7	1.6	1.7	2.7	1.8	1.7	1.7	2.6	3.1	3.7	3.9	2.6	2.0
Ordnance and accessories.....	.7	.9	.6	.5	.7	.7	.9	.8	.5	1.0	.8	.9	.7	.9	.7
Lumber and wood products, except furniture.....	4.0	3.7	2.5	2.1	2.4	3.0	1.4	1.3	1.4	2.8	4.5	4.3	5.4	3.1	2.1
Furniture and fixtures.....	2.1	2.0	1.9	1.7	1.6	2.2	1.5	2.3	1.7	2.6	2.5	3.4	3.3	2.1	1.8
Stone, clay, and glass products.....	3.7	2.3	2.1	1.8	1.5	1.5	1.3	1.3	1.8	1.9	3.0	4.1	4.5	2.4	1.8
Primary metal industries.....	1.0	1.8	1.6	1.2	1.4	1.1	1.2	1.2	1.2	2.3	2.6	3.5	4.2	3.0	1.1
Fabricated metal products.....	2.5	2.6	2.3	2.2	2.2	2.7	2.7	2.0	1.7	3.2	4.1	5.5	5.4	3.1	2.6
Machinery.....	.8	1.4	1.5	1.6	1.9	2.0	1.7	1.9	1.5	1.8	1.8	2.1	2.1	1.9	1.4
Electrical equipment and supplies.....	1.2	1.1	1.0	1.0	.8	1.3	1.3	1.3	1.3	2.0	1.9	2.2	2.1	1.6	1.2
Transportation equipment.....	2.2	1.7	2.2	2.4	6.8	2.8	2.6	2.6	4.5	5.6	6.1	4.9	3.6	3.7	3.7
Instruments and related products.....	1.3	1.0	.6	.7	.6	1.1	1.0	.6	1.0	1.0	1.0	1.4	1.3	1.0	.6
Miscellaneous manufacturing industries.....	8.4	4.5	2.2	1.4	2.2	2.7	1.9	2.4	2.2	3.0	2.6	3.7	8.7	3.2	2.7
Nondurable goods.....	2.8	2.5	2.3	2.6	1.8	1.9	1.6	1.9	2.1	2.0	2.1	2.6	3.3	2.2	2.0
Food and kindred products.....	5.4	5.6	4.3	5.3	3.6	2.9	2.7	2.4	2.9	2.8	2.8	3.8	5.2	3.6	3.6
Tobacco manufactures.....	5.4	10.1	12.1	4.6	1.4	1.0	1.1	2.1	5.1	4.2	5.9	2.0	5.2	4.5	3.6
Textile mill products.....	1.3	1.1	1.1	1.2	1.0	1.2	1.0	1.0	1.3	1.6	1.7	2.3	2.5	1.5	1.3
Apparel and related products.....	3.7	2.3	2.5	2.9	1.7	3.1	2.8	4.0	4.1	2.8	3.0	3.9	5.1	3.2	2.7
Paper and allied products.....	1.6	1.1	1.0	1.2	.8	1.0	.8	.8	1.0	1.1	1.3	1.7	1.8	1.2	.9
Printing, publishing, and allied industries.....	1.2	.9	1.0	.9	.9	.7	.8	1.0	.9	1.0	1.0	1.1	1.5	.9	.9
Chemicals and allied products.....	.8	.9	.8	.8	.7	.7	.9	1.4	.9	.7	.8	1.0	1.2	.9	.8
Petroleum refining and related industries.....	.8	1.3	.7	1.0	.6	.6	.4	.2	.3	.4	.4	.6	.8	.6	.5
Rubber and miscellaneous plastic products.....	1.6	1.7	1.6	1.3	1.0	1.5	1.2	1.2	1.2	2.5	3.0	3.1	3.3	2.2	1.5
Leather and leather products.....	3.6	1.5	2.2	2.1	2.1	2.7	1.4	1.8	2.8	2.8	2.2	2.5	3.2	2.1	1.8
Nonmanufacturing:															
Metal mining.....	2.1	2.6	1.3	1.2	.7	.8	.2	.8	.8	1.3	1.1	3.4	4.7	1.5	1.1
Coal mining.....	1.2	.8	1.4	.7	.9	4.8	.9	1.7	1.9	2.7	2.8	1.1	4.4	2.9	3.1

¹ Beginning with the December 1961 issue, figures differ from those previously published. The industry structure has been converted to the 1957 Standard Industrial Classification, and the printing and publishing industry and some seasonal manufacturing industries previously excluded are now included.

Data include Alaska and Hawaii beginning in January 1959; this inclusion has not significantly affected the labor turnover rates.

Month-to-month changes in total employment in manufacturing and non-manufacturing industries as indicated by labor turnover rates are not comparable with the changes shown by the Bureau's employment series for the following reasons: (1) the labor turnover series measures changes during the

calendar month, while the employment series measures changes from mid-month to midmonth; and (2) the turnover series excludes personnel changes caused by strikes, but the employment series reflects the influence of such stoppages.

² Preliminary.

³ Beginning with January 1959, transfers between establishments of the same firm are included in total accessions and total separations; therefore, rates for these items are not strictly comparable with prior data. Transfers comprise part of "other accessions" and "other separations," the rates for which are not shown separately.

C.—Earnings and Hours

TABLE C-1. Gross hours and earnings of production workers,¹ by industry

Industry	1961												1960	Annual average	
	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960	1959
	Average weekly earnings														
Mining.....	\$109.48	\$109.88	\$111.19	\$109.06	\$108.09	\$110.24	\$108.09	\$104.92	\$103.49	\$101.14	\$104.15	\$106.27	\$103.75	\$105.44	\$103.68
Metal mining.....	117.32	115.64	117.88	114.68	113.02	114.40	114.24	109.62	111.25	109.35	110.29	110.97	112.19	111.19	102.77
Iron ores.....	118.04	120.04	122.61	120.77	120.09	119.20	117.91	109.66	110.26	106.03	107.74	110.19	109.15	114.73	107.34
Copper ores.....	126.84	123.04	125.77	118.83	116.47	117.00	117.72	113.05	117.82	116.68	117.75	117.21	120.06	116.77	105.90
Coal mining.....	118.00	116.94	117.18	114.19	113.83	119.32	115.18	106.91	101.35	96.71	107.22	110.09	107.53	110.76	109.03
Bituminous.....	119.07	118.38	118.63	115.92	115.55	120.46	117.29	108.26	102.65	97.34	108.26	110.84	108.58	112.77	111.70
Crude petroleum and natural gas.....	107.17	106.75	107.95	106.08	104.67	106.93	103.75	104.00	105.75	104.75	104.42	106.68	103.09	103.32	103.52
Crude petroleum and natural gas fields.....	112.31	113.55	114.80	114.52	110.95	116.33	112.19	111.35	114.11	110.95	111.63	116.20	108.54	108.54	108.12
Oil and gas field services.....	102.77	100.11	101.85	97.90	98.93	98.21	96.48	97.81	97.78	98.97	97.61	97.33	97.75	98.31	99.68
Quarrying and nonmetallic mining.....	97.21	102.10	106.48	105.08	104.42	103.50	102.60	100.34	96.10	92.99	92.55	93.21	92.25	96.58	94.57
Contract construction.....	114.49	118.26	123.00	120.43	122.05	119.76	119.13	116.29	112.77	112.41	114.08	115.39	108.07	112.67	108.41
General building contractors.....	105.48	110.05	112.98	109.85	111.74	110.23	110.23	108.78	105.40	103.70	106.50	107.46	99.33	103.72	100.32
Heavy construction.....	110.66	117.00	127.08	121.80	127.15	122.60	121.72	116.40	109.62	110.48	112.11	113.87	107.61	114.77	108.94
Highway and street construction.....	103.37	110.30	124.13	118.20	124.24	120.13	117.88	109.85	100.66	100.10	101.14	104.37	98.10	110.00	105.06
Other heavy construction.....	118.50	125.37	131.36	127.75	131.57	126.77	127.30	123.91	119.42	119.87	121.27	122.09	115.82	119.60	113.65
Special trade contractors.....	121.45	124.20	127.97	126.25	126.45	125.06	124.02	121.32	118.96	118.61	119.65	121.00	114.58	118.11	113.62
Manufacturing.....	96.63	95.82	94.54	92.73	92.86	93.20	93.03	92.10	90.78	89.54	89.31	89.08	88.62	89.72	88.26
Durable goods.....	105.06	104.39	102.66	100.00	100.44	100.35	101.09	99.70	98.31	97.17	96.29	96.29	96.19	97.44	96.05
Nondurable goods.....	85.79	85.39	84.77	83.74	83.58	84.16	83.56	82.29	81.27	80.88	80.47	80.47	79.84	80.36	78.61
Average weekly hours															
Mining.....	40.7	41.0	41.8	41.0	41.1	41.6	41.1	40.2	39.5	38.9	39.6	40.1	39.6	40.4	40.5
Metal mining.....	41.9	41.3	42.1	41.7	41.4	41.6	42.0	40.6	40.9	40.5	41.0	41.1	41.4	41.8	40.3
Iron ores.....	38.7	39.1	40.2	40.8	40.3	39.6	39.7	37.3	37.0	35.7	36.4	37.1	37.0	39.7	37.4
Copper ores.....	45.3	44.1	44.6	42.9	42.2	42.7	43.6	42.5	43.8	43.7	44.1	43.9	44.8	44.4	42.7
Coal mining.....	37.7	37.6	37.8	36.6	36.6	38.0	36.8	34.6	32.8	31.5	34.7	35.4	34.8	35.5	35.4
Bituminous.....	37.8	37.7	37.9	36.8	36.8	38.0	37.0	34.7	32.9	31.4	34.7	35.3	34.8	35.8	35.8
Crude petroleum and natural gas.....	41.7	41.7	42.5	41.6	41.7	42.1	41.5	41.6	41.8	41.9	41.6	42.0	41.4	42.0	42.6
Crude petroleum and natural gas fields.....	40.4	40.7	41.0	40.9	40.2	41.4	40.5	40.2	40.9	40.2	40.3	41.5	40.2	40.5	40.8
Oil and gas field services.....	43.0	42.6	43.9	42.2	43.2	42.7	42.5	42.9	42.7	43.6	43.0	42.5	42.5	43.5	44.3
Quarrying and nonmetallic mining.....	41.9	44.2	45.7	45.1	45.4	45.0	45.2	44.4	42.9	41.7	41.5	41.8	41.0	43.7	44.4
Contract construction.....	34.8	36.5	38.2	37.4	38.5	37.9	37.7	36.8	35.8	35.8	36.1	36.4	34.2	36.7	37.0
General building contractors.....	33.7	35.5	36.8	35.9	37.0	36.5	36.5	35.9	34.9	34.8	35.5	35.7	33.0	35.4	35.7
Heavy construction.....	36.4	39.0	42.5	40.6	43.1	41.7	41.4	40.0	38.3	38.9	39.2	39.4	37.2	40.7	40.8
Highway and street construction.....	35.4	38.3	43.1	40.9	43.9	42.6	41.8	39.8	37.7	38.5	38.9	38.8	36.2	41.2	41.2
Other heavy construction.....	37.5	39.8	41.7	40.3	41.9	40.5	40.8	40.1	38.9	39.3	39.5	39.9	38.1	40.0	40.3
Special trade contractors.....	34.9	36.0	37.2	36.7	37.3	37.0	36.8	36.0	35.3	35.3	35.4	35.8	33.9	35.9	36.3
Manufacturing.....	40.6	40.6	40.4	39.8	40.2	40.0	40.1	39.7	39.3	39.1	39.0	38.9	38.7	39.7	40.3
Durable goods.....	41.2	41.1	40.9	40.0	40.5	40.3	40.6	40.2	39.8	39.5	39.3	39.3	39.1	40.1	40.7
Nondurable goods.....	39.9	39.9	39.8	39.5	39.8	39.7	39.6	39.0	38.7	38.7	38.5	38.5	38.2	39.2	39.7
Average hourly earnings															
Mining.....	\$2.69	\$2.68	\$2.66	\$2.66	\$2.63	\$2.65	\$2.63	\$2.61	\$2.62	\$2.60	\$2.63	\$2.65	\$2.62	\$2.61	\$2.56
Metal mining.....	2.80	2.80	2.80	2.75	2.73	2.75	2.72	2.70	2.72	2.70	2.69	2.70	2.71	2.66	2.55
Iron ores.....	3.05	3.07	3.05	2.96	2.98	3.01	2.97	2.94	2.98	2.97	2.96	2.97	2.95	2.89	2.87
Copper ores.....	2.80	2.79	2.82	2.77	2.76	2.74	2.70	2.66	2.69	2.67	2.67	2.67	2.68	2.63	2.48
Coal mining.....	3.13	3.11	3.10	3.12	3.11	3.14	3.13	3.09	3.09	3.07	3.09	3.11	3.09	3.12	3.08
Bituminous.....	3.15	3.14	3.13	3.15	3.14	3.17	3.17	3.12	3.12	3.10	3.12	3.14	3.12	3.15	3.12
Crude petroleum and natural gas.....	2.57	2.56	2.54	2.55	2.51	2.54	2.50	2.50	2.53	2.50	2.51	2.54	2.49	2.46	2.43
Crude petroleum and natural gas fields.....	2.78	2.79	2.80	2.80	2.76	2.81	2.77	2.77	2.79	2.76	2.77	2.80	2.70	2.68	2.65
Oil and gas field services.....	2.39	2.35	2.32	2.32	2.29	2.30	2.27	2.28	2.29	2.27	2.27	2.29	2.30	2.26	2.25
Quarrying and nonmetallic mining.....	2.32	2.31	2.33	2.33	2.30	2.30	2.27	2.26	2.24	2.23	2.23	2.23	2.25	2.21	2.13
Contract construction.....	3.29	3.24	3.22	3.22	3.17	3.16	3.16	3.16	3.15	3.14	3.16	3.17	3.16	3.07	2.93
General building contractors.....	3.13	3.10	3.07	3.06	3.02	3.02	3.02	3.03	3.02	2.98	3.00	3.01	3.01	2.93	2.81
Heavy construction.....	3.04	3.00	2.99	3.00	2.95	2.94	2.94	2.91	2.87	2.84	2.86	2.89	2.89	2.82	2.67
Highway and street construction.....	2.92	2.88	2.88	2.89	2.83	2.82	2.82	2.76	2.67	2.60	2.60	2.69	2.71	2.67	2.55
Other heavy construction.....	3.16	3.15	3.15	3.17	3.14	3.13	3.12	3.09	3.07	3.05	3.07	3.06	3.04	2.99	2.82
Special trade contractors.....	3.48	3.45	3.44	3.44	3.39	3.38	3.37	3.37	3.37	3.36	3.38	3.38	3.38	3.29	3.13
Manufacturing.....	2.38	2.36	2.34	2.33	2.31	2.33	2.32	2.32	2.31	2.29	2.29	2.29	2.29	2.26	2.19
Durable goods.....	2.55	2.54	2.51	2.50	2.48	2.49	2.49	2.48	2.47	2.46	2.45	2.45	2.46	2.43	2.36
Nondurable goods.....	2.15	2.14	2.13	2.12	2.10	2.12	2.11	2.11	2.10	2.09	2.09	2.09	2.09	2.05	1.98

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Industry	1961												1960	Annual average	
	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960	1959
Manufacturing—Continued	Average weekly earnings														
Durable goods—Continued															
Ordnance and accessories.....	\$117.46	\$116.90	\$115.92	\$114.11	\$112.87	\$111.76	\$112.19	\$112.19	\$112.06	\$112.61	\$111.50	\$111.79	\$109.47	\$108.67	\$106.30
Ammunition, except for small arms.....	118.56	117.14	116.57	115.75	115.75	115.34	114.39	114.67	114.26	114.40	114.26	115.65	114.54	110.29	108.05
Sighting and fire control equipment.....	121.72	122.43	121.18	116.87	116.11	116.00	117.97	117.09	117.09	115.53	111.55	112.35	105.75	113.16	111.07
Other ordnance and accessories.....	113.10	112.94	111.87	110.27	107.18	104.94	105.46	105.20	105.59	107.98	107.98	106.37	106.66	103.17	100.69
Lumber and wood products, except furniture.....	75.86	78.41	81.41	81.00	79.19	78.21	79.79	77.42	74.88	71.23	69.89	70.84	69.94	73.71	74.24
Sawmills and planing mills.....	67.64	70.17	72.54	73.20	71.38	70.71	71.20	69.70	67.55	65.45	64.39	64.56	63.75	67.20	67.26
Millwork, plywood, and related products.....	85.26	84.65	85.68	86.09	86.94	84.84	86.11	85.27	84.24	81.59	79.76	79.56	80.38	81.19	82.81
Wooden containers.....	65.36	64.52	66.57	65.67	63.83	64.80	64.08	62.87	61.86	59.91	59.75	59.68	58.81	62.17	61.35
Miscellaneous wood products.....	70.75	71.69	71.28	70.93	69.95	69.60	71.05	70.12	70.12	68.06	67.55	67.32	66.91	69.32	68.21
Furniture and fixtures.....	81.51	80.12	80.12	79.52	78.12	75.62	76.02	73.53	73.14	73.14	72.77	72.20	75.43	75.20	74.48
Household furniture.....	77.28	75.58	75.35	74.80	72.67	70.49	71.28	68.17	68.35	68.35	67.44	66.73	71.06	70.45	70.82
Office furniture.....	95.04	95.04	92.34	93.34	91.65	92.48	89.28	87.78	86.94	87.20	87.42	87.85	89.47	90.42	86.27
Partitions; office and store fixtures.....	105.67	105.67	107.43	105.08	106.42	99.54	99.63	98.49	93.75	94.43	95.26	93.65	92.79	96.72	93.09
Other furniture and fixtures.....	82.01	81.20	81.20	80.98	82.35	79.00	80.19	79.20	78.01	80.20	79.00	78.80	79.40	78.78	77.33
Average weekly hours															
Ordnance and accessories.....	41.8	41.6	41.4	40.9	40.6	40.2	40.5	40.5	40.6	40.8	40.4	40.8	40.1	40.7	41.2
Ammunition, except for small arms.....	41.6	41.1	40.9	40.9	40.9	40.9	41.0	41.1	41.1	41.3	41.1	41.6	41.5	41.0	41.4
Sighting and fire control equipment.....	41.4	41.5	41.5	40.3	39.9	40.0	40.4	40.1	40.1	39.7	38.6	39.7	37.5	41.0	41.6
Other ordnance and accessories.....	42.2	42.3	41.9	41.3	40.6	39.6	40.1	40.0	40.3	40.9	40.9	40.6	40.4	40.3	40.6
Lumber and wood products, except furniture.....	38.9	39.4	40.5	40.1	40.2	39.5	40.5	39.7	38.8	38.5	38.4	38.5	37.6	39.0	39.7
Sawmills and planing mills.....	38.0	39.2	40.3	40.0	40.1	39.5	40.0	39.6	38.6	38.5	38.1	38.2	37.5	39.3	39.8
Millwork, plywood, and related products.....	40.6	40.5	40.8	40.8	41.4	40.4	41.2	40.8	40.5	39.8	39.1	39.0	39.4	39.8	41.2
Wooden containers.....	40.1	39.1	40.1	39.8	40.4	40.5	40.3	40.3	39.4	38.9	38.8	38.5	37.7	39.6	40.1
Miscellaneous wood products.....	40.2	40.5	40.5	40.3	40.2	40.0	40.6	40.3	40.3	39.8	39.5	39.6	38.9	40.3	40.6
Furniture and fixtures.....	41.8	41.3	41.3	41.2	40.9	39.8	39.8	38.7	38.7	38.7	38.5	38.2	39.7	40.0	40.7
Household furniture.....	42.0	41.3	41.4	41.1	40.6	39.6	39.6	38.3	38.4	38.4	38.1	37.7	39.7	39.8	40.7
Office furniture.....	41.5	41.5	40.5	41.3	41.1	41.1	40.4	39.9	39.7	40.0	40.1	40.3	40.3	41.1	40.5
Partitions; office and store fixtures.....	42.1	42.1	42.8	42.2	42.4	40.3	40.5	40.2	38.9	38.7	39.2	38.7	38.5	40.3	40.3
Other furniture and fixtures.....	40.4	40.4	40.6	40.9	41.8	40.1	40.5	40.0	39.8	40.1	39.7	39.4	40.1	40.4	40.7
Average hourly earnings															
Ordnance and accessories.....	\$2.81	\$2.81	\$2.80	\$2.79	\$2.78	\$2.78	\$2.77	\$2.77	\$2.76	\$2.76	\$2.76	\$2.74	\$2.73	\$2.67	\$2.58
Ammunition, except for small arms.....	2.85	2.85	2.85	2.83	2.83	2.82	2.79	2.79	2.78	2.77	2.78	2.78	2.76	2.69	2.61
Sighting and fire control equipment.....	2.94	2.95	2.92	2.90	2.91	2.90	2.92	2.92	2.92	2.91	2.89	2.83	2.82	2.76	2.67
Other ordnance and accessories.....	2.68	2.67	2.67	2.67	2.64	2.65	2.63	2.63	2.62	2.64	2.64	2.62	2.64	2.56	2.48
Lumber and wood products, except furniture.....	1.95	1.99	2.01	2.02	1.97	1.98	1.97	1.95	1.93	1.85	1.82	1.84	1.86	1.89	1.87
Sawmills and planing mills.....	1.78	1.79	1.80	1.83	1.78	1.79	1.78	1.76	1.75	1.70	1.69	1.69	1.70	1.71	1.69
Millwork, plywood, and related products.....	2.10	2.09	2.10	2.11	2.10	2.10	2.09	2.09	2.08	2.05	2.04	2.04	2.04	2.04	2.01
Wooden containers.....	1.63	1.65	1.66	1.65	1.58	1.60	1.59	1.56	1.57	1.54	1.54	1.55	1.56	1.57	1.53
Miscellaneous wood products.....	1.76	1.77	1.76	1.76	1.74	1.74	1.75	1.74	1.74	1.71	1.71	1.70	1.72	1.72	1.68
Furniture and fixtures.....	1.95	1.94	1.94	1.93	1.91	1.90	1.91	1.90	1.89	1.89	1.89	1.89	1.90	1.88	1.83
Household furniture.....	1.84	1.83	1.82	1.82	1.79	1.78	1.80	1.78	1.78	1.78	1.77	1.77	1.79	1.77	1.74
Office furniture.....	2.29	2.29	2.28	2.26	2.23	2.25	2.21	2.20	2.19	2.18	2.18	2.18	2.22	2.20	2.13
Partitions; office and store fixtures.....	2.51	2.51	2.51	2.49	2.51	2.47	2.46	2.45	2.41	2.44	2.43	2.42	2.41	2.40	2.31
Other furniture and fixtures.....	2.03	2.01	2.00	1.98	1.97	1.97	1.98	1.98	1.96	2.00	1.99	2.00	1.98	1.95	1.90

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Industry	1961												1960	Annual average	
	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960	1959
Average weekly earnings															
Manufacturing—Continued															
Durable goods—Continued															
Stone, clay, and glass products.....	\$95.04	\$97.17	\$97.88	\$97.47	\$98.18	\$97.06	\$97.29	\$94.83	\$93.03	\$91.54	\$90.62	\$91.08	\$90.39	\$92.97	\$91.46
Flat glass.....	118.99	119.32	115.48	128.30	127.84	125.42	126.56	124.19	118.18	122.07	122.07	124.03	130.29	127.35	132.29
Glass and glassware, pressed or blown.....	98.01	96.96	96.56	94.09	96.56	95.68	96.32	94.72	95.20	94.64	94.24	92.90	91.49	91.94	88.36
Cement, hydraulic.....	105.60	110.68	109.88	111.92	108.79	109.06	107.16	105.56	103.46	102.94	100.74	101.65	103.06	102.87	98.98
Structural clay products.....	85.24	87.13	86.93	86.51	86.11	85.28	86.32	85.07	83.42	81.18	79.56	80.36	79.95	82.21	81.19
Pottery and related products.....	84.67	84.85	84.50	83.38	81.49	81.38	83.00	83.44	81.59	81.43	80.25	78.97	79.45	81.37	78.90
Concrete, gypsum, and plaster products.....	91.83	99.49	102.73	101.36	103.69	101.85	101.62	96.90	93.56	90.76	87.96	89.69	87.30	93.04	92.45
Other stone and mineral products.....	98.16	97.75	97.99	99.19	97.64	97.00	97.00	95.24	93.90	92.87	91.71	92.63	91.18	93.79	93.15
Primary metal industries.....	121.29	119.39	119.29	118.19	116.11	117.68	116.58	114.16	111.25	108.49	107.26	106.69	104.90	109.59	112.19
Blast furnace and basic steel products.....	129.35	127.01	127.83	127.43	123.80	126.80	125.06	121.76	118.80	114.27	112.98	112.06	108.58	116.13	122.71
Iron and steel foundries.....	106.37	103.86	101.38	99.20	99.96	100.33	100.19	98.67	95.63	94.00	93.25	92.25	93.62	96.61	97.04
Nonferrous smelting and refining.....	111.93	112.89	111.93	110.12	110.43	110.70	110.29	108.00	107.33	106.66	107.86	108.79	108.00	108.09	104.81
Nonferrous rolling, drawing, and extruding.....	117.66	115.60	115.48	113.42	114.90	112.67	112.94	110.92	108.77	107.30	105.89	105.59	104.15	105.01	105.59
Nonferrous foundries.....	105.50	103.16	103.50	100.10	100.10	99.60	100.35	98.95	98.95	98.06	98.31	97.46	97.22	97.51	96.87
Miscellaneous primary metal industries.....	124.15	123.07	120.25	121.06	115.82	116.18	117.74	115.60	113.47	111.25	112.11	113.37	111.93	112.92	111.50
Average weekly hours															
Stone, clay, and glass products.....	40.1	41.0	41.3	41.3	41.6	41.3	41.4	40.7	40.1	39.8	39.4	39.6	39.3	40.6	41.2
Flat glass.....	36.5	36.6	36.2	40.6	40.2	40.2	39.8	39.3	38.0	39.0	39.0	39.5	41.1	40.3	41.6
Glass and glassware, pressed or blown.....	40.5	40.4	40.4	39.7	40.4	40.2	40.3	39.8	40.0	40.1	40.1	39.7	39.1	39.8	39.8
Cement, hydraulic.....	39.7	41.3	41.0	41.3	40.9	41.0	40.9	40.6	40.1	39.9	39.2	39.4	40.1	40.5	40.9
Structural clay products.....	40.4	41.1	41.2	41.0	41.4	41.0	41.3	40.9	40.3	39.6	39.0	39.2	39.0	40.3	40.8
Pottery and related products.....	39.2	39.1	39.3	38.6	37.9	37.5	37.9	38.1	37.6	37.7	37.5	36.9	37.3	38.2	38.3
Concrete, gypsum, and plaster products.....	40.1	42.7	43.9	43.5	44.5	43.9	43.8	42.5	41.4	40.7	39.8	40.4	39.5	42.1	43.2
Other stone and mineral products.....	40.9	40.9	41.0	41.5	41.2	41.1	41.1	40.7	40.3	39.9	39.7	40.1	39.3	40.6	41.4
Primary metal industries.....	40.7	40.2	40.3	40.2	39.9	40.3	40.2	39.5	38.9	38.2	37.9	37.7	37.2	39.0	40.5
Blast furnace and basic steel products.....	39.8	39.2	39.7	40.2	39.3	40.0	39.7	38.9	38.2	37.1	36.8	36.5	35.6	38.2	40.1
Iron and steel foundries.....	40.6	40.1	39.6	38.9	39.2	39.5	39.6	39.0	38.1	37.6	37.3	36.9	37.3	38.8	40.1
Nonferrous smelting and refining.....	41.0	41.2	41.0	39.9	40.6	41.0	41.0	40.6	40.5	40.4	40.7	40.9	40.6	41.1	41.1
Nonferrous rolling, drawing, and extruding.....	43.1	42.5	42.3	41.7	42.4	42.2	42.3	41.7	41.2	40.8	40.3	40.3	39.6	40.7	41.9
Nonferrous foundries.....	41.7	41.1	41.4	40.2	40.2	40.0	40.3	39.9	39.9	39.7	39.8	39.3	39.2	39.8	40.7
Miscellaneous primary metal industries.....	41.8	41.3	40.9	40.9	39.8	40.2	40.6	40.0	39.4	38.9	39.2	39.5	39.0	39.9	40.4
Average hourly earnings															
Stone, clay, and glass products.....	\$2.37	\$2.37	\$2.37	\$2.36	\$2.36	\$2.35	\$2.35	\$2.33	\$2.32	\$2.30	\$2.30	\$2.30	\$2.30	\$2.29	\$2.22
Flat glass.....	3.26	3.26	3.19	3.16	3.18	3.12	3.18	3.16	3.11	3.13	3.13	3.14	3.17	3.16	3.18
Glass and glassware, pressed or blown.....	2.42	2.40	2.39	2.37	2.39	2.38	2.39	2.38	2.38	2.36	2.35	2.34	2.34	2.31	2.22
Cement, hydraulic.....	2.66	2.68	2.68	2.71	2.66	2.66	2.62	2.60	2.58	2.58	2.57	2.58	2.57	2.54	2.42
Structural clay products.....	2.11	2.12	2.11	2.11	2.08	2.08	2.09	2.08	2.07	2.05	2.04	2.05	2.05	2.04	1.99
Pottery and related products.....	2.16	2.17	2.15	2.16	2.15	2.17	2.19	2.19	2.17	2.16	2.14	2.14	2.13	2.13	2.06
Concrete, gypsum, and plaster products.....	2.29	2.33	2.34	2.33	2.33	2.32	2.32	2.28	2.26	2.23	2.21	2.22	2.21	2.21	2.14
Other stone and mineral products.....	2.40	2.39	2.39	2.39	2.37	2.36	2.36	2.34	2.33	2.32	2.31	2.31	2.32	2.31	2.25
Primary metal industries.....	2.98	2.97	2.96	2.94	2.91	2.92	2.90	2.89	2.86	2.84	2.83	2.83	2.82	2.81	2.77
Blast furnace and basic steel products.....	3.25	3.24	3.22	3.17	3.15	3.17	3.15	3.13	3.11	3.08	3.07	3.07	3.05	3.04	3.06
Iron and steel foundries.....	2.62	2.59	2.56	2.55	2.55	2.54	2.53	2.53	2.51	2.50	2.50	2.50	2.51	2.49	2.42
Nonferrous smelting and refining.....	2.73	2.74	2.73	2.76	2.72	2.70	2.69	2.66	2.65	2.64	2.66	2.66	2.66	2.63	2.55
Nonferrous rolling, drawing, and extruding.....	2.73	2.72	2.73	2.72	2.71	2.67	2.67	2.66	2.64	2.63	2.62	2.62	2.63	2.58	2.52
Nonferrous foundries.....	2.53	2.51	2.50	2.49	2.49	2.49	2.49	2.48	2.48	2.47	2.47	2.48	2.48	2.45	2.38
Miscellaneous primary metal industries.....	2.97	2.98	2.94	2.96	2.91	2.89	2.90	2.89	2.88	2.86	2.86	2.87	2.87	2.83	2.76

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Industry	1961												1960	Annual average	
	Dec. ¹	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960	1959
Manufacturing—Continued															
Average weekly earnings															
Durable goods—Continued															
Fabricated metal products.....	\$105.41	\$104.08	\$102.75	\$99.45	\$102.34	\$101.75	\$102.09	\$100.85	\$99.45	\$97.81	\$96.92	\$96.78	\$96.68	\$98.82	\$96.12
Metal cans.....	125.04	121.84	122.18	122.80	128.19	128.19	126.73	120.96	118.37	115.02	116.00	116.16	114.29	114.68	113.21
Cutlery, hand tools, and general hardware.....	103.32	100.43	96.15	84.04	94.24	92.90	94.64	94.64	92.50	91.34	88.47	91.10	92.12	93.03	89.10
Heating equipment and plumbing fixtures.....	95.74	96.96	97.77	96.80	96.00	94.64	95.52	94.56	93.21	90.82	91.87	92.25	91.15	91.26	91.43
Fabricated structural metal products.....	104.60	104.70	105.22	104.30	104.24	102.47	102.66	101.40	100.40	99.90	99.00	100.00	99.60	99.47	95.68
Screw machine products, bolts, etc.	106.14	104.06	102.09	101.43	99.14	98.17	99.63	97.36	94.17	94.17	93.45	93.53	92.90	99.85	97.06
Metal stampings.....	113.90	108.68	105.83	97.50	105.47	107.42	108.05	107.53	105.56	102.14	100.47	99.31	101.00	107.74	104.33
Coating, engraving, and allied services.....	94.02	91.88	91.98	92.84	91.43	90.72	91.43	89.51	89.28	87.96	85.41	84.80	81.70	86.43	84.46
Miscellaneous fabricated wire products.....	97.81	96.93	96.51	97.16	95.17	94.12	95.63	94.02	92.06	91.54	92.00	90.68	89.54	90.50	89.21
Miscellaneous fabricated metal products.....	102.91	102.75	103.41	100.60	101.09	99.70	101.18	99.94	98.00	97.27	96.78	96.29	94.82	96.96	95.82
Machinery															
Engines and turbines.....	110.92	109.18	109.03	107.83	106.75	107.16	107.68	106.75	106.49	105.04	104.90	104.23	103.46	104.55	102.92
Farm machinery and equipment.....	117.56	116.47	114.62	115.60	113.65	112.68	113.54	113.03	115.87	112.18	111.72	110.21	111.39	109.69	109.48
Construction and related machinery.....	105.04	103.06	102.00	102.40	100.04	100.62	102.43	103.20	105.56	104.12	104.90	103.72	102.80	99.85	99.47
Metalworking machinery and equipment.....	108.40	106.67	107.59	107.86	108.24	107.30	107.30	106.63	105.85	103.62	103.48	103.08	102.56	102.66	103.25
Special industrial machinery.....	121.84	119.00	117.60	115.93	115.93	117.18	117.60	116.34	116.62	115.09	114.63	113.85	112.34	117.27	113.32
General industrial machinery.....	106.25	104.16	103.42	103.66	101.19	101.11	101.92	100.28	99.39	98.90	99.22	99.39	98.33	99.72	96.37
Office, computing, and accounting machines.....	110.92	108.77	108.09	104.14	105.71	104.92	106.08	104.64	102.80	101.77	101.12	100.35	98.30	101.71	102.01
Service industry machines.....	113.02	113.30	113.15	112.74	111.51	113.28	112.47	110.29	108.81	108.40	108.79	108.12	107.86	106.23	101.91
Miscellaneous machinery.....	99.06	96.32	98.09	96.88	93.69	96.56	95.34	95.91	95.20	94.72	94.72	92.98	91.96	93.43	93.02
	108.20	106.17	105.25	106.09	102.09	103.75	104.75	103.58	102.26	102.01	101.27	101.76	102.26	101.26	99.54
Average weekly hours															
Fabricated metal products															
Metal cans.....	41.5	41.3	41.1	40.1	41.1	40.7	41.0	40.5	40.1	39.6	39.4	39.5	39.3	40.5	40.9
Cutlery, hand tools, and general hardware.....	42.7	41.3	41.7	42.2	43.9	43.9	43.7	42.0	41.1	40.5	40.7	40.9	40.1	41.4	42.4
Heating equipment and plumbing fixtures.....	42.0	41.5	40.4	36.7	40.1	39.7	40.1	40.1	39.7	39.2	38.3	39.1	38.2	40.1	40.5
Fabricated structural metal products.....	39.4	39.9	40.4	40.0	40.0	39.6	39.8	39.4	39.0	38.0	38.6	38.6	38.3	39.0	40.1
Screw machine products, bolts, etc.	40.7	40.9	41.1	40.9	41.2	40.5	40.9	40.4	40.0	39.8	39.6	40.0	40.0	40.6	40.2
Metal stampings.....	42.8	42.3	41.5	41.4	40.8	40.4	41.0	40.4	39.4	39.4	39.1	39.3	39.2	40.5	42.2
Coating, engraving, and allied services.....	42.5	41.8	41.5	39.0	41.2	41.0	41.4	41.2	40.6	39.9	39.4	39.1	39.3	41.6	41.9
Miscellaneous fabricated wire products.....	41.6	41.2	40.7	40.9	41.0	40.5	41.0	40.5	40.4	39.8	39.0	38.9	38.0	40.2	41.0
Miscellaneous fabricated metal products.....	41.8	41.6	41.6	41.7	41.2	41.1	41.4	40.7	40.2	39.8	40.0	39.6	39.1	40.4	41.3
Machinery															
Engines and turbines.....	41.0	41.1	41.2	40.4	40.6	40.2	40.8	40.3	40.0	39.7	39.5	39.3	38.7	39.9	40.6
Farm machinery and equipment.....	41.7	41.2	41.3	41.0	40.9	40.9	41.1	40.9	40.8	40.4	40.5	40.4	40.1	41.0	41.5
Construction and related machinery.....	40.4	40.3	39.8	40.0	39.6	39.4	39.7	39.8	40.8	39.5	39.9	39.5	39.5	39.6	40.7
Metalworking machinery and equipment.....	40.6	40.1	40.0	40.0	39.7	39.0	39.7	40.0	40.6	40.2	40.5	40.2	40.0	40.1	40.6
Special industrial machinery.....	42.9	42.2	42.0	41.7	41.7	42.0	42.0	41.7	41.8	41.4	41.4	41.4	41.0	42.8	42.6
General industrial machinery.....	42.5	42.0	41.7	41.8	41.3	41.1	41.6	41.1	40.9	40.7	41.0	40.9	40.8	41.9	41.9
Office, computing, and accounting machines.....	41.7	41.2	41.1	39.9	40.5	40.2	40.8	40.4	40.0	39.6	39.5	39.2	38.4	40.2	41.3
Service industry machines.....	41.4	41.5	41.6	41.6	41.3	41.8	41.5	41.0	40.6	40.6	40.9	40.8	40.7	40.7	40.6
Miscellaneous machinery.....	40.6	39.8	40.7	40.2	39.7	40.4	40.4	40.3	40.0	39.8	39.8	39.4	38.8	40.1	40.8
	42.6	41.8	42.1	42.1	41.0	41.5	41.9	41.6	41.4	41.3	41.0	41.2	41.4	41.5	42.0
Average hourly earnings															
Fabricated metal products															
Metal cans.....	\$2.54	\$2.52	\$2.50	\$2.48	\$2.49	\$2.50	\$2.49	\$2.49	\$2.48	\$2.47	\$2.46	\$2.45	\$2.46	\$2.44	\$2.35
Cutlery, hand tools, and general hardware.....	2.97	2.95	2.93	2.91	2.92	2.92	2.92	2.90	2.88	2.88	2.84	2.85	2.85	2.77	2.67
Heating equipment and plumbing fixtures.....	2.46	2.42	2.38	2.29	2.35	2.34	2.36	2.36	2.33	2.33	2.31	2.33	2.35	2.32	2.20
Fabricated structural metal products.....	2.43	2.43	2.42	2.42	2.40	2.39	2.40	2.40	2.39	2.39	2.38	2.39	2.38	2.34	2.28
Screw machine products, bolts, etc.	2.57	2.56	2.56	2.55	2.53	2.53	2.51	2.51	2.51	2.51	2.50	2.50	2.49	2.45	2.38
Metal stampings.....	2.48	2.46	2.46	2.45	2.43	2.43	2.43	2.41	2.39	2.39	2.39	2.38	2.37	2.36	2.30
Coating, engraving, and allied services.....	2.68	2.60	2.55	2.50	2.56	2.62	2.61	2.61	2.60	2.56	2.55	2.54	2.57	2.59	2.49
Miscellaneous fabricated wire products.....	2.26	2.23	2.26	2.27	2.23	2.24	2.23	2.21	2.21	2.21	2.19	2.18	2.15	2.15	2.06
Miscellaneous fabricated metal products.....	2.34	2.33	2.32	2.33	2.31	2.29	2.31	2.31	2.29	2.30	2.30	2.29	2.29	2.24	2.16
Machinery															
Engines and turbines.....	2.51	2.50	2.51	2.49	2.49	2.48	2.48	2.48	2.45	2.45	2.45	2.45	2.45	2.43	2.36
Farm machinery and equipment.....	2.66	2.65	2.64	2.63	2.61	2.62	2.62	2.61	2.61	2.60	2.59	2.58	2.58	2.55	2.48
Construction and related machinery.....	2.91	2.89	2.88	2.89	2.87	2.86	2.86	2.84	2.84	2.84	2.80	2.79	2.82	2.77	2.69
Metalworking machinery and equipment.....	2.60	2.57	2.55	2.56	2.52	2.58	2.58	2.58	2.60	2.59	2.59	2.58	2.57	2.49	2.45
Special industrial machinery.....	2.67	2.66	2.65	2.65	2.64	2.63	2.63	2.62	2.62	2.61	2.60	2.59	2.59	2.56	2.50
General industrial machinery.....	2.84	2.82	2.80	2.78	2.78	2.79	2.80	2.79	2.79	2.78	2.77	2.75	2.74	2.74	2.66
Office, computing, and accounting machines.....	2.50	2.48	2.48	2.48	2.45	2.46	2.45	2.44	2.43	2.43	2.42	2.43	2.41	2.38	2.30
Service industry machines.....	2.66	2.64	2.63	2.61	2.61	2.61	2.60	2.59	2.57	2.57	2.56	2.56	2.56	2.53	2.47
Miscellaneous machinery.....	2.73	2.73	2.72	2.71	2.70	2.71	2.71	2.69	2.68	2.67	2.66	2.65	2.65	2.61	2.51
	2.44	2.42	2.41	2.41	2.40	2.39	2.36	2.38	2.38	2.38	2.38	2.36	2.37	2.33	2.28
	2.54	2.54	2.50	2.52	2.49	2.50	2.50	2.49	2.47	2.47	2.47	2.47	2.47	2.44	2.27

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Industry	1961												1960	Annual average	
	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960	1959
Average weekly earnings															
Manufacturing—Continued															
Durable goods—Continued															
Electrical equipment and supplies	\$97.58	\$96.70	\$96.05	\$93.53	\$94.94	\$93.69	\$94.71	\$93.37	\$93.13	\$92.50	\$92.50	\$92.73	\$91.49	\$90.74	\$89.10
Electric distribution equipment	102.82	102.31	101.15	101.66	101.50	101.15	101.00	99.94	99.85	99.45	99.79	99.79	99.75	97.77	95.65
Electrical industrial apparatus	101.43	102.09	101.02	101.43	100.69	99.94	99.88	98.25	98.25	96.96	97.20	96.07	95.74	95.44	93.43
Household appliances	104.30	103.53	102.06	103.73	101.00	101.96	101.56	100.90	100.50	99.00	97.25	100.04	97.71	96.23	94.87
Electric lighting and wiring equipment	90.09	89.69	89.65	87.25	88.58	87.64	88.98	87.47	86.63	86.63	86.24	84.70	82.88	84.71	83.63
Radio and TV receiving sets	84.80	83.58	84.82	78.25	83.98	84.16	83.13	81.66	79.59	80.51	82.18	83.07	81.86	80.11	79.40
Communication equipment	107.01	105.32	103.98	104.81	102.87	100.19	102.72	100.00	100.25	99.60	99.94	100.69	98.95	98.82	97.41
Electronic components and accessories	82.42	83.02	82.62	81.61	80.40	77.39	80.20	79.80	79.60	79.60	80.00	79.40	76.03	76.24	74.00
Miscellaneous electrical equipment and supplies	106.60	103.17	100.70	77.05	98.90	97.20	99.31	97.04	93.77	93.77	93.06	94.47	94.95	93.93	92.34
Transportation equipment	124.84	123.83	117.29	106.22	112.96	113.00	112.87	112.87	110.95	109.85	108.74	108.19	111.60	111.52	107.45
Motor vehicles and equipment	132.76	131.42	119.52	96.84	113.94	115.43	116.57	116.00	112.24	107.80	105.46	105.00	112.35	115.21	111.38
Aircraft and parts	119.85	118.29	117.03	115.92	114.26	112.88	111.52	112.07	113.03	114.54	114.82	114.68	114.40	110.43	106.63
Ship and boat building and repairing	113.32	116.69	115.30	114.45	112.52	111.60	108.63	109.87	109.07	107.05	106.90	106.47	103.57	103.75	100.47
Railroad equipment	114.05	112.33	108.20	108.57	107.34	108.36	110.32	107.52	104.72	106.68	103.88	106.03	106.88	107.86	105.72
Other transportation equipment	82.86	83.07	86.24	88.78	87.08	84.74	86.22	83.13	83.71	81.66	78.38	78.12	79.63	80.13	80.40
Average weekly hours															
Electrical equipment and supplies	41.0	40.8	40.7	39.8	40.4	39.7	40.3	39.9	39.8	39.7	39.7	39.8	39.1	39.8	40.5
Electric distribution equipment	40.8	40.6	40.3	40.5	40.6	40.3	40.4	40.3	40.1	40.1	40.4	40.4	39.9	40.4	40.7
Electrical industrial apparatus	40.9	41.0	40.9	40.9	40.6	40.3	40.6	40.1	40.1	39.9	40.0	39.7	39.4	40.1	40.8
Household appliances	40.9	40.6	40.5	41.0	40.4	40.3	40.3	40.2	40.2	39.6	38.9	39.7	39.4	39.6	40.2
Electric lighting and wiring equipment	40.4	40.4	40.2	39.3	39.9	39.3	39.9	39.4	39.2	39.2	39.2	38.5	37.5	39.4	40.4
Radio and TV receiving sets	40.0	39.8	40.2	37.8	39.8	39.7	39.4	38.7	37.9	37.8	38.4	39.0	37.9	38.7	39.5
Communication equipment	41.8	41.3	41.1	41.1	40.5	39.6	40.6	40.0	40.1	40.0	40.3	40.6	39.9	40.5	41.1
Electronic components and accessories	40.8	41.1	40.9	40.6	40.2	38.5	40.1	39.9	40.0	40.0	40.2	40.1	38.4	39.5	40.0
Miscellaneous electrical equipment and supplies	42.3	41.6	41.1	33.5	40.7	40.0	40.7	40.1	39.4	39.4	39.1	39.2	39.4	39.8	40.5
Transportation equipment	42.9	42.7	41.3	37.8	40.2	40.5	40.6	40.6	40.2	39.8	39.4	39.2	40.0	40.7	40.7
Motor vehicles and equipment	44.4	44.1	41.5	34.1	39.7	40.5	40.9	40.7	39.8	38.5	37.8	37.5	39.7	41.0	41.1
Aircraft and parts	42.2	41.8	41.5	41.4	41.1	40.9	40.7	40.9	41.1	41.5	41.6	41.7	41.3	40.9	40.7
Ship and boat building and repairing	39.9	40.8	40.6	40.3	39.9	40.0	39.5	40.1	40.1	39.5	39.3	39.0	37.8	39.3	39.4
Railroad equipment	39.6	38.6	37.7	38.5	38.2	38.7	39.4	38.4	37.4	38.1	37.1	37.6	37.9	38.8	39.3
Other transportation equipment	38.9	39.0	40.3	41.1	40.5	39.6	40.1	39.4	39.3	38.7	37.5	37.2	38.1	38.9	40.4
Average hourly earnings															
Electrical equipment and supplies	\$2.38	\$2.37	\$2.36	\$2.35	\$2.35	\$2.36	\$2.35	\$2.34	\$2.34	\$2.33	\$2.33	\$2.33	\$2.34	\$2.28	\$2.20
Electrical distribution equipment	2.52	2.52	2.51	2.51	2.50	2.51	2.50	2.48	2.49	2.48	2.47	2.47	2.50	2.42	2.35
Electrical industrial apparatus	2.48	2.49	2.47	2.48	2.48	2.48	2.46	2.45	2.45	2.43	2.43	2.42	2.43	2.38	2.29
Household appliances	2.55	2.55	2.52	2.53	2.50	2.53	2.52	2.51	2.50	2.50	2.50	2.52	2.48	2.43	2.36
Electric lighting and wiring equipment	2.23	2.22	2.23	2.20	2.22	2.23	2.23	2.22	2.21	2.21	2.20	2.20	2.21	2.15	2.07
Radio and TV receiving sets	2.12	2.10	2.11	2.07	2.11	2.12	2.11	2.11	2.10	2.13	2.14	2.13	2.16	2.07	2.01
Communication equipment	2.56	2.55	2.53	2.55	2.54	2.53	2.53	2.50	2.50	2.49	2.48	2.48	2.48	2.44	2.37
Electronic components and accessories	2.02	2.02	2.02	2.01	2.00	2.01	2.00	2.00	1.99	1.99	1.99	1.98	1.98	1.93	1.85
Miscellaneous electrical equipment and supplies	2.52	2.48	2.45	2.30	2.43	2.43	2.44	2.42	2.38	2.38	2.38	2.41	2.41	2.36	2.28
Transportation equipment	2.91	2.90	2.84	2.81	2.81	2.79	2.78	2.78	2.76	2.76	2.76	2.76	2.79	2.74	2.64
Motor vehicles and equipment	2.99	2.98	2.88	2.84	2.87	2.85	2.85	2.85	2.82	2.80	2.79	2.80	2.83	2.81	2.71
Aircraft and parts	2.84	2.83	2.82	2.80	2.78	2.76	2.74	2.74	2.75	2.76	2.76	2.75	2.77	2.70	2.62
Ship and boat building and repairing	2.84	2.86	2.84	2.84	2.82	2.79	2.75	2.74	2.72	2.71	2.72	2.73	2.74	2.64	2.55
Railroad equipment	2.88	2.91	2.87	2.82	2.81	2.80	2.80	2.80	2.80	2.80	2.80	2.82	2.82	2.78	2.69
Other transportation equipment	2.13	2.13	2.14	2.16	2.15	2.14	2.15	2.11	2.13	2.11	2.09	2.10	2.09	2.06	1.99

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Industry	1961												1960	Annual average	
	Dec. ³	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960	1959
	Average weekly earnings														
Manufacturing—Continued															
Durable goods—Continued															
Instruments and related products.....	\$100.36	\$99.53	\$98.64	\$97.99	\$97.75	\$96.80	\$97.10	\$95.75	\$95.51	\$95.68	\$94.87	\$95.51	\$92.90	\$93.73	\$91.39
Engineering and scientific instruments.....	115.79	113.58	113.44	112.88	112.88	111.23	112.89	110.57	110.84	112.61	109.75	113.30	109.18	110.95	107.43
Mechanical measuring and control devices.....	98.98	98.33	96.72	96.80	96.56	95.27	97.27	95.04	95.44	94.80	93.77	93.77	90.32	92.00	91.84
Optical and ophthalmic goods.....	90.27	88.99	88.60	90.49	88.18	88.15	87.33	85.68	85.06	84.66	83.41	83.39	82.95	81.80	78.18
Surgical, medical, and dental equipment.....	84.66	84.25	83.43	83.03	82.82	81.60	81.61	81.00	80.80	79.80	81.20	80.60	77.00	80.40	78.79
Photographic equipment and supplies.....	116.45	115.87	113.63	112.94	113.05	112.52	112.36	109.30	107.98	106.92	107.04	107.59	107.83	106.14	102.01
Watches and clocks.....	83.81	84.46	85.90	81.39	79.59	78.54	76.58	79.59	78.98	79.76	79.40	78.19	73.68	76.83	76.63
Miscellaneous manufacturing industries.....	78.20	77.57	76.78	76.02	74.47	74.29	76.22	75.07	75.27	75.46	75.66	75.08	72.96	74.28	73.42
Jewelry, silverware, and plated ware.....	90.95	87.36	87.36	84.05	82.21	79.58	82.21	80.17	79.75	79.17	79.39	78.80	77.14	80.40	80.16
Toys, amusement, and sporting goods.....	69.32	70.09	70.93	69.87	69.66	68.92	69.78	69.81	70.20	70.80	71.00	70.82	66.04	67.73	66.98
Pens, pencils, and office and art materials.....	76.36	75.58	74.77	74.03	70.29	71.55	72.65	72.86	72.91	72.31	72.50	68.82	69.52	71.92	70.98
Costume jewelry, buttons, and notions.....	70.74	70.98	69.03	68.43	67.08	67.42	69.60	69.52	68.99	67.51	67.47	67.90	64.73	66.13	66.86
Other manufacturing industries.....	83.60	83.84	82.61	81.59	80.59	80.39	82.19	80.34	80.16	80.96	80.77	80.57	79.93	79.99	78.80
Average weekly hours															
Instruments and related products.....	41.3	41.3	41.1	41.0	40.9	40.5	40.8	40.4	40.3	40.2	40.2	40.3	39.2	40.4	40.8
Engineering and scientific instruments.....	41.8	41.3	41.1	40.9	40.9	40.3	41.2	40.5	40.6	40.8	40.2	41.5	39.7	41.4	41.8
Mechanical measuring and control devices.....	40.9	40.8	40.3	40.5	40.4	40.2	40.7	40.1	40.1	40.0	39.9	39.9	38.6	40.0	41.0
Optical and ophthalmic goods.....	41.6	41.2	41.4	41.7	41.4	41.0	41.0	40.8	40.7	40.7	40.1	39.9	39.5	40.1	40.3
Surgical, medical, and dental equipment.....	40.7	40.9	40.5	40.5	40.4	40.0	40.2	40.1	40.0	39.7	40.4	40.1	38.5	40.0	40.2
Photographic equipment and supplies.....	42.5	42.6	42.4	42.3	42.5	42.3	42.4	41.4	40.9	40.5	40.7	40.6	41.0	41.3	41.3
Watches and clocks.....	40.1	40.8	41.3	39.7	39.4	38.5	38.1	39.4	39.1	39.1	39.5	38.9	37.4	39.0	39.5
Miscellaneous manufacturing industries.....	39.9	40.4	40.2	39.8	39.4	39.1	39.7	39.1	39.0	39.1	39.2	38.9	38.0	39.3	39.9
Jewelry, silverware, and plated ware.....	42.9	42.0	41.8	40.8	40.3	39.2	40.3	39.3	38.9	39.0	39.3	39.4	38.0	40.2	40.9
Toys, amusement, and sporting goods.....	38.3	39.6	40.3	39.7	39.3	38.5	39.2	39.0	39.0	38.9	38.8	38.7	37.1	38.7	39.4
Pens, pencils, and office and art materials.....	41.5	41.3	40.2	39.8	38.2	39.1	39.7	39.6	39.2	39.3	39.4	37.2	38.2	39.3	40.1
Costume jewelry, buttons, and notions.....	39.3	40.1	39.0	39.1	39.0	39.2	40.0	39.5	39.2	38.8	39.0	38.8	37.2	38.9	39.8
Other manufacturing industries.....	40.0	40.5	40.1	39.8	39.7	39.6	39.9	39.0	39.1	39.3	39.4	39.3	38.8	39.6	40.0
Average hourly earnings															
Instruments and related products.....	\$2.43	\$2.41	\$2.40	\$2.39	\$2.39	\$2.39	\$2.38	\$2.37	\$2.37	\$2.38	\$2.36	\$2.37	\$2.37	\$2.32	\$2.24
Engineering and scientific instruments.....	2.77	2.75	2.76	2.76	2.76	2.76	2.74	2.73	2.73	2.76	2.73	2.73	2.75	2.68	2.57
Mechanical measuring and control devices.....	2.42	2.41	2.40	2.39	2.39	2.37	2.39	2.37	2.38	2.37	2.35	2.35	2.34	2.30	2.24
Optical and ophthalmic goods.....	2.17	2.16	2.14	2.17	2.13	2.15	2.13	2.10	2.09	2.08	2.08	2.09	2.10	2.04	1.94
Surgical, medical, and dental equipment.....	2.08	2.06	2.06	2.05	2.05	2.04	2.03	2.02	2.02	2.01	2.01	2.01	2.00	2.01	1.96
Photographic equipment and supplies.....	2.74	2.72	2.68	2.67	2.66	2.66	2.65	2.64	2.64	2.64	2.63	2.65	2.63	2.57	2.47
Watches and clocks.....	2.09	2.07	2.08	2.05	2.02	2.04	2.01	2.02	2.02	2.04	2.01	2.01	1.97	1.97	1.94
Miscellaneous manufacturing industries.....	1.96	1.92	1.91	1.91	1.89	1.90	1.92	1.92	1.93	1.93	1.93	1.93	1.92	1.89	1.84
Jewelry, silverware, and plated ware.....	2.12	2.08	2.09	2.06	2.04	2.03	2.04	2.04	2.05	2.03	2.02	2.00	2.03	2.00	1.96
Toys, amusement, and sporting goods.....	1.81	1.77	1.76	1.76	1.77	1.79	1.78	1.79	1.80	1.82	1.83	1.83	1.78	1.75	1.70
Pens, pencils, and office and art materials.....	1.84	1.83	1.86	1.86	1.84	1.83	1.83	1.84	1.86	1.84	1.84	1.85	1.82	1.83	1.77
Costume jewelry, buttons, and notions.....	1.80	1.77	1.77	1.75	1.70	1.72	1.74	1.76	1.76	1.74	1.73	1.75	1.74	1.70	1.68
Other manufacturing industries.....	2.09	2.07	2.06	2.05	2.03	2.03	2.06	2.06	2.05	2.06	2.05	2.05	2.06	2.02	1.97

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Industry	1961												1960	Annual average	
													Dec.	1960	1959
	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.		
Average weekly earnings															
Manufacturing—Continued															
<i>Nondurable goods</i>															
Food and kindred products.....	\$90.58	\$89.79	\$89.84	\$89.44	\$88.60	\$90.25	\$90.25	\$89.57	\$87.20	\$87.23	\$87.23	\$87.67	\$87.10	\$86.30	\$82.82
Meat products.....	100.37	101.16	100.62	98.41	95.18	98.18	98.47	97.64	94.47	95.44	93.69	96.72	97.10	94.83	92.29
Dairy products.....	93.04	93.46	93.26	95.46	92.44	94.61	93.53	92.44	91.36	91.15	90.52	90.94	90.73	89.68	86.50
Canned and preserved food, except meats.....	69.38	68.63	72.34	74.48	74.30	70.10	70.31	72.20	68.38	68.45	68.63	67.34	66.25	68.71	65.28
Grain mill products.....	100.97	102.35	102.15	102.83	102.08	100.25	98.26	95.27	95.26	95.48	96.86	97.90	96.79	94.15	90.85
Bakery products.....	88.84	89.24	88.62	88.44	88.26	89.35	89.57	87.89	85.57	85.79	85.57	84.32	84.74	83.81	80.00
Sugar.....	97.60	98.23	94.50	98.95	99.72	101.94	96.70	100.26	94.02	97.67	97.38	97.65	100.80	93.70	88.64
Confectionery and related products.....	73.63	73.20	74.70	75.70	73.97	73.30	74.21	73.45	72.13	71.31	70.82	70.71	67.55	66.34	66.59
Beverages.....	100.44	99.79	101.05	102.66	100.78	105.08	100.94	98.15	98.46	96.92	94.77	94.86	95.89	96.72	93.56
Miscellaneous food and kindred products.....	88.79	88.97	88.74	87.78	87.35	88.18	87.13	86.51	84.25	84.23	85.85	85.65	83.80	83.95	81.79
Tobacco manufactures.....	72.47	69.32	69.36	67.39	68.17	71.05	74.07	70.87	71.05	65.51	65.12	65.22	68.03	64.94	64.12
Cigarettes.....	91.43	89.65	92.29	84.50	86.65	83.85	89.82	85.02	85.89	78.86	80.56	80.60	86.48	80.29	80.40
Cigars.....	58.29	59.98	59.49	58.74	57.37	55.13	56.47	54.24	53.44	52.12	52.06	54.17	53.86	52.88	
Textile mill products.....	67.98	68.31	67.08	66.09	66.02	64.64	65.12	63.99	63.18	62.86	61.99	61.18	61.34	63.00	63.02
Cotton broad woven fabrics.....	66.72	67.04	66.72	64.71	63.67	62.49	62.64	61.86	61.39	60.76	59.75	59.90	61.15	62.56	60.90
Silk and synthetic broad woven fabrics.....	72.91	72.41	70.64	69.39	70.31	68.15	68.56	67.65	66.50	65.44	65.44	65.27	65.76	68.31	66.94
Weaving and finishing broad woolsens.....	73.81	73.46	72.04	73.81	74.34	74.80	74.55	73.33	70.99	69.37	69.14	67.25	65.02	69.83	70.64
Narrow fabrics and smallwares.....	70.79	71.14	69.32	69.83	68.91	67.94	68.05	67.94	67.20	66.23	66.23	64.24	64.01	66.07	65.69
Knitting.....	61.69	63.20	61.94	60.29	60.37	59.60	59.60	58.37	57.13	57.29	56.61	54.93	54.26	56.93	57.13
Finishing textiles, except wool and knit.....	78.44	77.11	75.84	73.21	73.93	72.90	76.32	75.06	74.52	74.52	75.30	70.88	71.06	71.73	72.14
Floor covering.....	76.25	75.86	75.33	74.45	73.92	67.48	72.22	68.82	69.74	69.70	68.64	69.21	70.27	70.62	72.51
Yarn and thread.....	63.08	63.23	61.61	62.02	61.16	59.85	60.15	58.71	57.51	56.92	56.02	54.83	55.35	58.05	58.40
Miscellaneous textile goods.....	78.85	78.85	77.11	76.14	76.14	76.14	77.08	74.99	73.84	72.89	70.84	71.97	70.49	73.60	72.45
Average weekly hours															
Food and kindred products.....	40.8	41.0	41.4	41.6	41.4	41.4	41.4	40.9	40.0	40.2	40.2	40.4	40.7	40.9	41.0
Meat products.....	40.8	41.8	42.1	41.7	40.5	41.6	41.9	41.2	40.2	40.1	39.2	40.3	40.8	40.7	41.2
Dairy products.....	42.1	42.1	42.2	43.0	42.6	43.4	43.1	42.6	42.1	42.2	42.1	42.1	42.2	42.3	42.4
Canned and preserved food, except meats.....	37.3	37.3	39.1	40.7	40.6	38.1	37.6	38.2	35.8	36.8	37.3	37.0	36.6	38.6	38.4
Grain mill products.....	43.9	44.5	45.4	45.7	46.4	46.2	45.7	43.7	43.3	43.4	43.8	44.5	44.4	44.2	44.1
Bakery products.....	40.2	40.2	40.1	40.2	40.3	40.8	40.9	40.5	39.8	39.9	39.8	39.4	39.6	40.1	40.2
Sugar.....	46.7	47.0	45.0	41.4	41.9	42.3	40.8	41.6	40.7	42.1	42.9	43.4	52.5	44.2	44.1
Confectionery and related products.....	39.8	40.0	40.6	40.7	40.2	39.2	39.9	39.7	39.2	39.4	39.4	39.5	38.6	39.4	39.4
Beverages.....	39.7	39.6	40.1	40.9	40.8	41.7	40.7	39.9	39.7	39.4	39.0	39.2	39.3	40.3	40.5
Miscellaneous food and kindred products.....	43.1	43.4	43.5	42.2	42.2	42.6	42.5	42.2	41.5	41.7	42.5	42.4	41.9	42.4	42.6
Tobacco manufactures.....	39.6	38.3	40.8	41.6	40.1	38.2	39.4	38.1	38.2	36.6	37.0	37.7	39.1	38.2	39.1
Cigarettes.....	41.0	40.2	41.2	39.3	40.3	39.0	41.2	39.0	39.4	37.2	38.0	38.2	40.6	38.6	40.2
Cigars.....	38.1	39.2	39.4	38.9	38.5	37.5	37.9	36.9	36.6	35.7	35.9	37.1	37.1	37.4	37.5
Textile mill products.....	41.2	41.4	40.9	40.3	40.5	39.9	40.2	39.5	39.0	38.8	38.5	38.0	38.1	39.5	40.4
Cotton broad woven fabrics.....	41.7	41.9	41.7	40.7	40.3	39.8	39.9	39.4	39.1	38.7	38.3	38.4	39.2	40.1	40.6
Silk and synthetic broad woven fabrics.....	43.4	43.1	42.3	41.8	42.1	41.3	41.3	41.0	40.3	39.9	39.9	39.8	40.1	41.4	42.1
Weaving and finishing broad woolsens.....	41.7	41.5	40.7	41.7	42.0	42.5	42.6	41.9	40.8	40.1	40.2	39.1	37.8	40.6	42.3
Narrow fabrics and smallwares.....	41.4	41.6	40.3	40.6	40.3	40.2	40.8	40.2	40.0	39.9	39.9	38.7	38.1	39.8	40.8
Knitting.....	38.8	39.5	39.2	38.4	39.2	38.7	38.7	37.9	37.1	37.2	37.0	35.9	35.7	37.7	38.6
Finishing textiles, except wool and knit.....	43.1	42.6	41.9	40.9	41.3	40.5	42.4	41.7	41.4	41.4	41.6	39.6	39.7	40.3	41.7
Floor covering.....	42.6	43.1	42.8	42.3	42.0	37.7	40.8	39.1	39.4	39.6	39.0	39.1	39.7	39.9	41.2
Yarn and thread.....	41.5	41.6	40.8	40.8	40.5	39.9	40.1	39.4	38.6	38.2	37.6	36.8	37.4	38.7	40.0
Miscellaneous textile goods.....	41.5	41.5	40.8	40.5	40.5	40.5	41.0	40.1	39.7	39.4	38.5	38.9	38.1	40.0	40.7
Average hourly earnings															
Food and kindred products.....	\$2.22	\$2.19	\$2.17	\$2.15	\$2.14	\$2.18	\$2.18	\$2.19	\$2.18	\$2.17	\$2.17	\$2.17	\$2.14	\$2.11	\$2.02
Meat products.....	2.46	2.42	2.39	2.36	2.35	2.36	2.35	2.37	2.35	2.38	2.39	2.40	2.38	2.33	2.24
Dairy products.....	2.21	2.22	2.21	2.22	2.17	2.18	2.17	2.17	2.17	2.16	2.15	2.16	2.15	2.12	2.04
Canned and preserved food, except meats.....	1.86	1.84	1.85	1.83	1.83	1.84	1.87	1.89	1.91	1.86	1.84	1.82	1.81	1.78	1.70
Grain mill products.....	2.30	2.30	2.25	2.25	2.20	2.17	2.15	2.18	2.20	2.20	2.20	2.20	2.18	2.13	2.06
Bakery products.....	2.21	2.22	2.21	2.20	2.19	2.19	2.19	2.17	2.15	2.15	2.15	2.14	2.14	2.09	1.99
Sugar.....	2.09	2.09	2.10	2.39	2.38	2.41	2.37	2.41	2.31	2.32	2.27	2.25	1.92	2.12	2.01
Confectionery and related products.....	1.85	1.83	1.84	1.86	1.84	1.87	1.86	1.85	1.84	1.81	1.80	1.79	1.75	1.76	1.69
Beverages.....	2.53	2.52	2.52	2.51	2.47	2.52	2.48	2.46	2.48	2.46	2.43	2.42	2.44	2.40	2.31
Miscellaneous food and kindred products.....	2.06	2.05	2.04	2.08	2.07	2.07	2.05	2.05	2.03	2.02	2.02	2.02	2.00	1.98	1.92
Tobacco manufactures.....	1.83	1.81	1.70	1.62	1.70	1.86	1.88	1.86	1.86	1.79	1.76	1.73	1.74	1.70	1.64
Cigarettes.....	2.23	2.23	2.24	2.15	2.15	2.15	2.18	2.18	2.18	2.12	2.12	2.11	2.13	2.08	2.00
Cigars.....	1.53	1.53	1.51	1.51	1.49	1.47	1.49	1.47	1.46	1.46	1.45	1.46	1.46	1.44	1.41
Textile mill products.....	1.65	1.65	1.64	1.64	1.63	1.62	1.62	1.62	1.62	1.62	1.61	1.61	1.61	1.61	1.56
Cotton broad woven fabrics.....	1.60	1.60	1.60	1.59	1.58	1.57	1.57	1.57	1.57	1.57	1.56	1.56	1.56	1.56	1.50
Silk and synthetic broad woven fabrics.....	1.68	1.68	1.67	1.66	1.67	1.65	1.66	1.65	1.65	1.64	1.64	1.64	1.64	1.65	1.59
Weaving and finishing broad woolsens.....	1.77	1.77	1.77	1.77	1.77	1.76	1.75	1.75	1.74	1.73	1.72	1.72	1.72	1.72	1.67
Narrow fabrics and smallwares.....	1.71	1.71	1.72	1.72	1.71	1.69	1.69	1.69	1.68	1.66	1.66	1.66	1.68	1.66	1.61
Knitting.....	1.59	1.60	1.58	1.57	1.54	1.54	1.54	1.54	1.54	1.54	1.53	1.53	1.52	1.51	1.48
Finishing textiles, except wool and knit.....	1.82	1.81	1.81	1.79	1.79	1.80	1.80	1.80	1.80	1.80	1.81	1.79	1.79	1.78	1.73
Floor covering.....	1.79	1.76	1.76	1.76	1.76	1.79	1.77	1.76	1.77	1.76	1.76	1.77	1.77	1.77	1.76
Yarn and thread.....	1.52	1.52	1.51	1.52	1.51	1.50	1.50	1.49	1.49	1.49	1.49	1.49	1.48	1.50	1.46
Miscellaneous textile goods.....	1.90	1.90	1.89	1.88	1.88	1.88	1.88	1.87	1.86	1.85	1.84	1.85	1.85	1.84	1.78

See footnote at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Industry	1961												1960	Annual average	
	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960	1959
Manufacturing—Continued	Average weekly earnings														
<i>Nondurable goods—Continued</i>															
Apparel and related products.....	\$60.12	\$60.62	\$60.14	\$56.93	\$59.86	\$58.16	\$56.64	\$55.84	\$56.51	\$57.51	\$56.19	\$55.06	\$52.79	\$56.45	\$56.63
Men's and boys' suits and coats.....	71.97	70.62	68.60	65.43	69.84	68.40	68.32	67.71	65.51	65.55	66.34	67.45	63.27	68.27	65.28
Men's and boys' furnishings.....	52.88	52.97	52.97	51.52	50.92	49.08	48.91	47.75	47.30	48.06	46.90	46.71	46.15	48.55	49.14
Women's, misses', and juniors' outerwear.....	62.75	63.54	63.88	58.66	65.05	63.61	58.86	58.21	61.54	63.14	59.94	57.28	54.16	58.76	59.68
Women's and children's undergarments.....	55.94	57.99	57.15	54.90	54.31	52.64	52.35	52.33	53.14	53.21	52.04	51.16	49.20	51.91	51.97
Hats, caps, and millinery.....	63.36	62.28	64.26	59.19	66.25	66.06	62.12	57.62	59.51	64.42	67.69	62.84	55.08	60.54	61.90
Girls' and children's outerwear.....	52.65	54.66	54.47	49.53	53.49	53.72	53.87	51.39	50.66	52.69	54.09	52.10	46.51	51.64	50.84
Fur goods and miscellaneous apparel.....	64.98	66.77	65.14	59.49	61.46	61.03	59.83	58.45	57.56	58.22	56.86	56.93	55.44	58.74	60.62
Miscellaneous fabricated textile products.....	63.63	63.79	62.81	61.55	62.65	61.02	62.10	60.96	60.70	60.48	59.89	59.45	60.35	60.48	59.75
Paper and allied products.....	101.91	102.38	101.91	102.15	101.05	100.58	100.39	97.90	97.90	96.14	95.68	95.22	94.30	95.37	93.30
Paper and pulp.....	112.46	112.71	111.51	111.51	111.13	110.88	109.56	108.13	108.38	106.03	106.21	105.29	105.47	105.46	102.75
Paperboard.....	113.41	111.76	113.28	113.28	110.38	112.52	110.88	108.50	107.57	105.40	103.25	105.90	105.25	105.16	102.90
Converted paper and paperboard products.....	91.36	89.44	89.01	88.38	88.18	87.54	87.34	85.05	85.26	85.47	85.06	83.42	82.99	83.23	81.16
Paperboard containers and boxes.....	91.96	94.15	93.93	95.00	93.06	92.18	91.98	88.75	88.34	87.08	86.24	85.39	83.10	86.10	85.27
Printing, publishing, and allied industries.....	107.97	106.09	105.71	106.37	105.33	104.39	104.67	104.12	104.01	103.90	103.36	102.98	103.36	102.80	99.72
Newspaper publishing and printing.....	111.67	109.50	108.77	107.74	107.02	106.07	106.95	107.68	106.36	105.05	104.69	104.11	109.00	105.33	101.84
Periodical publishing and printing.....	109.59	110.04	115.75	119.48	113.93	109.30	107.29	105.65	104.99	107.80	108.23	109.14	105.81	109.18	105.60
Books.....	100.44	98.89	100.04	100.78	101.52	100.04	99.88	100.12	97.36	96.96	97.28	96.24	93.14	95.82	92.34
Commercial printing.....	109.30	107.80	107.25	107.92	106.98	106.04	105.65	104.99	105.03	106.35	104.61	104.76	103.30	103.88	100.88
Bookbinding and related industries.....	84.20	82.19	82.51	82.73	82.82	81.68	82.39	81.53	81.15	81.15	81.62	82.13	79.61	78.87	77.16
Other publishing and printing industries.....	110.19	107.97	108.08	108.67	108.19	107.80	108.19	108.30	108.39	108.57	107.80	107.42	104.90	106.37	104.06
Apparel and related products.....	36.0	36.3	35.8	34.5	36.5	35.9	35.4	34.9	35.1	35.5	34.9	34.2	33.2	35.5	36.3
Men's and boys' suits and coats.....	37.1	36.4	35.0	33.9	36.0	36.0	35.4	34.9	34.3	34.5	35.1	35.5	33.3	36.9	37.3
Men's and boys' furnishings.....	37.5	37.3	37.3	36.8	38.0	36.9	36.5	35.9	35.3	35.6	35.0	34.6	34.7	36.5	37.8
Women's, misses', and juniors' outerwear.....	33.2	33.8	33.1	31.2	34.6	34.2	32.7	32.7	34.0	34.5	33.3	32.0	30.6	33.2	34.1
Women's and children's undergarments.....	36.8	37.9	37.6	36.6	37.2	36.3	36.1	35.6	36.4	36.2	35.4	34.8	33.7	35.8	36.6
Hats, caps, and millinery.....	36.0	36.0	35.7	32.7	36.6	35.9	35.7	34.3	34.8	36.6	37.4	35.5	32.4	35.2	36.2
Girls' and children's outerwear.....	35.1	36.2	35.6	32.8	35.9	36.3	36.4	35.2	34.7	35.6	36.3	35.2	32.3	35.3	35.8
Fur goods and miscellaneous apparel.....	36.3	37.3	36.8	35.2	36.8	35.9	35.4	35.0	35.1	35.5	35.1	34.5	33.4	35.6	36.3
Miscellaneous fabricated textile products.....	38.1	38.2	38.3	37.3	38.2	37.9	38.1	37.4	37.7	37.8	37.2	36.7	36.8	37.8	38.3
Paper and allied products.....	43.0	43.2	43.0	43.1	43.0	42.8	42.9	42.2	42.2	41.8	41.6	41.4	41.0	42.2	42.8
Paper and pulp.....	44.1	44.2	43.9	43.9	44.1	44.0	44.0	43.6	43.7	43.1	43.0	42.8	42.7	43.4	44.1
Paperboard.....	44.3	44.0	44.6	44.6	43.8	44.3	44.0	43.4	43.2	42.5	41.8	42.7	42.1	43.1	43.6
Converted paper and paperboard products.....	42.1	41.6	41.4	41.3	41.4	41.1	41.2	40.5	40.6	40.7	40.7	40.3	39.9	40.8	41.2
Paperboard containers and boxes.....	41.8	42.6	42.5	42.6	42.3	41.9	42.0	40.9	40.9	40.5	40.3	39.9	39.2	41.0	41.8
Printing, publishing, and allied industries.....	38.7	38.3	38.3	38.4	38.3	38.1	38.2	38.0	38.1	38.2	38.0	38.0	38.0	38.5	38.5
Newspaper publishing and printing.....	37.1	36.5	36.5	36.4	36.4	36.2	36.5	36.5	36.3	36.1	36.1	35.9	37.2	36.7	36.5
Periodical publishing and printing.....	39.0	39.3	40.9	41.2	40.4	39.6	39.3	38.7	38.6	39.2	39.5	39.4	38.9	39.7	39.7
Books.....	40.5	40.2	40.5	40.8	41.1	41.0	40.6	41.2	40.4	40.4	40.2	40.1	39.3	40.6	40.5
Commercial printing.....	39.6	39.2	39.0	39.1	38.9	38.7	38.6	38.9	39.1	38.6	38.8	38.8	39.4	39.2	39.4
Bookbinding and related industries.....	38.1	37.7	38.2	38.3	38.7	38.3	38.5	38.1	38.1	38.1	38.5	38.2	37.2	38.1	38.2
Other publishing and printing industries.....	38.8	38.7	38.6	38.4	38.5	38.5	38.5	38.0	38.3	38.5	38.5	38.5	37.6	38.4	38.4
Apparel and related products.....	\$1.67	\$1.67	\$1.68	\$1.65	\$1.64	\$1.62	\$1.60	\$1.60	\$1.61	\$1.62	\$1.61	\$1.61	\$1.59	\$1.59	\$1.56
Men's and boys' suits and coats.....	1.94	1.94	1.96	1.93	1.94	1.90	1.93	1.94	1.91	1.90	1.89	1.90	1.85	1.75	1.75
Men's and boys' furnishings.....	1.41	1.42	1.42	1.40	1.34	1.33	1.34	1.33	1.34	1.35	1.34	1.35	1.33	1.33	1.30
Women's, misses', and juniors' outerwear.....	1.89	1.88	1.93	1.88	1.88	1.86	1.80	1.78	1.81	1.83	1.80	1.79	1.77	1.77	1.75
Women's and children's undergarments.....	1.52	1.53	1.52	1.50	1.46	1.45	1.45	1.47	1.46	1.47	1.47	1.47	1.46	1.45	1.42
Hats, caps, and millinery.....	1.76	1.73	1.80	1.81	1.81	1.84	1.74	1.68	1.71	1.76	1.81	1.77	1.70	1.72	1.71
Girls' and children's outerwear.....	1.50	1.51	1.53	1.51	1.49	1.48	1.48	1.46	1.46	1.48	1.49	1.48	1.44	1.46	1.42
Fur goods and miscellaneous apparel.....	1.79	1.79	1.77	1.69	1.67	1.70	1.69	1.67	1.64	1.64	1.62	1.65	1.66	1.65	1.67
Miscellaneous fabricated textile products.....	1.67	1.67	1.64	1.65	1.64	1.61	1.63	1.63	1.61	1.60	1.61	1.62	1.64	1.60	1.56
Paper and allied products.....	2.37	2.37	2.37	2.37	2.35	2.35	2.34	2.32	2.32	2.30	2.30	2.30	2.26	2.26	2.18
Paper and pulp.....	2.55	2.55	2.54	2.54	2.52	2.52	2.49	2.48	2.48	2.46	2.47	2.46	2.47	2.43	2.33
Paperboard.....	2.56	2.54	2.54	2.54	2.52	2.54	2.52	2.50	2.49	2.48	2.47	2.48	2.50	2.44	2.36
Converted paper and paperboard products.....	2.17	2.15	2.15	2.14	2.13	2.13	2.12	2.10	2.10	2.10	2.09	2.07	2.08	2.04	1.97
Paperboard containers and boxes.....	2.20	2.21	2.21	2.23	2.20	2.20	2.19	2.17	2.16	2.15	2.14	2.14	2.12	2.10	2.04
Printing, publishing, and allied industries.....	2.79	2.77	2.76	2.77	2.75	2.74	2.74	2.74	2.73	2.72	2.72	2.71	2.72	2.67	2.59
Newspaper publishing and printing.....	3.01	3.00	2.98	2.96	2.94	2.93	2.93	2.95	2.98	2.91	2.90	2.90	2.93	2.87	2.79
Periodical publishing and printing.....	2.81	2.80	2.83	2.90	2.82	2.76	2.73	2.73	2.72	2.75	2.74	2.77	2.72	2.75	2.66
Books.....	2.48	2.46	2.47	2.47	2.47	2.44	2.46	2.43	2.41	2.40	2.42	2.40	2.37	2.38	2.28
Commercial printing.....	2.76	2.75	2.75	2.76	2.75	2.74	2.73	2.72	2.70	2.72	2.71	2.70	2.69	2.65	2.56
Bookbinding and related industries.....	2.21	2.18	2.16	2.16	2.14	2.13	2.14	2.14	2.13	2.13	2.12	2.15	2.14	2.07	2.02
Other publishing and printing industries.....	2.84	2.79	2.80	2.83	2.81	2.80	2.81	2.85	2.83	2.82	2.80	2.79	2.79	2.77	2.71

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Industry	1961												1960	Annual average	
	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960	1959
	Average weekly earnings														
Manufacturing—Continued															
Nondurable goods—Continued															
Chemicals and allied products.....	\$109.25	\$109.52	\$108.58	\$107.53	\$107.49	\$107.90	\$108.00	\$105.06	\$104.24	\$104.24	\$103.89	\$104.14	\$103.38	\$103.25	\$99.36
Industrial chemicals.....	123.48	123.77	123.19	121.60	121.51	122.06	121.80	119.81	119.11	118.53	117.83	118.40	117.55	117.31	113.15
Plastics and synthetics, except glass.....	110.14	110.83	109.52	108.05	107.90	108.94	109.72	105.88	105.32	104.65	103.89	103.38	104.04	104.17	100.50
Drugs.....	96.52	96.52	95.88	95.18	93.96	93.43	94.77	93.26	92.46	92.97	92.52	92.34	89.89	90.68	87.51
Soap, cleaners, and toilet goods.....	102.18	100.28	102.58	100.28	100.60	99.22	101.02	97.68	97.68	96.32	96.08	96.32	94.64	94.77	90.54
Paints, varnishes, and allied products.....	100.12	100.61	98.58	98.42	99.39	100.12	100.43	99.05	97.68	96.48	95.04	94.33	94.64	95.65	92.70
Agricultural chemicals.....	87.34	85.48	85.87	84.04	84.66	85.07	84.00	82.68	81.46	84.29	83.50	84.12	83.75	82.37	80.17
Other chemical products.....	102.84	104.08	103.09	103.34	102.75	102.51	101.26	99.46	98.98	98.57	98.09	99.53	98.40	97.06	94.16
Petroleum refining and related industries.....	123.32	126.46	125.93	126.88	122.59	126.42	126.24	123.30	124.42	121.80	121.00	123.90	118.73	118.78	117.42
Petroleum refining.....	129.34	132.07	129.65	131.29	126.95	131.24	130.38	128.21	129.56	127.17	126.45	129.58	123.62	123.22	121.99
Other petroleum and coal products.....	97.20	101.28	110.74	107.93	103.81	105.70	109.66	101.24	99.41	95.17	91.80	96.12	95.88	99.26	97.61
Rubber and miscellaneous plastic products.....	102.83	100.12	98.49	98.74	97.85	98.90	97.03	95.04	93.69	91.89	91.49	92.51	91.96	92.97	94.16
Tires and inner tubes.....	137.81	130.00	126.14	127.70	125.96	128.86	121.88	115.20	114.82	110.56	110.11	113.24	117.21	116.33	120.64
Other rubber products.....	96.10	94.12	92.80	92.57	91.30	91.53	91.35	91.58	90.27	88.13	87.91	87.91	86.30	87.82	88.38
Miscellaneous plastic products.....	84.67	83.84	83.64	84.26	83.44	83.03	84.67	83.03	81.20	80.80	80.20	79.99	78.56	79.40	78.53
Leather and leather products.....	65.79	64.98	62.76	61.88	62.79	63.58	63.29	61.46	59.95	61.62	61.55	62.75	58.35	60.52	60.26
Leather tanning and finishing.....	88.54	86.62	85.57	85.57	85.39	84.77	85.41	83.92	84.77	82.68	80.85	81.06	81.66	81.74	79.39
Footwear, except rubber.....	63.91	61.92	58.93	59.24	60.64	61.66	61.07	58.97	56.86	59.33	59.73	60.86	56.25	58.04	58.28
Other leather products.....	63.14	64.35	63.53	59.33	61.40	60.86	60.75	59.62	59.09	60.16	60.00	60.38	55.81	58.62	57.99
	Average weekly hours														
Chemicals and allied products.....	41.7	41.8	41.6	41.2	41.5	41.5	41.7	41.2	41.2	41.2	40.9	41.0	40.7	41.3	41.4
Industrial chemicals.....	42.0	42.1	41.9	41.5	41.9	41.8	42.0	41.6	41.5	41.3	41.2	41.4	41.1	41.6	41.6
Plastics and synthetics, except glass.....	42.2	42.3	41.8	41.4	41.5	41.9	42.2	41.2	41.3	41.2	40.9	40.7	40.8	41.5	41.7
Drugs.....	40.9	40.9	40.8	40.5	40.5	40.1	40.5	40.2	40.2	40.6	40.4	40.5	39.6	40.3	40.7
Soap, cleaners, and toilet goods.....	41.2	41.1	41.7	41.1	40.4	41.0	41.4	40.7	40.7	40.3	40.2	40.3	39.6	40.5	40.6
Paints, varnishes, and allied products.....	40.7	40.9	40.4	40.5	40.9	41.2	41.5	41.1	40.7	40.2	39.6	39.8	39.6	40.7	41.2
Agricultural chemicals.....	42.4	41.9	42.3	41.4	41.5	41.7	42.0	42.4	43.1	44.6	42.6	42.7	42.3	42.9	43.1
Other chemical products.....	41.3	41.8	41.4	41.5	41.6	41.5	41.5	41.1	40.9	40.9	40.7	41.3	41.0	41.3	41.3
Petroleum refining and related industries.....	40.7	41.6	41.7	41.6	41.0	42.0	41.8	41.1	41.2	40.6	40.2	41.3	40.8	41.1	41.2
Petroleum refining.....	40.8	41.4	40.9	40.9	40.3	41.4	41.0	40.7	41.0	40.5	40.4	41.4	40.8	40.8	40.8
Other petroleum and coal products.....	40.5	42.2	45.2	44.6	43.8	44.6	45.5	42.9	42.3	41.2	39.4	40.9	40.8	42.6	43.0
Rubber and miscellaneous plastic products.....	41.8	41.2	40.7	40.8	40.6	40.7	40.6	40.1	39.7	39.1	39.1	39.2	38.8	39.9	41.3
Tires and inner tubes.....	43.2	41.4	40.3	40.8	40.5	41.3	39.7	38.4	38.4	37.1	37.2	38.0	39.2	39.3	41.6
Other rubber products.....	41.6	41.1	40.7	40.6	40.4	40.5	40.6	40.7	40.3	39.7	39.6	39.6	38.7	40.1	41.3
Miscellaneous plastic products.....	41.1	41.1	41.0	41.1	40.9	40.5	41.3	40.7	40.2	40.0	39.9	39.6	38.7	40.1	40.9
Leather and leather products.....	38.7	38.0	36.7	36.4	37.6	38.3	37.9	36.8	35.9	36.9	37.3	37.8	35.8	36.9	37.9
Leather tanning and finishing.....	40.8	40.1	39.8	39.8	39.9	39.8	40.1	39.4	39.8	39.0	38.5	38.6	38.7	39.3	39.3
Footwear, except rubber.....	38.5	37.3	35.5	35.9	37.2	38.3	37.7	36.4	35.1	36.4	37.1	37.8	35.6	36.5	37.6
Other leather products.....	38.5	39.0	38.5	36.4	37.9	37.8	37.5	36.8	36.7	37.6	37.5	37.5	35.1	37.1	37.9
	Average hourly earnings														
Chemicals and allied products.....	\$2.62	\$2.62	\$2.61	\$2.61	\$2.59	\$2.60	\$2.59	\$2.55	\$2.53	\$2.53	\$2.54	\$2.54	\$2.54	\$2.50	\$2.40
Industrial chemicals.....	2.94	2.94	2.94	2.93	2.90	2.92	2.90	2.88	2.87	2.87	2.86	2.86	2.86	2.82	2.72
Plastics and synthetics, except glass.....	2.61	2.62	2.62	2.61	2.60	2.60	2.60	2.57	2.55	2.54	2.54	2.54	2.55	2.51	2.41
Drugs.....	2.36	2.36	2.35	2.35	2.32	2.32	2.33	2.32	2.30	2.29	2.29	2.28	2.27	2.25	2.15
Soap, cleaners, and toilet goods.....	2.48	2.44	2.46	2.44	2.43	2.42	2.44	2.40	2.40	2.39	2.39	2.39	2.39	2.34	2.23
Paints, varnishes, and allied products.....	2.46	2.46	2.44	2.43	2.43	2.43	2.42	2.41	2.40	2.40	2.40	2.37	2.39	2.35	2.25
Agricultural chemicals.....	2.06	2.04	2.03	2.03	2.04	2.04	2.00	1.95	1.89	1.89	1.96	1.97	1.98	1.92	1.86
Other chemical products.....	2.49	2.49	2.49	2.49	2.47	2.47	2.44	2.42	2.42	2.41	2.41	2.41	2.40	2.35	2.28
Petroleum refining and related industries.....	3.03	3.04	3.02	3.05	2.99	3.01	3.02	3.00	3.02	3.00	3.01	3.00	2.91	2.89	2.85
Petroleum refining.....	3.17	3.19	3.17	3.21	3.15	3.17	3.18	3.15	3.16	3.14	3.13	3.13	3.03	3.02	2.99
Other petroleum and coal products.....	2.40	2.40	2.45	2.42	2.37	2.37	2.41	2.36	2.35	2.31	2.33	2.35	2.35	2.33	2.27
Rubber and miscellaneous plastic products.....	2.46	2.43	2.42	2.42	2.41	2.43	2.39	2.37	2.36	2.35	2.34	2.36	2.37	2.33	2.28
Tires and inner tubes.....	3.19	3.14	3.13	3.12	3.11	3.12	3.07	3.00	2.99	2.98	2.96	2.98	2.97	2.96	2.90
Other rubber products.....	2.31	2.29	2.28	2.28	2.26	2.26	2.25	2.25	2.24	2.22	2.22	2.22	2.23	2.19	2.14
Miscellaneous plastic products.....	2.06	2.04	2.04	2.05	2.04	2.05	2.05	2.04	2.02	2.02	2.01	2.02	2.03	1.98	1.92
Leather and leather products.....	1.70	1.71	1.71	1.70	1.67	1.66	1.67	1.67	1.67	1.67	1.65	1.66	1.63	1.64	1.59
Leather tanning and finishing.....	2.17	2.16	2.15	2.15	2.14	2.13	2.13	2.13	2.13	2.12	2.10	2.10	2.11	2.08	2.02
Footwear, except rubber.....	1.66	1.66	1.66	1.65	1.63	1.61	1.62	1.62	1.62	1.63	1.61	1.61	1.58	1.59	1.55
Other leather products.....	1.64	1.65	1.65	1.63	1.62	1.61	1.62	1.62	1.61	1.60	1.60	1.61	1.59	1.58	1.53

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Industry	1961												1960	Annual average	
	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960	1959
Average weekly earnings															
Transportation and public utilities:															
Railroad transportation:															
Class I railroads ³	-----	\$114.70	\$112.41	\$112.71	\$114.48	\$111.49	\$114.38	\$113.95	\$108.27	\$111.41	\$115.02	\$108.92	\$111.04	\$108.84	\$101.84
Local and interurban passenger transit:															
Local and suburban transportation.....	\$97.75	100.02	98.24	98.67	99.16	98.47	99.41	98.06	97.16	97.13	97.16	95.34	98.31	94.82	91.57
Intercity and rural buslines.....	113.21	110.81	111.57	119.97	116.77	117.13	112.49	108.94	112.58	106.14	108.03	107.68	104.33	105.22	100.01
Motor freight transportation and storage.....	111.45	111.04	111.67	111.14	111.19	108.42	109.30	106.55	104.45	103.53	103.63	102.06	103.73	104.17	102.12
Pipeline transportation.....	138.18	130.65	133.80	133.50	130.33	137.03	124.42	128.95	133.06	128.16	129.03	135.29	127.08	124.53	124.14
Communication:															
Telephone communication.....	96.47	96.47	96.64	97.53	93.62	93.46	92.12	91.03	90.17	90.02	90.71	90.48	91.64	89.50	85.46
Telegraph communication ⁴	103.58	103.58	104.33	105.25	104.33	104.90	105.33	106.00	102.51	103.17	102.01	103.00	100.77	100.01	95.99
Radio and television broadcasting.....	124.66	121.03	121.59	122.29	119.27	118.81	117.50	117.66	119.58	118.04	118.80	120.51	121.28	121.13	115.50
Electric, gas, and sanitary services.....	114.80	115.64	114.95	114.26	112.07	112.34	110.98	110.70	110.43	110.30	110.84	110.84	112.06	108.65	103.73
Electric companies and systems.....	114.11	115.77	114.39	114.54	113.44	113.71	112.20	111.52	110.84	110.98	110.57	110.84	111.79	109.45	104.81
Gas companies and systems.....	107.01	108.21	108.32	105.26	103.12	103.94	102.36	102.36	102.77	102.31	103.63	103.63	105.16	100.69	97.51
Combined utility systems.....	125.55	125.75	125.14	124.01	121.88	121.25	120.66	119.48	119.07	119.54	121.42	120.13	121.84	117.26	110.70
Water, steam, and sanitary systems.....	93.38	94.71	93.61	94.35	94.16	93.43	92.84	92.89	92.16	91.08	92.80	91.63	90.58	89.84	86.11
Average weekly hours															
Transportation and public utilities:															
Railroad transportation:															
Class I railroads ³	-----	42.8	42.1	41.9	43.2	41.6	43.0	43.0	40.4	42.2	42.6	41.1	41.9	41.7	41.4
Local and interurban passenger transit:															
Local and suburban transportation.....	42.5	43.3	42.9	42.9	43.3	43.0	43.6	43.2	42.8	42.6	42.8	42.0	43.5	43.1	43.4
Intercity and rural buslines.....	42.4	41.5	42.1	44.6	43.9	44.2	43.1	41.9	43.3	41.3	42.7	41.9	41.9	42.6	42.2
Motor freight transportation and storage.....	41.9	41.9	42.3	42.1	42.6	41.7	42.2	41.3	40.8	40.6	40.8	40.5	41.0	41.5	42.2
Pipeline transportation.....	42.0	40.2	40.3	40.7	40.1	41.4	38.4	39.8	40.2	39.8	39.7	41.5	40.6	40.3	40.7
Communication:															
Telephone communication.....	39.7	39.7	40.1	40.3	39.5	39.6	39.2	38.9	38.7	38.8	39.1	39.0	39.5	39.6	39.2
Telegraph communication ⁴	41.6	41.6	41.9	42.1	41.9	42.3	42.3	42.4	41.5	41.6	41.3	41.7	41.3	42.2	42.1
Radio and television broadcasting.....	39.2	38.3	38.6	38.7	38.6	38.7	38.4	38.2	38.7	38.2	38.2	38.5	38.5	38.7	38.5
Electric, gas, and sanitary services.....	41.0	41.3	41.2	41.1	40.9	41.0	40.8	40.7	40.6	40.7	40.9	40.9	41.2	41.0	41.0
Electric companies and systems.....	40.9	41.2	41.0	41.2	41.1	41.2	41.1	41.0	40.9	40.8	40.8	40.9	41.1	41.3	41.1
Gas companies and systems.....	41.0	41.3	41.5	40.8	40.6	40.6	40.3	40.3	40.3	40.6	40.8	40.8	41.4	40.6	40.8
Combined utility system.....	41.3	41.5	41.3	41.2	40.9	41.1	40.9	40.5	40.5	40.8	41.3	41.0	41.3	41.0	41.0
Water, steam, and sanitary systems.....	40.6	41.0	40.7	41.2	41.3	40.8	40.9	41.1	40.6	40.3	40.7	40.5	40.8	41.4	41.6
Average hourly earnings															
Transportation and public utilities:															
Railroad transportation:															
Class I railroads ³	-----	\$2.68	\$2.67	\$2.69	\$2.65	\$2.68	\$2.66	\$2.65	\$2.68	\$2.64	\$2.70	\$2.65	\$2.65	\$2.61	\$2.46
Local and interurban passenger transit:															
Local and suburban transportation.....	\$2.30	2.31	2.29	2.30	2.29	2.29	2.28	2.27	2.27	2.28	2.27	2.27	2.26	2.20	2.11
Intercity and rural buslines.....	2.67	2.67	2.65	2.69	2.66	2.65	2.61	2.60	2.60	2.57	2.53	2.57	2.49	2.47	2.37
Motor freight transportation and storage.....	2.66	2.65	2.64	2.64	2.61	2.60	2.59	2.58	2.56	2.55	2.54	2.52	2.53	2.51	2.42
Pipeline transportation.....	3.29	3.25	3.32	3.28	3.25	3.31	3.24	3.24	3.31	3.22	3.25	3.26	3.13	3.09	3.05
Communication:															
Telephone communication.....	2.43	2.43	2.41	2.42	2.37	2.36	2.35	2.34	2.33	2.32	2.32	2.32	2.32	2.26	2.18
Telegraph communication ⁴	2.49	2.49	2.49	2.50	2.49	2.48	2.49	2.50	2.47	2.48	2.47	2.47	2.44	2.37	2.28
Radio and television broadcasting.....	3.18	3.16	3.15	3.16	3.09	3.07	3.06	3.08	3.09	3.09	3.11	3.13	3.15	3.13	3.00
Electric, gas, and sanitary services.....	2.80	2.80	2.79	2.78	2.74	2.74	2.72	2.72	2.72	2.71	2.71	2.71	2.72	2.65	2.53
Electric companies and systems.....	2.79	2.81	2.79	2.78	2.76	2.76	2.73	2.72	2.71	2.72	2.71	2.71	2.72	2.65	2.55
Gas companies and systems.....	2.61	2.62	2.61	2.58	2.54	2.56	2.54	2.54	2.55	2.52	2.54	2.54	2.54	2.48	2.39
Combined utility systems.....	3.04	3.03	3.03	3.01	2.98	2.95	2.95	2.95	2.94	2.93	2.94	2.93	2.95	2.86	2.70
Water, steam, and sanitary systems.....	2.30	2.31	2.30	2.29	2.28	2.29	2.27	2.26	2.27	2.26	2.28	2.26	2.22	2.17	2.07

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Industry	1961												1960	Annual average	
	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960	1959
	Average weekly earnings														
Wholesale and retail trade ³	\$72.93	\$73.34	\$73.34	\$73.72	\$73.88	\$74.07	\$73.51	\$72.37	\$71.98	\$71.41	\$71.60	\$71.60	\$70.20	\$70.98	\$69.17
Wholesale trade.....	95.06	95.00	94.60	94.77	93.79	94.42	94.19	92.69	92.69	91.66	91.43	91.88	91.30	91.13	88.91
Motor vehicles and automotive equipment.....	91.79	91.57	90.72	89.87	89.25	89.25	88.83	88.41	88.41	87.36	87.36	87.99	87.36	86.53	84.22
Drugs, chemicals, and allied products.....	95.84	95.44	95.44	95.34	93.83	95.11	93.83	93.37	93.13	93.37	92.97	92.80	91.94	91.20	87.38
Dry goods and apparel.....	94.82	93.74	95.88	94.88	93.62	92.72	90.62	90.99	92.10	91.99	91.20	93.65	89.68	90.68	89.68
Groceries and related products.....	88.41	88.82	88.18	89.44	88.61	89.46	87.78	86.31	86.10	84.86	84.66	84.66	85.90	84.67	81.56
Electrical goods.....	100.45	100.28	99.55	99.55	97.28	97.28	97.12	95.76	96.07	95.12	95.76	96.88	95.51	95.11	93.73
Hardware, plumbing, and heating goods.....	91.80	92.16	91.80	91.17	90.32	89.69	89.91	88.66	88.88	88.48	86.83	87.91	87.89	86.86	84.45
Machinery, equipment, and supplies.....	102.66	103.73	103.07	104.30	101.68	101.84	102.41	101.18	100.78	99.88	99.72	99.55	102.16	99.80	97.99
Retail trade ⁴	64.73	64.13	64.64	64.60	65.23	65.57	64.90	63.84	63.46	62.70	62.87	63.25	61.82	62.37	60.76
General merchandise stores.....	51.62	50.21	50.66	51.11	51.25	51.39	51.16	50.22	49.74	49.39	49.39	49.74	49.62	48.58	47.60
Department stores.....	55.77	53.95	55.60	56.25	56.03	56.19	55.71	55.55	54.19	53.69	53.51	54.22	53.96	53.09	52.15
Limited price variety stores.....	37.97	37.21	37.67	37.79	38.08	38.53	37.18	35.95	36.27	36.92	36.82	36.51	35.49	35.53	34.22
Food stores.....	63.55	63.55	63.55	63.90	64.59	64.40	63.36	61.95	61.60	61.24	61.42	61.06	61.39	60.98	58.72
Grocery, meat, and vegetable stores.....	65.16	65.15	64.79	65.70	66.05	66.23	65.34	63.90	63.37	63.01	62.83	62.83	63.18	62.95	60.15
Apparel and accessories stores.....	55.08	52.02	52.67	52.10	52.60	52.80	52.55	51.60	51.11	50.42	51.50	51.94	52.24	51.30	50.40
Men's and boys' apparel stores.....	65.66	63.84	64.67	63.54	66.53	66.64	65.05	63.38	62.63	62.12	63.75	66.00	64.47	63.29	62.54
Women's ready-to-wear stores.....	49.66	46.90	47.04	46.31	45.75	46.10	45.83	45.50	45.90	45.16	45.02	45.36	45.89	44.41	43.31
Family clothing stores.....	53.87	52.24	51.54	51.55	52.42	51.77	52.13	51.47	51.10	50.96	51.94	51.05	52.26	51.01	50.78
Shoe stores.....	57.26	51.52	52.80	53.46	54.32	53.88	53.46	52.64	50.88	51.04	52.10	52.16	52.96	52.33	51.51
Average weekly hours															
Wholesale and retail trade ³	39.0	38.4	38.6	38.8	39.3	39.4	39.1	38.7	38.7	38.6	38.7	38.7	39.0	39.0	39.3
Wholesale trade.....	40.8	40.6	40.6	40.5	40.6	40.7	40.6	40.3	40.3	40.2	40.1	40.3	40.4	40.5	40.6
Motor vehicles and automotive equipment.....	42.3	42.2	42.0	41.8	42.1	42.3	42.1	41.9	41.9	41.6	41.6	41.7	41.6	41.8	41.9
Drugs, chemicals, and allied products.....	40.1	40.1	40.1	40.4	40.1	40.3	40.1	39.9	39.8	39.9	39.9	40.0	39.8	40.0	39.9
Dry goods and apparel.....	38.7	37.8	38.2	37.8	37.6	38.0	37.6	37.6	37.9	37.7	38.0	38.7	38.0	38.1	38.0
Groceries and related products.....	41.9	41.7	41.4	41.6	41.6	42.0	41.6	41.1	41.0	40.8	40.7	40.9	41.9	41.3	41.4
Electrical goods.....	41.0	41.1	40.8	40.8	40.2	40.2	40.3	39.9	39.7	39.8	39.9	40.2	40.3	40.3	40.4
Hardware, plumbing, and heating goods.....	40.8	40.6	40.8	40.7	40.5	40.4	40.5	40.3	40.4	40.4	40.2	40.7	40.5	40.4	40.6
Machinery, equipment, and supplies.....	40.9	41.0	40.9	40.9	41.0	40.9	40.8	40.8	40.8	40.6	40.7	40.8	40.7	40.9	41.0
Retail trade ⁴	38.3	37.5	37.8	38.0	38.6	38.8	38.4	38.0	38.0	38.0	38.1	38.1	38.4	38.5	38.7
General merchandise stores.....	35.6	33.7	34.0	34.3	35.1	35.2	34.8	34.4	34.3	34.3	34.3	34.3	35.7	34.7	35.0
Department stores.....	35.3	33.3	33.9	34.3	34.8	34.9	34.6	34.5	34.3	34.2	34.3	34.1	35.5	34.7	35.0
Limited price variety stores.....	33.9	31.8	32.2	32.3	33.4	33.8	32.9	32.1	32.1	32.1	32.3	32.6	33.8	32.6	32.9
Food stores.....	35.7	35.5	35.5	35.9	36.7	36.8	36.0	35.4	35.4	35.4	35.5	35.5	35.9	36.3	36.7
Grocery, meat, and vegetable stores.....	35.8	35.6	35.6	36.1	36.9	37.0	36.3	35.7	35.6	35.6	35.7	35.7	36.1	36.6	36.9
Apparel and accessories stores.....	36.0	34.0	34.2	34.5	35.3	35.2	34.8	34.4	34.2	34.3	34.8	34.4	35.3	34.9	35.0
Men's and boys' apparel stores.....	38.4	36.9	37.6	37.6	37.8	38.3	37.6	37.5	37.5	37.2	37.5	37.5	37.7	37.9	37.9
Women's ready-to-wear stores.....	35.4	33.5	33.6	33.8	34.4	34.4	34.2	33.7	33.5	33.7	33.6	33.6	34.5	33.9	34.1
Family clothing stores.....	36.4	35.3	35.3	35.8	36.4	35.7	36.2	36.5	36.5	36.4	37.1	35.7	37.6	36.7	36.8
Shoe stores.....	34.7	32.0	32.0	32.6	34.6	34.1	32.8	31.9	32.0	32.1	33.4	32.2	33.1	32.5	32.6
Average hourly earnings															
Wholesale and retail trade ³	\$1.87	\$1.91	\$1.90	\$1.90	\$1.88	\$1.88	\$1.87	\$1.86	\$1.85	\$1.85	\$1.85	\$1.85	\$1.80	\$1.82	\$1.76
Wholesale trade.....	2.33	2.34	2.33	2.34	2.31	2.32	2.32	2.30	2.30	2.28	2.28	2.28	2.26	2.25	2.19
Motor vehicles and automotive equipment.....	2.17	2.17	2.16	2.15	2.12	2.11	2.11	2.11	2.11	2.10	2.10	2.11	2.10	2.07	2.01
Drugs, chemicals, and allied products.....	2.39	2.38	2.38	2.36	2.34	2.36	2.34	2.34	2.34	2.34	2.33	2.32	2.31	2.28	2.19
Dry goods and apparel.....	2.45	2.48	2.51	2.51	2.49	2.44	2.41	2.42	2.43	2.44	2.40	2.42	2.36	2.38	2.36
Groceries and related products.....	2.11	2.13	2.13	2.15	2.13	2.13	2.11	2.10	2.10	2.08	2.08	2.07	2.05	2.05	1.97
Electrical goods.....	2.45	2.44	2.44	2.44	2.42	2.42	2.41	2.40	2.42	2.39	2.40	2.41	2.37	2.36	2.32
Hardware, plumbing, and heating goods.....	2.25	2.27	2.25	2.25	2.23	2.22	2.22	2.20	2.20	2.19	2.16	2.16	2.17	2.15	2.08
Machinery, equipment, and supplies.....	2.51	2.53	2.52	2.55	2.48	2.49	2.51	2.48	2.47	2.46	2.45	2.44	2.51	2.44	2.39
Retail trade ⁴	1.69	1.71	1.71	1.70	1.69	1.69	1.69	1.68	1.67	1.65	1.65	1.66	1.61	1.62	1.57
General merchandise stores.....	1.45	1.49	1.49	1.49	1.46	1.46	1.47	1.46	1.45	1.44	1.44	1.45	1.39	1.40	1.36
Department stores.....	1.58	1.62	1.64	1.64	1.61	1.61	1.61	1.61	1.58	1.57	1.56	1.59	1.52	1.53	1.49
Limited price variety stores.....	1.12	1.17	1.17	1.17	1.14	1.14	1.13	1.12	1.13	1.15	1.14	1.12	1.05	1.09	1.04
Food stores.....	1.78	1.79	1.79	1.78	1.76	1.75	1.76	1.75	1.74	1.73	1.73	1.72	1.71	1.68	1.60
Grocery, meat, and vegetable stores.....	1.82	1.83	1.82	1.82	1.79	1.79	1.80	1.79	1.78	1.77	1.76	1.76	1.75	1.72	1.63
Apparel and accessories stores.....	1.53	1.53	1.54	1.51	1.49	1.50	1.51	1.50	1.49	1.47	1.48	1.51	1.48	1.47	1.44
Men's and boys' apparel stores.....	1.71	1.73	1.72	1.69	1.76	1.74	1.73	1.69	1.67	1.67	1.70	1.76	1.71	1.67	1.65
Women's ready-to-wear stores.....	1.40	1.40	1.40	1.37	1.33	1.34	1.34	1.35	1.37	1.34	1.34	1.35	1.33	1.31	1.27
Family clothing stores.....	1.48	1.48	1.46	1.44	1.44	1.45	1.44	1.41	1.40	1.40	1.40	1.43	1.39	1.39	1.38
Shoe stores.....	1.65	1.61	1.65	1.64	1.57	1.58	1.63	1.65	1.59	1.59	1.56	1.62	1.60	1.61	1.58

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Industry	1961												1960	Annual average	
	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960	1959
	Average weekly earnings														
Wholesale and retail trade ³ —Continued															
Retail trade ³ —Continued															
Furniture and appliance stores.....	\$81.25	\$79.10	\$78.50	\$78.06	\$78.25	\$77.23	\$77.79	\$76.22	\$76.04	\$75.81	\$74.62	\$76.67	\$77.38	\$74.98	\$73.87
Other retail trade.....	74.46	74.52	73.87	73.46	74.27	74.69	74.10	72.98	72.56	71.72	71.90	72.07	71.99	71.87	70.22
Motor vehicle dealers.....	90.02	90.05	88.97	87.23	89.49	90.17	90.78	89.04	87.96	86.39	84.67	85.31	86.63	87.91	86.08
Other vehicle and accessory dealers.....	78.32	77.53	78.41	78.77	79.20	79.47	79.39	78.94	77.88	77.53	77.79	77.35	76.64	77.26	74.36
Drug stores.....	57.66	56.52	55.94	56.24	56.93	57.00	56.17	55.13	54.46	54.39	54.02	54.31	54.81	53.34	51.14
Finance, insurance, and real estate:															
Banking.....	70.50	70.31	70.12	69.37	69.19	69.56	68.82	68.63	68.82	69.01	69.01	68.45	67.52	67.15	65.10
Security dealers and exchanges.....	132.05	127.93	124.71	125.36	125.04	127.42	143.45	151.10	152.16	139.38	129.37	119.93	118.08	117.12	124.07
Insurance carriers.....	91.64	90.58	90.35	90.26	90.34	90.05	89.57	89.50	89.08	88.80	88.74	88.90	88.07	87.41	85.29
Life insurance.....	97.34	95.42	95.81	95.61	96.10	95.56	94.90	94.74	93.71	93.93	93.89	94.34	93.60	93.32	91.52
Accident and health insurance.....	74.87	76.79	76.47	75.09	73.68	74.14	73.47	72.92	73.88	73.85	73.27	73.16	72.74	71.33	68.48
Fire, marine, and casualty insurance.....	86.78	86.39	85.16	85.46	85.11	85.11	85.01	85.02	85.27	84.24	84.19	83.99	83.12	81.96	79.36
Services and miscellaneous:															
Hotels and lodging places:															
Hotels, tourist courts, and motels ⁶	46.92	46.41	47.08	45.31	45.21	44.88	44.75	45.20	44.85	45.08	44.97	45.08	45.31	43.89	42.40
Personal services:															
Laundries, cleaning and dyeing plants.....	49.15	49.66	50.05	49.15	48.76	49.66	50.42	50.17	48.51	48.25	47.75	48.13	47.63	48.11	46.80
Motion pictures:															
Motion picture filming and distributing.....	114.15	115.10	114.80	116.00	116.31	119.93	119.50	114.94	115.43	119.48	117.66	115.82	118.94	113.69	111.79
Average weekly hours															
Wholesale and retail trade ³ —Continued															
Retail trade ³ —Continued															
Furniture and appliance stores.....	42.1	41.2	41.1	41.3	41.4	41.3	41.6	41.2	41.1	41.2	41.0	41.0	41.6	41.2	41.5
Other retail trade.....	41.6	41.4	41.5	41.5	42.2	42.2	42.1	41.7	41.7	41.7	41.8	41.9	42.1	42.1	42.3
Motor vehicle dealers.....	43.7	43.5	43.4	43.4	44.3	44.2	44.5	44.3	44.2	44.3	44.1	44.2	44.2	44.4	44.6
Other vehicle and accessory dealers.....	44.0	43.8	44.3	44.5	45.0	44.9	44.6	44.6	44.5	44.3	44.2	44.2	44.3	44.4	44.0
Drug stores.....	37.2	36.7	36.8	37.0	37.7	38.0	37.7	37.0	36.8	37.0	37.0	37.2	37.8	37.3	37.6
Finance, insurance, and real estate:															
Banking.....	37.3	37.2	37.1	36.9	37.0	37.0	36.8	36.9	37.0	37.1	37.1	37.2	37.1	37.1	37.2
Security dealers and exchanges.....															
Insurance carriers.....															
Life insurance.....															
Accident and health insurance.....															
Fire, marine, and casualty insurance.....															
Services and miscellaneous:															
Hotels and lodging places:															
Hotels, tourist courts, and motels ⁶	39.1	39.0	39.9	39.4	41.1	40.8	39.6	39.3	39.0	39.2	39.1	39.2	39.4	39.9	40.0
Personal services:															
Laundries, cleaning and dyeing plants.....	38.7	38.8	39.1	38.7	38.7	39.1	39.7	39.5	38.5	38.6	38.2	38.5	38.1	38.8	39.0
Motion pictures:															
Motion picture filming and distributing.....															
Average hourly earnings															
Wholesale and retail trade ³ —Continued															
Retail trade ³ —Continued															
Furniture and appliance stores.....	\$1.93	\$1.92	\$1.91	\$1.89	\$1.89	\$1.87	\$1.87	\$1.85	\$1.85	\$1.84	\$1.82	\$1.87	\$1.86	\$1.82	\$1.78
Other retail trade.....	1.79	1.80	1.78	1.77	1.76	1.77	1.76	1.75	1.74	1.72	1.72	1.72	1.71	1.70	1.66
Motor vehicle dealers.....	2.06	2.07	2.05	2.01	2.02	2.04	2.04	2.01	1.99	1.95	1.92	1.93	1.96	1.98	1.93
Other vehicle and accessory dealers.....	1.78	1.77	1.77	1.77	1.76	1.77	1.78	1.77	1.75	1.75	1.76	1.75	1.73	1.74	1.69
Drug stores.....	1.55	1.54	1.52	1.52	1.51	1.50	1.49	1.49	1.48	1.47	1.46	1.46	1.45	1.43	1.36
Finance, insurance, and real estate:															
Banking.....	1.89	1.89	1.89	1.88	1.87	1.88	1.87	1.86	1.86	1.86	1.86	1.86	1.84	1.82	1.75
Security dealers and exchanges.....															
Insurance carriers.....															
Life insurance.....															
Accident and health insurance.....															
Fire, marine, and casualty insurance.....															
Services and miscellaneous:															
Hotels and lodging places:															
Hotels, tourist courts, and motels ⁶	1.20	1.19	1.18	1.15	1.10	1.10	1.13	1.15	1.15	1.15	1.15	1.15	1.15	1.10	1.06
Personal services:															
Laundries, cleaning and dyeing plants.....	1.27	1.28	1.28	1.27	1.26	1.27	1.27	1.27	1.26	1.25	1.25	1.25	1.25	1.24	1.20
Motion pictures:															
Motion picture filming and distributing.....															

¹ For comparability of data with those published in issues prior to December 1961, see footnote 1, table A-2.

² For employees covered, see footnote 1, table A-3.

³ Preliminary.

⁴ Based upon monthly data summarized in the M-300 report by the Interstate Commerce Commission, which relate to all employees who received pay during the month, except executives, officials, and staff assistants (ICC Group I).

⁵ Data relate to nonsupervisory employees except messengers.

⁶ Excludes eating and drinking places.

⁷ Money payments only; additional value of board, room, uniforms, and tips not included.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics for all series except that for Class I railroads. (See footnote 3.)

TABLE C-2. Average weekly hours, seasonally adjusted, of production workers in selected industries ¹

Industry division and group	1961												1960
	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.
Mining.....	40.4	41.2	41.5	40.8	40.7	41.6	40.5	40.3	39.9	39.3	40.2	40.4	39.3
Contract construction.....	35.4	37.5	37.2	36.7	37.1	36.9	36.8	36.3	35.7	36.9	38.1	37.5	34.8
Manufacturing.....	40.4	40.6	40.2	39.6	40.0	40.0	39.9	39.8	39.7	39.3	39.3	39.0	38.5
Durable goods.....	41.1	41.2	40.6	39.8	40.5	40.5	40.4	40.2	40.0	39.7	39.6	39.3	39.0
Ordinance and accessories.....	41.4	41.5	41.3	40.9	41.1	40.4	40.7	40.4	40.7	40.7	40.4	40.4	39.7
Lumber and wood products, except furniture.....	39.4	39.6	39.9	39.5	39.6	39.5	39.7	39.5	39.0	38.9	39.2	39.3	38.1
Furniture and fixtures.....	40.9	41.0	40.3	40.4	40.1	40.1	40.1	39.6	39.5	39.0	38.9	38.6	38.9
Stone, clay, and glass products.....	40.5	40.8	40.8	41.0	41.0	41.1	40.9	40.4	40.3	40.4	40.2	40.2	39.7
Primary metal industries.....	40.5	40.6	40.5	40.1	40.2	40.5	39.7	39.5	38.9	38.1	38.0	37.5	37.1
Fabricated metal products.....	41.0	41.5	40.9	39.6	40.8	40.9	40.7	40.5	40.5	40.0	39.8	39.7	38.9
Machinery.....	41.6	41.6	41.4	41.1	41.1	41.0	40.8	40.7	40.7	40.2	40.6	40.4	40.0
Electrical equipment and supplies.....	40.5	40.7	40.5	39.4	40.4	40.1	40.1	39.9	40.2	39.9	39.9	39.8	38.6
Transportation equipment.....	42.1	42.7	40.9	38.0	40.6	40.7	40.6	40.6	40.5	39.8	39.6	38.9	39.3
Instruments and related products.....	41.3	41.0	40.9	40.9	40.9	40.5	40.7	40.6	40.5	40.3	40.4	40.3	39.2
Miscellaneous manufacturing industries.....	39.7	40.1	39.7	39.7	39.4	39.6	39.7	39.3	39.3	39.1	39.4	39.1	37.8
Nondurable goods.....	39.8	39.7	39.6	39.2	39.3	39.5	39.5	39.3	39.3	39.1	38.8	38.7	38.1
Food and kindred products.....	40.6	40.8	41.2	40.9	40.9	41.0	41.3	41.1	40.7	40.9	40.9	40.6	40.5
Tobacco manufactures.....	38.6	38.8	39.4	39.5	39.6	38.0	38.9	38.3	39.8	38.4	38.3	37.7	38.1
Textile mill products.....	40.9	40.8	40.4	40.4	40.2	40.0	40.1	39.9	39.8	38.9	38.6	38.2	37.8
Apparel and related products.....	36.4	36.1	35.7	34.4	35.6	35.7	35.4	35.0	35.7	35.6	34.8	34.4	33.6
Paper and allied products.....	42.9	43.2	42.7	42.7	42.6	42.7	42.8	42.4	42.6	42.0	42.0	41.6	40.9
Printing, publishing, and allied industries.....	38.4	38.2	38.1	38.1	38.2	38.2	38.3	38.0	38.3	38.2	38.2	38.2	37.7
Chemicals and allied products.....	41.4	41.8	41.7	41.2	41.6	41.5	41.5	41.1	41.2	41.3	41.1	41.0	40.4
Petroleum refining and related industries.....	41.1	41.6	41.8	41.0	41.0	41.4	41.6	41.1	41.2	40.8	40.7	41.5	41.2
Rubber and miscellaneous plastic products.....	41.6	41.2	40.4	40.6	40.2	40.3	40.1	40.3	40.5	39.5	39.5	39.4	38.6
Leather and leather products.....	38.5	38.1	37.4	37.0	37.0	37.4	37.6	37.6	37.4	36.8	36.7	36.9	35.6
Wholesale and retail trade ³	38.8	38.7	38.7	38.7	38.8	38.9	38.9	38.9	38.9	38.8	39.0	38.9	38.8
Wholesale trade.....	40.6	40.6	40.5	40.4	40.5	40.5	40.6	40.4	40.5	40.4	40.3	40.3	40.2
Retail trade ³	38.1	37.9	38.0	38.0	37.9	38.2	38.1	38.3	38.2	38.2	38.4	38.3	38.2

¹ For employees covered, see footnote 1, table A-3.² Preliminary.³ Excludes eating and drinking places.NOTE: The seasonal adjustment method used is described in "New Seasonal Adjustment Factors for Labor Force Components," *Monthly Labor Review*, August 1960, pp. 822-827.TABLE C-3. Average hourly earnings excluding overtime of production workers in manufacturing, by major industry group ¹

Major industry group	1961												1960	Annual average	
	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960	1959
Manufacturing.....	\$2.29	\$2.28	\$2.26	\$2.25	\$2.24	\$2.26	\$2.25	\$2.25	\$2.25	\$2.24	\$2.23	\$2.24	\$2.23	\$2.20	\$2.12
Durable goods.....	2.46	2.45	2.43	2.41	2.41	2.42	2.42	2.42	2.41	2.40	2.39	2.39	2.40	2.36	2.28
Ordinance and accessories.....	2.73	2.73	2.73	2.72	2.72	2.72	2.72	2.72	2.70	2.69	2.69	2.68	2.67	2.60	2.52
Lumber and wood products, except furniture.....	1.89	1.92	1.93	1.95	1.90	1.91	1.90	1.88	1.87	1.79	1.77	1.78	1.81	1.82	1.79
Furniture and fixtures.....	1.87	1.87	1.86	1.86	1.85	1.85	1.86	1.86	1.85	1.85	1.85	1.85	1.84	1.82	1.77
Stone, clay, and glass products.....	2.28	2.28	2.27	2.26	2.26	2.25	2.26	2.25	2.24	2.23	2.23	2.23	2.23	2.20	2.13
Primary metal industries.....	2.90	2.89	2.88	2.85	2.84	2.84	2.83	2.83	2.81	2.79	2.78	2.78	2.77	2.75	2.68
Fabricated metal products.....	2.46	2.43	2.42	2.39	2.41	2.42	2.42	2.42	2.42	2.41	2.41	2.40	2.40	2.36	2.27
Machinery.....	2.57	2.56	2.55	2.55	2.54	2.54	2.54	2.54	2.54	2.53	2.53	2.52	2.51	2.47	2.40
Electrical equipment and supplies.....	2.31	2.32	2.29	2.28	2.29	2.31	2.30	2.30	2.29	2.29	2.28	2.28	2.28	2.23	2.14
Transportation equipment.....	2.77	2.76	2.74	2.71	2.73	2.72	2.72	2.71	2.70	2.70	2.70	2.70	2.71	2.65	2.56
Instruments and related products.....	2.35	2.33	2.32	2.32	2.32	2.33	2.33	2.32	2.32	2.33	2.31	2.32	2.31	2.26	2.18
Miscellaneous manufacturing industries.....	1.90	1.86	1.85	1.86	1.84	1.86	1.87	1.88	1.88	1.89	1.88	1.89	1.87	1.84	1.79
Nondurable goods.....	2.07	2.06	2.06	2.05	2.03	2.05	2.04	2.05	2.05	2.04	2.03	2.04	2.03	1.99	1.91
Food and kindred products.....	2.13	2.11	2.08	2.06	2.05	2.09	2.09	2.11	2.11	2.10	2.09	2.09	2.06	2.02	1.94
Tobacco manufactures.....	1.80	1.78	1.67	1.59	1.67	1.83	1.85	1.84	1.83	1.77	1.74	1.72	1.72	1.67	1.62
Textile mill products.....	1.59	1.58	1.58	1.58	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.56	1.50
Apparel and related products.....	1.64	1.64	1.65	1.62	1.61	1.60	1.58	1.58	1.59	1.60	1.59	1.60	1.58	1.56	1.53
Paper and allied products.....	2.25	2.25	2.24	2.24	2.23	2.23	2.22	2.22	2.21	2.21	2.21	2.20	2.20	2.15	2.07
Printing, publishing, and allied industries.....	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Chemicals and allied products.....	2.55	2.54	2.54	2.53	2.52	2.52	2.51	2.48	2.47	2.46	2.48	2.48	2.48	2.43	2.33
Petroleum refining and related industries.....	2.98	2.96	2.94	2.95	2.92	2.92	2.93	2.93	2.95	2.95	2.96	2.94	2.86	2.82	2.79
Rubber and miscellaneous plastic products.....	2.36	2.34	2.33	2.33	2.32	2.34	2.32	2.30	2.30	2.30	2.29	2.31	2.32	2.26	2.18
Leather and leather products.....	1.67	1.67	1.67	1.67	1.64	1.63	1.64	1.64	1.64	1.64	1.62	1.62	1.61	1.61	1.56

¹ For comparability of data with those published in issues prior to December 1961, see footnote 1, table A-2. For employees covered, see footnote 1, table A-3. Average hourly earnings excluding overtime are derived by assuming that overtime hours are paid for at the rate of time and one-half.² Preliminary.³ Not available, because average overtime rates are significantly above time and one-half. Inclusion of data for the group in the nondurable goods total has little effect.

TABLE C-4. Average overtime hours of production workers in manufacturing, by industry ¹

Industry	1961												1960	Annual average	
	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960	1959
Manufacturing.....	2.9	2.9	2.8	2.8	2.6	2.5	2.4	2.2	2.1	2.0	1.9	1.9	2.1	2.4	2.7
Durable goods.....	3.0	2.9	2.7	2.7	2.5	2.3	2.3	2.1	2.0	1.8	1.8	1.8	2.0	2.4	2.7
Nondurable goods.....	2.8	2.8	2.9	2.9	2.8	2.6	2.6	2.3	2.2	2.2	2.1	2.1	2.2	2.5	2.7
Durable goods															
Ordnance and accessories.....	2.3	2.3	2.3	2.0	1.8	1.4	1.5	1.5	2.0	2.0	1.9	1.8	2.1	2.0	2.1
Ammunition, except for small arms.....	1.7	1.6	1.5	1.3	1.3	1.2	1.2	1.3	2.4	2.3	1.8	1.8	1.8	1.7	2.0
Sighting and fire control equipment.....	3.0	3.0	3.0	2.7	2.4	1.8	2.0	2.0	1.7	1.7	1.5	1.4	2.1	2.7	2.5
Other ordnance and accessories.....	2.6	2.7	2.8	2.4	2.1	1.5	1.4	1.4	1.6	2.0	2.3	2.0	2.4	1.8	1.8
Lumber and wood products, except furniture.....	2.7	2.9	3.2	3.2	3.3	3.2	3.2	2.9	2.7	2.4	2.4	2.5	2.3	2.9	3.2
Sawmills and planing mills.....	2.5	2.9	3.1	3.1	3.3	3.3	3.3	3.0	2.6	2.4	2.4	2.6	2.2	3.0	3.3
Millwork, plywood, and related products.....	2.9	2.7	2.9	3.1	3.4	3.1	3.1	2.8	2.9	2.3	1.8	1.9	2.2	2.6	3.3
Wooden containers.....	2.5	2.2	2.5	2.5	2.7	3.2	2.6	2.7	2.4	2.1	2.2	2.0	1.9	2.6	2.8
Miscellaneous wood products.....	2.7	2.9	3.1	2.7	2.6	2.7	2.7	2.6	2.6	2.4	2.3	2.2	2.4	2.7	2.9
Furniture and fixtures.....	3.5	3.2	3.3	3.2	2.8	2.2	2.1	1.6	1.7	1.6	1.5	1.6	2.3	2.5	2.8
Household furniture.....	3.7	3.3	3.4	3.3	2.7	2.1	2.1	1.6	1.7	1.5	1.4	1.5	2.5	2.5	2.8
Office furniture.....	2.8	2.5	2.4	2.4	2.3	2.0	1.8	1.5	1.3	1.7	1.8	1.8	1.9	2.3	2.4
Partitions; office and store fixtures.....	2.6	3.3	4.3	4.1	3.1	2.3	2.0	1.6	1.4	1.1	1.2	1.2	1.3	2.3	2.6
Other furniture and fixtures.....	2.8	2.8	2.7	2.9	3.7	2.8	2.4	1.9	2.1	2.3	1.8	1.9	2.6	2.7	2.8
Stone, clay, and glass products.....	2.9	3.2	3.6	3.7	3.6	3.6	3.5	3.1	2.8	2.6	2.5	2.4	2.5	3.1	3.6
Flat glass.....	2.9	1.4	2.1	2.7	2.2	2.3	2.2	1.8	1.5	1.9	2.0	2.0	2.5	2.4	3.7
Glass and glassware, pressed or blown.....	3.8	3.9	3.8	3.8	3.7	3.7	3.6	3.3	3.2	3.5	3.4	3.2	3.2	3.6	3.7
Cement, hydraulic.....	1.3	1.6	1.6	1.9	1.7	1.9	1.8	1.6	1.3	1.1	1.2	1.1	1.2	1.6	1.8
Structural clay products.....	2.5	2.6	2.9	3.0	3.0	3.1	3.1	2.7	2.6	2.3	2.0	2.2	2.3	2.7	3.0
Pottery and related products.....	2.2	1.8	1.8	1.7	1.6	1.6	1.6	1.2	1.2	1.2	1.0	1.0	1.2	1.5	1.7
Concrete, gypsum, and plaster products.....	3.6	5.0	6.0	5.9	6.0	5.9	5.6	5.0	4.5	3.9	3.6	3.3	3.1	4.8	5.5
Other stone and mineral products.....	2.4	2.3	2.5	2.9	2.7	2.5	2.5	2.3	2.2	1.8	1.8	1.9	1.9	2.4	3.0
Primary metal industries.....	2.3	2.1	2.2	2.5	2.1	2.1	2.1	1.6	1.4	1.3	1.2	1.4	1.3	1.8	2.6
Blast furnace and basic steel products.....	1.5	1.3	1.5	2.1	1.5	1.7	1.6	1.0	.9	.7	.7	.9	.7	1.3	2.2
Iron and steel foundries.....	2.9	2.7	2.4	2.2	2.3	2.3	2.2	1.9	1.7	1.4	1.4	1.4	1.6	2.1	2.7
Nonferrous smelting and refining.....	2.2	2.6	2.5	2.7	2.6	2.8	2.6	2.3	2.2	2.1	2.3	2.5	2.9	3.0	3.2
Nonferrous rolling, drawing, and extruding.....	3.9	3.5	3.7	3.8	3.8	3.2	3.5	2.8	2.3	2.1	1.9	2.0	2.2	2.4	3.4
Nonferrous foundries.....	3.2	2.8	2.8	2.5	2.1	2.1	2.2	2.0	2.0	1.8	2.0	1.7	2.0	2.3	2.7
Miscellaneous primary metal industries.....	3.4	2.8	2.9	2.8	2.1	2.0	2.3	2.1	1.9	1.7	1.8	1.9	2.2	2.3	2.6
Fabricated metal products.....	3.0	2.9	2.8	3.0	2.8	2.6	2.5	2.2	2.0	1.8	1.7	1.7	1.9	2.6	2.8
Metal cans.....	3.1	2.8	3.0	4.0	4.4	4.2	3.6	3.0	2.8	2.1	2.4	2.3	2.2	2.8	3.4
Cutlery, handtools, and general hardware.....	3.4	2.9	2.2	2.5	2.0	1.6	1.7	1.9	1.7	1.5	1.4	1.3	1.8	2.1	2.2
Heating equipment and plumbing fixtures.....	1.4	1.7	2.1	1.9	1.9	1.7	1.5	1.3	1.0	1.0	1.1	1.2	1.4	1.4	2.1
Fabricated structural metal products.....	2.3	2.4	2.8	2.8	3.0	2.5	2.5	2.1	1.9	1.8	1.7	1.8	2.2	2.4	2.2
Screw machine products, bolts, etc.....	4.2	3.5	3.1	3.0	2.7	2.5	2.5	2.1	1.6	1.9	1.6	1.8	1.7	2.5	3.6
Metal stampings.....	3.9	3.7	3.3	3.5	3.2	3.3	2.9	2.7	2.4	1.9	1.8	1.7	2.0	3.7	3.8
Coating, engraving, and allied services.....	3.5	3.4	3.3	3.5	2.6	2.6	2.8	2.6	2.3	2.2	2.3	2.2	2.3	2.7	3.1
Miscellaneous fabricated wire products.....	3.2	3.2	3.1	3.2	3.1	2.8	2.6	2.3	2.0	2.0	2.4	2.2	2.2	2.6	3.2
Miscellaneous fabricated metal products.....	2.3	2.6	2.7	2.7	2.6	2.4	2.4	2.2	1.9	1.8	1.6	1.6	1.4	1.9	2.5
Machinery.....	2.9	2.8	2.8	2.7	2.5	2.4	2.5	2.3	2.3	2.2	2.1	2.0	2.2	2.7	2.9
Engines and turbines.....	2.2	1.8	1.7	1.9	1.6	1.4	1.5	1.7	2.2	2.1	1.5	1.1	1.7	1.8	2.6
Farm machinery and equipment.....	1.7	1.5	1.6	1.5	1.3	1.3	1.4	1.4	2.0	2.0	1.6	1.3	1.3	1.9	2.2
Construction and related machinery.....	2.0	2.1	2.3	2.3	2.2	2.1	1.9	1.8	1.7	1.4	1.4	1.3	1.5	1.8	2.7
Metalworking machinery and equipment.....	4.0	3.7	3.8	3.4	3.4	3.5	3.5	3.3	3.2	3.1	3.0	3.0	2.9	4.3	4.0
Special industry machinery.....	3.6	3.2	3.3	3.1	2.8	2.7	2.8	2.5	2.4	2.3	2.4	2.5	2.8	3.3	3.1
General industrial machinery.....	3.0	2.6	2.6	2.2	2.2	1.9	2.1	1.8	1.4	1.4	1.4	1.2	1.6	2.1	2.8
Office, computing, and accounting machines.....	1.9	2.7	2.3	2.5	1.9	2.4	2.3	1.9	1.8	1.7	1.9	2.0	1.9	1.9	1.5
Service industry machines.....	1.8	1.5	1.9	1.9	1.7	1.8	1.7	1.4	1.5	1.5	1.4	1.3	1.1	1.9	2.2
Miscellaneous machinery.....	4.1	3.8	3.8	3.7	3.5	3.3	3.4	3.2	3.4	3.2	3.1	2.9	3.4	3.4	3.8
Electrical equipment and supplies.....	2.5	2.4	2.3	2.3	2.0	1.7	1.8	1.5	1.5	1.5	1.6	1.6	1.9	1.9	2.2
Electric distribution equipment.....	2.2	2.0	1.9	2.0	2.0	1.9	2.0	1.5	1.6	1.6	1.6	1.6	2.0	1.9	2.2
Electrical industrial apparatus.....	2.3	2.3	2.2	2.2	2.2	2.0	2.0	1.5	1.6	1.5	1.5	1.4	1.4	1.8	2.2
Household appliances.....	2.1	2.2	2.1	2.5	1.8	1.7	2.0	1.7	1.6	1.6	1.5	1.7	1.5	1.6	2.0
Electric lighting and wiring equipment.....	2.0	2.1	2.2	2.2	1.7	1.5	1.5	1.3	1.2	1.3	1.2	1.1	1.3	1.7	2.3
Radio and TV receiving sets.....	2.1	1.9	2.5	2.1	1.8	1.7	1.4	1.0	.8	1.0	1.3	1.3	1.7	1.4	1.9
Communication equipment.....	3.0	2.8	2.5	2.8	2.2	1.6	2.0	1.4	1.5	1.5	1.9	2.1	2.9	2.5	2.5
Electronic components and accessories.....	2.3	2.5	2.4	2.0	1.7	1.6	1.6	1.4	1.7	1.6	1.7	1.8	1.5	1.6	2.0
Miscellaneous electrical equipment and supplies.....	3.9	3.2	2.8	2.2	2.4	1.7	2.1	1.7	1.3	1.2	1.4	1.6	1.9	1.9	2.5
Transportation equipment.....	4.2	4.1	2.8	2.7	2.3	2.2	2.0	2.1	1.9	1.6	1.7	1.6	2.2	2.7	2.6
Motor vehicles and equipment.....	5.4	5.4	3.1	2.9	2.5	2.3	2.1	2.2	1.5	.8	.9	.9	1.8	3.2	3.1
Aircraft and parts.....	3.1	2.9	2.5	2.4	2.2	2.0	1.9	2.0	2.2	2.6	2.6	2.6	2.9	2.2	2.1
Ship and boat building and repairing.....	3.1	3.1	3.3	2.9	2.4	2.4	2.0	2.2	2.6	1.9	2.3	2.2	2.2	2.4	2.3
Railroad equipment.....	1.9	1.3	1.1	1.0	1.1	.5	1.3	.9	.6	.5	.6	.8	.8	1.2	1.6
Other transportation equipment.....	1.4	1.7	2.4	2.9	2.4	2.0	2.2	1.9	1.7	1.3	.7	.8	1.1	1.7	2.8
Instruments and related products.....	2.7	2.7	2.6	2.6	2.3	2.0	1.9	1.8	1.8	1.6	1.8	1.8	2.0	2.1	2.3
Engineering and scientific instruments.....	2.9	2.9	2.5	2.3	1.9	1.5	1.9	1.9	2.0	2.1	2.1	2.5	3.4	2.8	2.8
Mechanical measuring and control devices.....	2.5	2.2	2.0	2.5	2.2	1.9	1.7	1.4	1.6	1.4	1.6	1.5	1.5	1.9	2.4
Optical and ophthalmic goods.....	2.3	1.8	2.4	2.9	2.3	2.2	2.1	2.0	2.1	1.2	1.4	1.3	1.4	1.8	1.7
Surgical, medical, and dental equipment.....	2.4	2.8	2.5	2.3	2.1	2.0	2.0	2.0	1.9	1.7	2.0	1.8	1.8	2.2	2.2
Photographic equipment and supplies.....	3.7	3.9	3.6	3.4	3.2	3.1	2.8	2.4	2.2	2.1	2.0	2.2	2.4	2.5	2.5
Watches and clocks.....	1.6	2.4	2.9	1.6	1.4	1.0	.8	1.5	.7	1.0	1.2	1.0	.9	1.0	1.7

See footnotes end of table.

TABLE C-4. Average overtime hours of production workers in manufacturing, by industry ¹—Continued

Industry	1961												1960	Annual average	
	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960	1959
Manufacturing—Continued															
<i>Durable goods—Continued</i>															
Miscellaneous manufacturing industries.....	2.5	2.8	2.6	2.4	2.1	1.7	2.0	1.9	1.9	1.9	1.8	1.8	2.0	2.1	2.4
Jewelry, silverware, and plated ware.....	4.9	4.3	4.2	3.3	3.0	2.0	2.6	2.3	2.1	1.9	2.2	2.2	2.8	2.8	3.1
Toys, amusement, and sporting goods.....	1.5	2.4	2.4	2.4	2.1	1.5	1.6	1.6	1.7	1.8	1.9	1.7	1.8	1.9	2.1
Pens, pencils, office and art materials.....	2.9	2.7	2.0	2.0	1.7	1.6	1.5	1.5	1.4	1.3	1.4	1.2	1.1	1.5	1.9
Costume jewelry, buttons, and notions.....	1.8	2.5	2.0	1.8	1.9	1.9	2.2	2.0	1.9	1.5	1.7	1.6	1.6	1.7	2.2
Other manufacturing industries.....	2.7	3.0	2.7	2.4	2.1	1.8	2.1	2.0	2.0	2.1	1.9	1.9	2.3	2.3	2.5
<i>Nondurable goods</i>															
Food and kindred products.....	3.3	3.4	3.6	3.8	3.6	3.7	3.6	3.2	2.8	2.9	2.9	3.0	3.3	3.3	3.3
Meat products.....	4.0	3.9	4.4	4.1	3.5	3.9	4.0	3.6	3.1	3.2	2.8	3.2	3.8	3.7	3.9
Dairy products.....	3.1	2.9	3.1	3.7	3.7	3.3	3.7	3.1	2.6	3.1	2.8	2.1	3.0	2.9	2.9
Canned and preserved food, except meats.....	2.1	2.3	2.5	3.3	2.8	2.4	2.1	2.1	1.8	1.8	2.2	2.1	1.8	2.3	2.4
Grain mill products.....	5.7	6.1	6.9	7.3	7.6	7.4	6.7	5.3	4.9	5.0	5.4	5.9	5.9	6.0	5.9
Bakery products.....	2.7	3.0	3.0	3.1	3.1	3.3	3.3	2.9	2.5	2.6	2.6	2.3	2.8	2.9	2.9
Sugar.....	5.7	5.8	5.3	4.0	3.8	4.3	3.2	3.3	2.6	3.6	3.9	6.7	5.7	4.2	4.2
Confectionery and related products.....	2.6	2.6	3.0	3.3	2.8	2.1	2.5	2.5	2.0	2.2	2.2	2.5	2.3	2.4	2.3
Beverages.....	2.5	2.3	2.9	3.5	3.1	3.9	3.2	2.4	2.5	2.3	2.2	2.2	2.3	2.8	2.8
Miscellaneous food and kindred products.....	4.0	4.1	4.3	4.2	3.8	4.1	4.0	3.7	3.5	3.6	4.1	3.9	3.9	3.9	3.9
Tobacco manufactures.....	1.3	1.1	1.5	1.7	1.3	1.1	1.2	1.1	1.0	.6	.6	.7	1.1	1.0	1.2
Cigarettes.....	1.8	1.2	1.9	1.0	1.2	1.3	1.7	1.4	1.4	.5	.5	.6	1.2	1.1	1.5
Cigars.....	1.0	1.7	1.5	1.2	1.1	.7	.8	.8	.7	.6	.7	.8	1.0	1.0	.9
Textile mill products.....	3.4	3.6	3.4	3.0	3.0	2.6	2.8	2.5	2.2	2.1	2.0	1.9	2.1	2.6	3.1
Cotton broad woven fabrics.....	3.6	4.0	3.7	3.1	2.8	2.2	2.5	2.4	2.2	2.0	1.9	1.9	2.1	2.8	3.1
Silk and synthetic broad woven fabrics.....	4.7	4.5	3.9	3.7	3.8	3.3	3.2	2.8	2.3	2.1	2.1	2.3	2.6	3.3	3.7
Weaving and finishing broad woollens.....	3.5	3.5	3.6	3.4	3.6	4.0	4.2	3.6	2.9	2.4	2.7	2.3	2.0	3.1	4.2
Narrow fabrics and smallwares.....	3.2	3.5	3.4	3.2	2.9	2.7	2.9	2.7	2.5	2.5	2.4	2.3	2.1	2.4	2.9
Knitting.....	2.2	2.6	2.6	2.1	2.6	2.2	2.3	1.9	1.6	1.6	1.4	1.2	1.4	1.9	2.2
Finishing textiles, except wool and knit.....	4.7	4.4	4.2	3.5	3.6	3.2	4.2	3.8	3.5	3.4	3.6	2.6	3.1	3.2	3.9
Floor covering.....	5.0	5.1	4.4	3.9	3.6	2.0	2.9	2.2	2.8	2.7	2.6	2.4	3.1	2.8	3.5
Yarn and thread.....	3.5	3.7	3.4	3.4	3.2	2.8	2.9	2.5	2.1	1.8	1.8	1.8	1.7	2.4	2.9
Miscellaneous textile goods.....	3.4	3.6	3.4	3.0	3.1	3.3	3.3	2.5	2.4	2.3	1.9	2.0	2.3	2.8	3.3
Apparel and related products.....	1.2	1.4	1.3	1.1	1.4	1.1	1.0	.9	1.0	1.2	1.0	.8	.8	1.2	1.3
Men's and boys' suits and coats.....	1.0	.9	1.0	.8	.9	.5	.7	.7	.6	.7	.9	.7	.7	1.4	1.3
Men's and boys' furnishings.....	1.1	1.2	1.1	1.1	1.4	.9	1.0	.7	.6	.7	.6	.5	.6	1.0	1.2
Women's, misses', and juniors' outerwear.....	1.1	1.2	1.1	.9	1.3	1.2	.9	.9	1.3	1.5	1.1	.8	.6	1.1	1.2
Women's and children's undergarments.....	1.5	2.1	1.9	1.5	1.6	1.1	1.1	1.1	1.3	1.2	1.1	.9	.7	1.1	1.3
Hats, caps, and millinery.....	1.3	1.1	1.7	1.5	1.6	1.2	1.1	.8	1.0	2.3	2.4	1.6	.6	1.3	1.6
Girls' and children's outerwear.....	1.0	1.4	1.4	1.0	1.8	1.5	1.4	1.2	1.0	1.4	1.6	1.2	.8	1.3	1.3
Fur goods and miscellaneous apparel.....	1.4	1.8	1.6	1.1	1.5	1.1	.8	.8	.9	1.0	.8	.6	.9	1.1	1.3
Miscellaneous fabricated textile products.....	1.7	1.8	1.9	2.0	1.9	1.6	1.6	1.4	1.4	1.4	1.4	1.2	1.6	1.7	1.9
Paper and allied products.....	4.7	4.6	4.8	4.9	4.5	4.6	4.3	3.9	3.9	3.7	3.7	3.6	3.6	4.1	4.5
Paper and pulp.....	5.7	5.3	5.3	5.3	5.2	5.3	5.1	4.9	5.0	4.6	4.7	4.6	4.5	5.1	5.5
Paperboard.....	5.9	5.6	6.3	6.3	5.6	6.4	6.0	5.2	5.2	4.9	4.8	5.3	4.7	5.1	5.6
Converted paper and paperboard products.....	3.8	3.3	3.4	3.3	3.2	3.1	2.7	2.4	2.6	2.7	2.6	2.3	2.6	2.8	3.1
Paperboard containers and boxes.....	3.8	4.4	4.6	4.8	4.2	4.0	3.7	3.1	3.0	2.6	2.6	2.4	2.7	3.3	4.0
Printing, publishing, and allied industries.....	3.0	2.8	2.9	3.1	3.0	2.6	2.5	2.5	2.5	2.6	2.5	2.4	2.8	2.9	2.8
Newspaper publishing and printing.....	2.9	2.6	2.5	2.4	2.3	2.2	2.3	2.5	2.4	2.1	2.0	2.0	2.9	2.7	2.6
Periodical publishing and printing.....	3.1	3.0	4.4	4.8	3.0	2.8	2.5	2.2	2.5	2.9	3.2	3.2	3.2	3.6	3.4
Books.....	3.6	3.3	3.6	4.4	4.4	3.9	3.8	4.2	3.4	3.4	3.5	3.4	2.9	3.7	3.4
Commercial printing.....	3.2	3.0	3.2	3.3	3.3	2.7	2.6	2.5	2.7	3.0	2.7	2.7	3.0	3.1	3.2
Bookbinding and related industries.....	2.3	1.7	2.1	2.6	2.4	2.2	2.0	1.9	1.8	1.9	1.8	2.2	2.0	2.1	2.0
Other publishing and printing industries.....	2.6	2.7	2.7	2.9	2.7	2.6	2.3	2.2	2.3	2.3	2.3	2.1	2.4	2.6	2.5
Chemicals and allied products.....	2.4	2.5	2.6	2.5	2.4	2.4	2.4	2.2	2.2	2.2	2.0	2.0	2.0	2.3	2.5
Industrial chemicals.....	2.4	2.5	2.6	2.6	2.5	2.6	2.3	2.1	1.9	2.0	2.0	2.1	2.0	2.5	2.5
Plastics and synthetics, except glass.....	2.3	2.4	2.3	2.2	2.0	2.2	2.3	1.9	1.7	1.5	1.5	1.4	1.6	2.0	2.2
Drugs.....	2.1	2.1	2.2	2.1	2.0	1.7	2.0	1.7	1.7	1.9	2.0	1.8	1.6	1.9	2.0
Soap, cleaners, and toilet goods.....	2.8	3.1	3.5	2.9	2.9	2.5	2.9	2.2	2.1	2.0	2.1	2.0	2.3	2.3	2.2
Paints, varnishes, and allied products.....	1.7	1.8	1.7	2.0	2.2	2.5	2.6	2.3	1.8	1.5	1.2	1.2	1.3	1.9	2.3
Agricultural chemicals.....	3.5	2.9	3.4	2.9	2.7	2.8	2.8	4.6	5.2	6.0	3.8	3.6	3.2	4.3	4.5
Other chemical products.....	2.5	2.8	2.8	2.8	2.7	2.7	2.6	2.3	2.3	2.3	2.3	2.4	2.3	2.5	2.6
Petroleum refining and related industries.....	1.6	2.2	2.3	2.9	1.9	2.5	2.6	1.9	1.8	1.5	1.3	1.7	1.6	2.0	1.9
Petroleum refining.....	1.3	1.8	1.4	2.2	1.2	1.8	1.7	1.4	1.3	1.2	1.1	1.5	1.3	1.4	1.4
Other petroleum and coal products.....	2.9	3.7	6.5	6.0	4.9	5.4	6.5	4.2	4.2	2.9	2.5	2.8	3.1	4.5	4.8
Rubber and miscellaneous plastic products.....	3.6	3.2	3.0	3.1	3.1	3.0	2.6	2.4	2.1	1.7	1.8	1.8	1.8	2.4	3.5
Tires and inner tubes.....	4.9	3.6	3.1	3.3	3.5	3.6	2.2	1.8	1.6	1.3	1.4	1.7	1.6	2.3	4.5
Other rubber products.....	3.3	2.9	2.7	2.8	2.6	2.6	2.6	2.5	2.1	1.6	1.8	1.6	1.7	2.2	3.3
Miscellaneous plastic products.....	3.0	3.3	3.2	3.5	3.3	2.9	3.1	2.9	2.5	2.2	2.2	2.0	2.1	2.5	3.0
Leather and leather products.....	1.6	1.5	1.5	1.3	1.4	1.4	1.4	1.1	1.1	1.3	1.4	1.4	1.2	1.2	1.4
Leather tanning and finishing.....	2.9	2.6	2.5	2.4	2.5	2.2	2.4	2.1	2.2	2.0	1.8	1.8	2.1	2.1	2.1
Footwear, except rubber.....	1.3	1.0	1.0	1.0	1.1	1.2	1.2	1.0	.9	1.1	1.3	1.3	1.0	1.1	1.3
Other leather products.....	2.0	2.4	2.4	1.9	1.8	1.6	1.5	1.1	1.2	1.5	1.7	1.7	1.4	1.4	1.6

¹ For comparability of data with those published in issues prior to December 1961, see footnote 1, table A-2. For employees covered, see footnote 1, table A-3.

These series cover premium overtime hours of production and related workers during the pay period ending nearest the 15th of the month. Overtime hours are those paid for at premium rates because (1) they exceeded

either the straight-time workday or workweek or (2) they occurred on week-ends or holidays or outside regularly scheduled hours. Hours for which only shift differential, hazard, incentive, or other similar types of premiums were paid are excluded.

² Preliminary.

TABLE C-5. Indexes of aggregate weekly man-hours and payrolls in industrial and construction activities¹

[1957-59=100]

Activity	1962	1961												Annual average	
	Jan. ²	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	1960	1959
Total.....	Man-hours														
	91.5	96.6	99.3	100.4	99.2	100.0	97.4	97.7	93.7	90.6	89.0	88.0	89.4	99.0	101.2
	78.0	84.0	86.0	87.9	87.3	87.5	87.6	87.8	84.4	81.4	79.5	81.4	83.8	91.1	94.7
Contract construction.....	68.4	82.1	95.9	106.9	105.9	111.4	107.4	104.7	94.4	85.8	79.6	75.9	81.0	98.3	102.3
Manufacturing.....	96.5	99.9	100.6	99.9	98.6	98.5	96.1	96.9	94.1	92.0	91.2	90.6	91.2	99.6	101.3
Durable goods.....	96.4	99.7	99.8	97.8	95.4	95.0	94.1	95.7	93.3	90.3	88.6	88.2	89.4	99.4	101.0
Ordnance and accessories.....	122.7	125.1	125.7	124.6	121.0	117.0	115.7	115.8	115.3	113.2	115.3	113.2	114.6	111.7	106.6
Lumber and wood products, except furniture.....	85.5	90.9	95.2	100.1	100.9	101.8	99.0	101.8	94.9	88.8	84.4	83.9	86.1	99.2	105.1
Furniture and fixtures.....	101.1	105.2	104.9	105.5	103.9	102.3	96.0	96.5	92.2	92.4	91.6	91.2	90.3	102.6	105.0
Stone, clay, and glass products.....	84.4	92.4	97.2	99.4	101.0	101.8	99.5	99.6	95.6	91.3	88.0	85.1	87.0	100.4	104.3
Primary metal industries.....	101.0	99.1	97.1	96.9	97.3	95.0	94.6	94.4	90.6	86.0	83.2	82.5	82.8	98.0	97.7
Fabricated metal products.....	97.7	100.2	100.2	98.8	95.5	96.7	93.9	96.0	93.8	89.7	87.7	87.5	90.0	99.9	100.6
Machinery.....	94.4	96.4	93.4	93.0	92.9	91.6	92.3	93.9	93.7	93.6	92.4	92.8	92.2	99.7	100.4
Electrical equipment and supplies.....	110.3	112.0	111.3	109.3	105.3	105.2	100.7	103.0	101.2	99.7	99.6	100.4	101.4	105.8	105.3
Transportation equipment.....	90.2	96.8	96.0	84.3	76.6	77.3	83.7	85.2	84.8	80.9	79.4	78.7	82.1	92.1	96.0
Instruments and related products.....	100.7	102.7	103.4	101.7	101.4	99.7	96.6	98.6	97.0	95.7	95.9	95.7	97.6	102.8	103.0
Miscellaneous manufacturing industries.....	93.3	100.1	108.8	109.6	106.0	102.2	96.1	100.5	96.3	93.5	92.1	91.6	88.9	101.4	102.1
Nondurable goods.....	96.5	100.1	101.5	102.5	102.7	103.2	98.6	98.5	95.0	94.2	94.6	93.8	93.6	99.8	101.6
Food and kindred products.....	88.0	93.7	99.0	105.5	110.0	107.9	100.6	97.0	90.9	88.3	88.0	87.6	89.7	98.0	99.2
Tobacco manufactures.....	88.2	96.2	95.6	119.8	135.0	108.4	75.6	80.7	77.1	79.2	80.7	87.3	93.5	97.1	99.9
Textile mill products.....	93.7	97.7	98.6	97.5	96.0	96.0	92.9	95.2	92.5	90.5	89.4	88.6	87.3	96.5	102.2
Apparel and related products.....	99.2	102.5	103.9	102.2	97.8	105.3	97.5	97.4	94.5	96.3	100.6	98.2	93.3	101.8	103.8
Paper and allied products.....	101.5	104.9	105.3	104.9	104.8	104.3	102.3	103.7	100.0	99.6	98.4	97.6	98.0	102.1	102.8
Printing, publishing, and allied industries.....	103.8	107.0	106.3	106.1	105.7	104.6	104.0	104.2	103.2	103.6	104.2	103.3	103.2	104.4	101.7
Chemicals and allied products.....	102.0	102.5	102.5	102.1	101.1	101.7	101.0	101.8	101.1	101.0	99.6	97.4	98.0	101.6	101.0
Petroleum refining and related industries.....	84.2	83.0	86.2	90.6	91.2	91.2	91.4	92.8	89.7	89.2	87.0	86.0	89.4	93.5	95.0
Rubber and miscellaneous plastic products.....	105.5	109.2	107.3	105.5	104.8	101.6	99.4	99.6	96.6	93.7	91.4	91.5	93.5	101.5	104.9
Leather and leather products.....	100.8	102.1	99.4	95.1	94.8	100.5	99.6	99.8	93.7	91.4	96.1	98.2	98.3	97.5	103.2
Mining.....	Payrolls														
	90.7	92.3	93.9	93.2	92.2	93.0	92.6	88.3	85.6	82.9	85.8	89.0	95.2	97.1	
	95.6	110.1	121.8	120.7	125.0	120.3	117.1	105.6	95.9	88.6	85.0	91.0	106.9	106.1	
Contract construction.....	108.5	112.2	112.3	110.5	107.6	105.7	106.4	103.0	100.3	98.9	98.0	98.9	106.6	105.1	

¹ For comparability of data with those published in issues prior to December 1961, see footnote 1, table A-2. For mining and manufacturing, data refer to production and related workers

and for contract construction, to construction workers, as defined in footnote 1, table A-3.

² Preliminary.

TABLE C-6. Gross and spendable average weekly earnings of production workers in manufacturing¹

[In current and 1957-59 dollars]

Item	1961												1960	Annual average	
	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960	1959
<i>Manufacturing</i>															
Gross average weekly earnings:															
Current dollars.....	\$96.63	\$95.82	\$94.54	\$92.73	\$92.86	\$93.20	\$93.03	\$92.10	\$90.78	\$89.54	\$89.31	\$89.08	\$88.62	\$89.72	\$88.26
1957-59 dollars.....	92.47	91.61	90.38	88.65	89.03	89.27	89.45	88.73	87.37	86.18	85.96	85.82	85.29	87.02	86.96
Spendable average weekly earnings:															
Worker with no dependents:															
Current dollars.....	78.04	77.39	76.36	74.91	75.01	75.29	75.15	74.41	73.39	72.43	72.26	72.08	71.72	72.57	71.89
1957-59 dollars.....	74.68	73.99	73.00	71.62	71.92	72.12	72.26	71.69	70.64	69.71	69.55	69.44	69.03	70.39	70.83
Worker with 3 dependents:															
Current dollars.....	85.70	85.03	83.98	82.50	82.61	82.88	82.74	81.99	80.95	79.97	79.78	79.60	79.24	80.11	79.40
1957-59 dollars.....	82.01	81.29	80.29	78.87	79.20	79.39	79.56	78.99	77.91	76.97	76.79	76.69	76.27	77.70	78.23

¹ For comparability of data with those published in issues prior to December 1961, see footnote 1, table A-2. For employees covered, see footnote 1, table A-3.

Spendable average weekly earnings are based on gross average weekly earnings as published in table C-1, less the estimated amount of the workers' Federal social security and income tax liability. Since the amount of tax liability depends on the number of dependents supported by the worker as well as on the level of his gross income, spendable earnings have been com-

puted for 2 types of income receivers: (1) a worker with no dependents, and (2) a worker with 3 dependents.

The earnings expressed in 1957-59 dollars have been adjusted for changes in purchasing power as measured by the Bureau's Consumer Price Index.

² Preliminary.

NOTE: These series are described in "The Calculation and Uses" of the Spendable Earnings Series," *Monthly Labor Review*, January 1959, pp. 50-54.

D.—Consumer and Wholesale Prices

TABLE D-1. Consumer Price Index¹—All-city average:* All items, groups, subgroups, and special groups of items

[1957-59=100]

Converted indexes^a

Group	1962	1961												Annual average	
	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	1961	1960
All items.....	104.5	104.5	104.6	104.6	104.6	104.3	104.4	104.0	103.8	103.9	103.9	103.9	103.8	104.2	103.1
Food ²	102.5	102.0	101.9	102.5	102.6	102.7	103.4	102.5	102.3	102.7	102.7	102.9	102.8	102.6	101.4
Food at home.....	101.2	100.6	100.5	101.2	101.4	101.7	102.4	101.4	101.3	101.8	101.8	102.1	102.0	101.5	100.6
Cereals and bakery products.....	106.6	106.3	106.3	105.7	105.4	105.3	105.1	105.4	105.4	105.4	105.3	105.1	104.9	105.4	103.2
Meats, poultry, and fish.....	99.8	98.5	98.5	99.5	99.2	98.3	97.7	97.4	98.5	100.2	101.0	101.4	101.2	99.3	99.1
Dairy products.....	105.6	105.6	105.5	105.1	105.1	104.7	104.2	103.6	103.8	104.2	104.7	105.1	105.2	104.8	103.2
Fruits and vegetables.....	100.6	99.8	98.4	99.4	102.3	107.1	111.8	109.5	107.0	106.3	103.4	102.9	102.0	104.2	103.8
Other foods at home ³	97.2	97.1	97.9	99.4	98.6	97.4	97.6	95.9	95.7	96.3	97.4	98.2	99.1	97.6	96.7
Housing ⁴	104.4	104.4	104.2	104.1	104.0	103.8	103.8	103.8	103.7	103.8	103.9	103.8	103.8	103.9	103.1
Rent.....	105.1	105.0	104.9	104.8	104.7	104.4	104.4	104.4	104.3	104.2	104.1	104.1	103.9	104.4	103.1
Gas and electricity.....	107.8	107.8	107.8	107.8	107.8	107.7	107.7	108.3	108.2	107.9	108.0	108.0	108.0	107.9	107.0
Solid and petroleum fuels.....	103.9	102.8	102.1	101.5	100.7	100.4	99.7	99.5	100.1	102.6	103.7	103.7	102.4	101.6	99.5
Housefurnishings.....	98.7	99.2	99.3	99.5	99.7	99.1	99.5	99.8	99.4	99.7	99.8	99.6	99.5	99.5	100.1
Household operation.....	106.5	106.4	106.4	106.2	105.9	105.9	106.1	105.9	105.8	105.8	105.6	105.5	105.5	105.9	104.8
Apparel.....	101.8	103.5	103.7	103.9	103.6	102.5	102.5	102.2	102.2	102.1	102.4	102.2	102.1	102.8	102.1
Men's and boys'.....	102.4	103.1	103.3	103.2	102.9	102.2	102.6	102.5	102.8	102.5	102.4	102.5	102.5	102.8	101.6
Women's and girls'.....	98.6	102.0	102.4	103.1	102.8	100.9	100.7	100.1	100.0	99.8	100.6	100.2	99.8	101.0	100.7
Footwear.....	108.9	108.8	108.6	108.2	108.0	107.8	107.6	107.5	107.5	107.5	107.6	107.6	107.1	107.8	106.8
Other apparel ⁵	100.0	101.1	101.0	101.1	101.4	100.9	100.9	100.5	100.8	100.8	100.5	100.9	101.0	100.9	101.3
Transportation.....	106.0	106.0	106.8	106.7	106.0	106.0	105.3	104.8	104.0	103.5	103.4	103.8	103.8	105.0	103.8
Private.....	104.8	104.9	105.9	105.8	105.1	105.0	104.3	103.8	103.0	102.4	102.4	102.8	102.8	104.0	103.2
Public.....	113.9	113.3	112.7	112.5	112.5	112.3	112.0	111.3	110.9	110.9	110.4	110.5	110.4	111.7	107.0
Medical care.....	112.6	112.5	112.4	112.3	111.9	111.7	111.6	111.3	111.0	110.7	110.4	110.3	109.7	111.3	108.1
Personal care.....	105.6	105.2	104.8	104.6	104.8	104.8	104.8	104.5	104.4	104.4	104.3	104.4	104.4	104.6	104.1
Reading and recreation.....	108.5	108.2	108.1	108.3	107.9	107.4	107.2	106.6	107.0	107.2	106.6	106.0	105.5	107.2	104.9
Other goods and services.....	104.9	104.9	105.0	105.0	105.0	104.9	104.9	104.5	104.5	104.1	104.1	104.1	104.1	104.6	103.8
Special groups:															
All items less food.....	105.3	105.5	105.6	105.5	105.3	104.9	104.8	104.6	104.5	104.3	104.4	104.3	104.1	104.8	103.7
All items less shelter.....	104.4	104.4	104.5	104.7	104.5	104.3	104.4	104.0	103.7	103.8	103.8	103.8	103.7	104.2	103.0
All commodities less food.....	102.0	102.6	102.9	103.0	102.6	102.2	102.1	101.8	101.5	101.4	101.6	101.7	101.6	102.1	101.8
All commodities.....	102.3	102.4	102.6	102.9	102.8	102.5	102.8	102.2	101.9	102.1	102.2	102.3	102.2	102.4	101.7
Nondurables ⁶	102.6	102.6	102.7	103.0	103.1	102.9	103.2	102.6	102.4	102.6	102.8	102.9	102.8	102.8	109.1
Nondurables less food.....	102.9	103.6	103.8	103.8	103.8	103.1	103.0	102.7	102.5	102.5	103.1	103.0	102.9	103.2	102.6
Nondurables less food and apparel.....	103.6	103.6	103.8	103.7	103.7	103.4	103.3	103.0	102.6	102.6	103.4	103.5	103.4	103.3	102.8
Durables ⁷	100.8	101.1	101.6	101.7	101.0	101.0	100.6	100.4	100.0	99.9	99.2	99.5	99.5	100.5	100.7
Durables less cars.....	98.7	98.8	98.9	99.0	99.0	99.0	99.0	98.7	98.7	98.8	98.9	99.0	99.3	98.9	100.1
All services ⁸	108.7	108.5	108.2	108.0	107.9	107.7	107.6	107.5	107.4	107.3	107.2	107.0	106.8	107.6	105.6
All services less rent.....	109.3	109.1	108.9	108.7	108.6	108.4	108.3	108.2	108.1	108.0	107.9	107.6	107.5	108.3	106.1
Household operation services, gas, and electricity.....	107.9	107.7	107.6	107.5	107.3	107.2	107.2	107.3	107.2	107.1	107.0	106.9	106.8	107.2	105.9
Transportation services.....	110.7	110.4	110.1	110.0	109.9	109.8	109.6	109.5	109.3	109.1	108.9	108.6	108.6	109.5	107.0
Medical care services.....	115.1	114.7	114.5	114.3	113.8	113.6	113.5	113.1	112.7	112.4	112.1	112.0	111.2	113.1	109.1
Other services.....	107.9	107.7	107.4	107.1	107.0	106.8	106.7	106.6	106.6	106.5	106.6	106.2	106.3	106.8	105.0

*The Consumer Price Index for January 1962 calculated from a 1947-49=100 base was 128.2.

^a See explanation in box under table D-2.

¹ The Consumer Price Index measures the average change in prices of goods and services purchased by urban wage-earner and clerical-worker families. Data for 46 large, medium-size, and small cities are combined for the all-city average.

² In addition to subgroups shown here, total food includes restaurant meals and other food bought and eaten away from home.

³ Includes eggs, fats and oils, sugar and sweets, beverages (nonalcoholic), and other miscellaneous foods.

⁴ In addition to subgroups shown here, total housing includes the purchase price of homes and other homeowner costs.

⁵ Includes yard goods, diapers, and miscellaneous items.

⁶ Includes food, house paint, solid fuels, fuel oil, textile housefurnishings, household paper, electric light bulbs, laundry soap and detergents, apparel (except shoe repairs), gasoline, motor oil, prescriptions and drugs, toilet goods, nondurable toys, newspapers, cigarettes, cigars, beer, and whiskey.

⁷ Includes water heaters, central heating furnaces, kitchen sinks, sink faucets, porch flooring, household appliances, furniture and bedding, floor coverings, dinnerware, automobiles, tires, radio and television sets, durable toys, and sporting goods.

⁸ Includes rent, home purchase, real estate taxes, mortgage interest, property insurance, repainting garage, repainting rooms, reshingling roof, refinishing floors, gas, electricity, dry cleaning, laundry service, domestic service, telephone, water, postage, shoe repairs, auto repairs, auto insurance, auto registration, transit fares, railroad fares, professional medical services, hospital services, hospitalization and surgical insurance, barber and beauty shop services, television repairs, and motion picture admissions.

TABLE D-2. Consumer Price Index ¹—All items and food indexes, by city

[1957-59=100]

Converted indexes ^a

City	1962	1961												Annual average		1962 (1947-49=100)
	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	1961	1960	Jan.
All Items																
All-city average ² -----	104.5	104.5	104.6	104.6	104.6	104.3	104.4	104.0	103.8	103.9	103.9	103.9	103.8	104.2	103.1	128.2
Atlanta, Ga.-----	(3)	103.4	(3)	(3)	103.6	(3)	(3)	102.9	(3)	(3)	103.2	(3)	(3)	103.2	102.7	(3)
Baltimore, Md.-----	(3)	104.4	(3)	(3)	104.4	(3)	(3)	104.6	(3)	(3)	104.4	(3)	(3)	104.4	103.4	(3)
Boston, Mass.-----	105.6	(3)	(3)	105.4	(3)	(3)	105.2	(3)	(3)	104.9	(3)	(3)	104.4	105.1	103.6	130.8
Chicago, Ill.-----	103.9	103.8	103.8	104.1	104.0	103.7	103.8	102.9	103.0	103.2	103.3	103.5	103.4	103.6	103.0	131.0
Cincinnati, Ohio-----	(3)	102.6	(3)	(3)	103.0	(3)	(3)	102.4	(3)	(3)	102.5	(3)	(3)	102.6	102.2	(3)
Cleveland, Ohio-----	(3)	(3)	103.1	(3)	(3)	103.6	(3)	(3)	103.0	(3)	(3)	(3)	(3)	-----	102.3	(3)
Detroit, Mich.-----	101.1	100.9	101.5	101.7	101.3	102.0	101.8	102.0	101.9	101.9	102.0	102.5	102.4	101.9	101.3	124.6
Houston, Tex.-----	(3)	(3)	103.9	(3)	(3)	102.5	(3)	(3)	102.4	(3)	(3)	101.5	(3)	-----	102.1	(3)
Kansas City, Mo.-----	105.2	(3)	(3)	104.6	(3)	104.9	(3)	(3)	104.7	(3)	(3)	(3)	103.2	104.5	103.1	130.1
Los Angeles, Calif.-----	105.7	105.8	105.8	105.5	105.3	105.1	105.4	105.4	105.1	105.1	105.0	105.4	105.2	105.4	104.1	131.8
Minneapolis, Minn.-----	104.3	(3)	(3)	104.4	(3)	(3)	104.4	(3)	(3)	104.3	(3)	(3)	103.3	104.2	103.1	129.1
New York, N.Y.-----	105.6	105.3	105.2	105.3	105.2	104.9	104.9	104.4	104.2	104.3	(3)	104.6	104.7	104.6	104.8	127.3
Philadelphia, Pa.-----	104.5	104.8	104.9	104.8	104.6	104.2	104.5	104.1	104.2	104.2	104.0	104.2	104.1	104.4	103.2	128.3
Pittsburgh, Pa.-----	105.2	(3)	(3)	105.0	(3)	105.2	(3)	(3)	104.9	(3)	(3)	(3)	104.1	104.0	104.1	129.6
Portland, Ore.-----	103.8	(3)	(3)	104.6	(3)	(3)	104.4	(3)	(3)	103.6	(3)	(3)	104.0	104.1	102.9	128.6
St. Louis, Mo.-----	(3)	104.4	(3)	(3)	104.1	(3)	(3)	103.9	(3)	(3)	103.9	(3)	(3)	103.9	102.4	(3)
San Francisco, Calif.-----	(3)	106.5	(3)	(3)	106.3	(3)	(3)	105.4	(3)	(3)	105.4	(3)	(3)	105.8	104.5	(3)
Scranton, Pa.-----	(3)	(3)	104.6	(3)	(3)	104.2	(3)	(3)	104.0	(3)	(3)	103.5	(3)	-----	102.5	(3)
Seattle, Wash.-----	(3)	(3)	105.7	(3)	(3)	104.9	(3)	(3)	104.8	(3)	(3)	104.1	(3)	-----	103.3	(3)
Washington, D.C.-----	(3)	(3)	104.2	(3)	(3)	104.0	(3)	(3)	103.2	(3)	(3)	103.4	(3)	-----	102.2	(3)
Food																
All-city average ² -----	102.5	102.0	101.9	102.5	102.6	102.7	103.4	102.5	102.3	102.7	102.7	102.9	102.8	102.6	101.4	-----
Atlanta, Ga.-----	101.8	101.3	101.4	103.0	102.9	102.4	102.8	100.8	100.4	101.1	101.5	101.9	102.1	101.8	101.1	-----
Baltimore, Md.-----	102.5	102.0	102.2	103.0	102.5	103.1	103.6	102.6	101.9	102.2	102.0	101.9	102.0	102.4	101.0	-----
Boston, Mass.-----	103.5	102.5	102.2	102.3	102.4	103.1	103.6	101.5	101.7	102.3	102.1	102.7	102.3	102.4	101.4	-----
Chicago, Ill.-----	103.8	102.9	102.6	103.0	103.5	103.6	104.2	102.7	102.9	103.0	102.9	103.5	103.4	103.2	101.9	-----
Cincinnati, Ohio-----	100.3	100.8	100.6	101.5	101.2	102.2	103.2	101.4	101.8	101.9	101.8	102.3	102.5	101.8	100.9	-----
Cleveland, Ohio-----	99.2	99.0	99.3	100.6	101.4	101.5	101.7	101.0	100.7	101.2	100.9	101.7	101.7	100.9	100.8	-----
Detroit, Mich.-----	100.5	99.8	99.9	100.5	100.1	101.8	102.7	102.0	102.1	102.3	102.1	102.3	101.9	101.4	100.1	-----
Houston, Tex.-----	102.1	101.4	101.4	101.6	101.7	101.7	101.1	100.7	101.0	101.5	100.9	101.1	101.0	101.3	100.0	-----
Kansas City, Mo.-----	101.9	101.0	101.3	101.4	101.7	102.0	103.1	102.5	101.8	102.3	102.5	101.1	101.7	101.9	100.2	-----
Los Angeles, Calif.-----	105.2	104.4	104.3	104.3	103.5	103.0	103.6	104.1	104.9	105.5	105.3	105.4	105.6	104.5	103.7	-----
Minneapolis, Minn.-----	101.1	99.9	99.8	100.9	100.5	100.5	102.0	101.5	101.5	101.5	101.8	102.0	102.1	101.2	101.3	-----
New York, N.Y.-----	103.8	103.0	102.9	103.0	103.4	102.9	103.3	102.1	101.9	102.4	103.2	103.5	103.4	102.9	102.8	-----
Philadelphia, Pa.-----	101.5	101.4	101.6	101.9	101.7	102.2	102.9	101.3	101.5	101.8	102.1	102.5	102.2	101.9	101.1	-----
Pittsburgh, Pa.-----	101.7	101.0	101.5	101.9	102.2	102.8	103.4	102.6	101.9	102.4	102.6	103.1	102.9	102.3	101.4	-----
Portland, Ore.-----	102.5	102.4	103.1	103.6	103.9	103.5	103.3	102.8	102.5	103.5	102.7	102.1	102.4	103.0	101.3	-----
St. Louis, Mo.-----	102.1	101.7	101.0	101.8	101.9	101.9	102.2	102.5	102.4	102.5	102.3	102.2	102.2	102.0	100.3	-----
San Francisco, Calif.-----	104.6	104.0	103.2	104.2	104.1	103.1	104.0	104.1	104.1	104.1	104.5	104.4	104.0	104.0	102.6	-----
Scranton, Pa.-----	102.4	100.9	100.9	100.7	100.9	101.0	102.6	101.2	101.0	101.2	101.9	101.9	101.4	101.3	100.0	-----
Seattle, Wash.-----	104.0	104.7	104.0	104.6	104.5	104.3	104.9	104.9	104.8	104.8	104.2	104.2	103.9	104.5	102.5	-----
Washington, D.C.-----	101.4	100.3	101.1	100.9	101.9	102.3	102.5	101.7	101.3	101.8	101.8	101.6	101.8	101.6	100.7	-----

¹ See footnote 1, table D-1. Indexes measure time-to-time changes in prices of goods and services purchased by urban wage-earner and clerical-worker families. They do not indicate whether it costs more to live in 1 city than in another.

² Average of 46 cities.

³ All items indexes are computed monthly for 5 cities and once every 3 months on a rotating cycle for 15 other cities.

^a As of January 1962, the Consumer Price Index will be calculated from a 1957-59=100 reference base instead of a 1947-49 reference base. However, for the convenience of index users, the Consumer Price Index, including all U.S. major component indexes and the all-items index for each of the 20 large cities, will also be published through June 1964 on a 1947-49 reference base in the regular monthly index report. A description of the methodology of conversion is available upon request.

TABLE D-3. Indexes of wholesale prices,¹ by group and subgroup of commodities

[1947-49=100, unless otherwise specified]

Commodity group	1962			1961									1960		Annual average	
	Jan. ²	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Dec.	1960 ³	1959	
All commodities.....	119.7	119.2	118.8	118.7	118.8	118.9	118.6	118.2	118.7	119.4	119.9	120.0	119.5	119.6	119.5	
Farm products and processed foods.....	100.0	98.6	98.0	98.0	97.9	98.6	97.5	96.2	97.4	98.8	100.0	100.5	99.2	98.5	98.2	
Farm products.....	89.7	³ 87.8	87.6	87.1	87.2	88.6	87.1	85.1	86.8	88.5	89.9	90.0	83.7	88.8	89.1	
Fresh and dried fruits and vegetables.....	102.9	92.5	95.4	94.5	94.9	97.3	104.3	103.3	101.4	100.2	105.9	99.8	99.5	106.7	102.7	
Grains.....	78.1	79.0	79.3	77.9	78.0	78.1	77.8	74.2	74.8	73.8	76.4	76.0	72.7	75.7	77.3	
Livestock and live poultry.....	82.3	79.5	76.9	76.9	77.6	80.3	75.5	75.4	78.2	82.0	83.1	85.3	82.8	82.6	85.1	
Plant and animal fibers.....	99.2	99.3	99.3	99.4	98.7	98.4	96.7	96.2	95.2	93.4	92.8	91.2	90.7	94.2	98.2	
Fluid milk.....	99.9	³ 100.2	100.6	100.5	99.6	98.4	98.1	94.9	95.6	97.0	98.7	99.6	102.3	98.0	94.4	
Eggs.....	73.3	71.9	80.1	79.5	76.6	80.7	75.5	63.3	63.3	66.5	75.7	81.2	87.7	77.3	65.6	
Hay, hayseeds, and oilseeds.....	81.7	81.6	81.3	79.9	80.0	82.9	83.7	83.6	92.1	96.4	87.5	81.3	74.1	74.7	76.6	
Other farm products.....	130.2	131.5	129.4	130.1	131.2	129.3	129.3	129.0	129.5	129.4	129.6	129.6	130.4	128.5	132.6	
Processed foods.....	109.8	108.8	107.9	108.3	108.1	108.1	107.5	106.7	107.5	108.7	109.6	110.5	109.2	107.7	107.0	
Cereal and bakery products.....	126.3	125.2	125.2	125.1	124.3	123.9	123.7	123.6	123.6	123.6	123.6	123.6	123.5	121.8	119.3	
Meats, poultry, and fish.....	98.2	94.9	92.6	93.7	94.3	94.8	92.5	89.9	91.8	94.3	96.1	99.5	97.3	96.7	98.2	
Dairy products and ice cream.....	123.1	124.4	123.8	123.6	121.9	121.0	120.4	119.7	119.5	119.9	120.7	119.8	122.0	118.5	114.3	
Canned and frozen fruits and vegetables.....	106.9	³ 108.0	108.1	108.0	107.3	107.4	³ 109.2	108.7	109.0	111.1	111.5	112.0	110.1	107.0	109.0	
Sugar and confectionery.....	114.7	114.5	113.0	112.6	112.8	113.0	114.8	116.3	115.8	114.9	115.1	115.8	116.3	115.5	115.1	
Packaged beverage materials.....	136.0	136.4	136.4	136.0	138.6	138.6	139.1	139.1	139.1	139.1	139.1	139.1	140.9	143.3	146.5	
Animal fats and oils.....	56.7	³ 57.1	58.1	58.0	59.8	59.7	57.6	57.2	65.0	72.2	76.8	77.4	62.4	58.4	54.6	
Crude vegetable oils.....	57.3	³ 57.2	56.6	57.2	58.2	59.9	59.6	61.9	66.9	69.4	66.7	63.2	52.4	49.1	53.1	
Refined vegetable oils.....	73.0	73.9	77.7	77.7	70.1	68.3	67.7	68.0	71.8	71.9	70.5	67.5	61.2	56.7	58.0	
Vegetable oil end products.....	83.7	83.7	83.7	83.3	82.3	82.4	83.8	84.8	85.9	85.0	84.4	80.4	77.4	73.2	74.0	
Other processed foods.....	98.4	98.5	99.6	101.4	102.3	102.1	102.5	103.1	102.6	102.4	103.3	102.2	100.8	102.2	96.7	
All commodities except farm products.....	124.7	124.4	124.0	124.0	124.1	124.0	123.9	123.8	124.0	124.6	124.9	125.0	124.6	124.7	124.5	
All commodities except farm and foods.....	127.9	127.7	127.5	127.3	127.5	127.4	127.4	127.6	127.6	128.0	128.2	128.1	127.9	128.3	128.2	
Textile products and apparel.....	94.9	³ 94.9	94.8	94.7	94.4	94.2	93.9	93.7	94.0	94.1	94.4	94.7	95.2	96.1	95.0	
Cotton products.....	92.0	91.9	91.8	91.6	91.0	90.4	89.7	89.5	89.9	89.9	90.2	90.2	91.2	94.2	91.7	
Wool products.....	101.7	101.6	101.6	101.6	102.1	101.7	101.2	101.0	100.9	100.1	99.5	99.9	100.8	102.1	101.6	
Manmade fiber textile products.....	75.6	75.6	75.5	75.1	75.1	75.1	75.1	75.1	75.4	75.8	76.3	77.2	77.8	79.1	81.1	
Silk products.....	129.7	129.6	132.9	133.3	136.2	136.2	131.2	130.8	131.5	129.5	129.5	129.5	125.7	122.9	113.5	
Apparel.....	100.8	100.8	100.8	100.8	100.7	100.6	100.4	100.4	100.3	100.4	100.4	100.5	101.0	100.9	100.0	
Other textile products.....	93.5	³ 94.1	93.5	94.7	90.5	91.0	90.7	85.7	92.8	93.6	100.3	101.3	92.6	85.2	76.8	
Hides, skins, leather, and leather products.....	113.3	³ 113.3	113.8	114.1	113.5	113.1	111.1	110.1	110.7	109.9	109.5	108.0	108.8	110.3	114.3	
Hides and skins.....	74.7	76.3	79.6	82.2	82.5	82.9	76.2	68.1	71.0	68.0	68.8	60.5	64.9	68.1	90.7	
Leather.....	108.8	108.4	108.6	109.3	107.6	106.3	102.6	102.6	104.1	102.2	100.2	97.3	99.4	101.5	111.8	
Footwear.....	134.8	134.8	134.8	134.7	133.9	133.5	132.9	132.8	132.8	132.7	132.7	132.7	132.5	133.0	129.5	
Other leather products.....	106.4	³ 105.8	105.9	105.2	105.4	105.1	104.3	104.5	104.6	104.3	103.6	103.9	103.9	105.8	109.0	
Fuel and related products, and power ⁴	115.3	114.9	114.0	113.0	113.7	114.4	114.6	114.3	113.6	115.2	117.5	117.7	116.2	113.8	112.7	
Coal.....	121.8	121.6	121.2	120.8	120.1	119.2	118.7	117.7	117.4	119.6	122.8	123.4	123.1	121.8	122.6	
Coke.....	170.4	170.4	170.4	170.4	170.4	170.4	170.4	170.4	170.4	170.4	170.4	170.4	170.4	170.4	169.8	
Gas fuels ⁵	118.1	118.4	119.3	119.4	116.9	116.6	115.6	115.4	118.7	118.3	121.8	122.3	120.0	116.6	110.9	
Electric power ⁶	102.5	102.5	102.6	102.5	102.4	102.4	102.5	102.3	102.4	102.5	102.4	102.2	102.3	101.9	100.8	
Crude petroleum and natural gasoline.....	127.4	127.4	127.4	127.4	127.2	127.2	127.2	127.2	127.2	127.2	126.8	126.8	126.8	126.8	127.4	
Petroleum products, refined.....	117.8	117.0	115.0	113.3	115.1	116.8	117.4	117.0	115.0	117.9	121.5	121.9	119.3	115.4	114.2	
Chemicals and allied products.....	108.2	107.9	107.9	108.0	108.1	108.4	108.9	109.3	109.9	110.2	110.1	110.0	110.2	110.2	109.9	
Industrial chemicals.....	120.5	120.1	120.3	120.3	120.6	120.8	121.1	122.2	122.8	123.2	123.2	123.2	123.6	124.2	123.8	
Prepared paint.....	132.2	132.2	132.2	132.2	132.4	132.4	132.4	132.4	132.4	132.4	132.4	132.4	130.3	128.5	128.3	
Paint materials.....	99.6	99.0	99.3	100.0	99.9	101.1	101.0	101.0	101.5	103.5	104.6	104.1	104.4	103.8	101.9	
Drugs and pharmaceuticals.....	90.8	91.0	91.0	90.8	90.7	91.3	92.5	92.4	92.4	92.6	92.6	92.7	92.8	93.6	93.2	
Fats and oils, inedible.....	50.0	³ 47.2	46.0	47.0	48.7	51.1	52.2	54.1	61.4	62.1	57.7	54.7	48.5	49.0	56.7	
Mixed fertilizer.....	114.2	³ 114.0	114.2	113.6	114.4	113.6	113.0	112.3	112.3	112.3	112.3	111.9	111.8	111.0	109.5	
Fertilizer materials.....	113.5	112.3	112.3	111.9	110.2	110.0	111.7	112.3	112.3	112.3	112.3	112.4	111.9	109.6	106.9	
Other chemicals and allied products.....	105.5	105.4	105.3	105.3	105.3	105.3	105.8	105.8	105.8	105.6	105.6	105.5	107.2	106.7	106.6	
Rubber and rubber products.....	136.6	³ 136.9	138.4	139.4	139.6	139.4	139.0	139.6	140.2	140.1	139.9	139.6	141.2	144.7	144.5	
Crude rubber.....	134.6	³ 133.6	134.7	137.8	139.1	137.9	136.2	137.4	140.8	138.2	138.0	136.2	136.5	155.7	152.0	
Tires and tubes.....	132.5	133.8	137.0	138.3	138.3	138.3	138.3	138.5	138.4	138.4	137.1	137.1	137.1	138.4	143.4	
Other rubber products.....	141.1	141.1	141.1	141.0	141.0	141.1	140.9	141.6	141.6	142.5	143.3	143.3	146.8	145.6	142.2	
Lumber and wood products.....	114.6	114.5	114.7	114.7	115.7	115.9	117.2	117.8	117.6	118.0	115.4	114.7	116.5	121.3	125.8	
Lumber.....	114.5	³ 114.2	114.3	114.5	115.3	115.8	116.8	117.0	117.0	116.5	114.4	113.5	115.0	121.4	127.1	
Millwork.....	131.9	132.0	132.2	132.4	132.4	130.7	132.0	134.0	133.4	134.8	134.7	134.9	135.5	136.6	135.9	
Plywood.....	90.5	91.1	91.6	90.9	93.7	95.3	97.2	97.2	97.2	99.1	92.0	90.8	95.1	96.1	101.2	
Pulp, paper, and allied products.....	130.7	130.4	129.9	130.4	129.5	126.3	126.4	126.5	126.1	130.1	131.5	132.2	132.3	133.2	132.2	
Woodpulp.....	114.4	114.4	114.4	114.4	114.4	114.4	114.4	114.4	114.4	114.4	114.5	114.5	114.5	120.6	121.2	
Wastepaper.....	91.4	86.9	86.9	100.2	76.6	76.6	76.6	65.0	62.1	62.1	62.1	72.4	67.8	83.7	112.5	
Paper.....	145.4	145.4	145.4	145.4	145.3	145.9	145.9	145.9	145.4	145.4	145.7	145.7	145.7	145.4	143.4	
Paperboard.....	122.4	³ 122.4	122.4	122.4	122.4	122.8	123.0	128.9	128.9	129.1	129.9	130.1	132.4	135.3	136.1	
Converted paper and paperboard products.....	128.7	128.3	127.3	127.3	127.3	121.2	121.2	121.2	120.9	129.7	130.3	130.9	131.1	130.6	127.5	
Building paper and board.....	142.2	³ 143.3	143.9	144.8	144.8	144.8	144.9	144.9	144.6	145.3	145.8	146.0	145.4	145.7	146.4	

See footnotes at end of table.

TABLE D-3. Indexes of wholesale prices,¹ by group and subgroup of commodities—Continued

[1947-49=100, unless otherwise specified]

Commodity group	1962	1961											1960	Annual average	
	Jan. ²	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Dec.	1960 ³	1959
All commodities except farm and foods—Con.															
Metals and metal products.....	153.0	152.7	152.4	153.2	153.7	153.6	153.2	153.1	153.0	152.7	152.4	152.3	152.2	153.8	153.6
Iron and steel.....	170.0	169.3	169.2	170.5	170.8	170.5	170.1	170.3	170.2	170.8	170.4	169.7	168.6	170.0	172.0
Nonferrous metals.....	134.5	134.8	134.0	134.9	136.3	136.2	135.8	135.2	134.4	132.4	132.3	132.2	133.9	139.0	136.1
Metal containers.....	159.5	156.6	156.6	156.6	156.6	156.6	156.6	156.6	156.6	156.6	156.6	156.6	153.6	153.9	153.7
Hardware.....	177.1	177.1	176.7	176.7	176.7	176.4	176.3	176.3	176.3	175.2	175.0	175.1	174.7	174.3	173.0
Plumbing fixtures and brass fittings.....	133.6	133.7	133.8	133.8	133.5	133.5	132.8	132.2	131.3	130.9	130.9	130.9	130.8	132.1	130.1
Heating equipment.....	114.5	³ 115.0	114.3	114.8	115.2	115.6	115.5	115.4	115.4	115.2	114.5	114.8	116.8	119.4	121.7
Fabricated structural metal products.....	131.8	³ 131.8	131.7	131.9	131.8	132.3	132.3	132.1	132.4	132.8	132.8	133.5	133.9	134.7	133.4
Fabricated nonstructural metal products.....	150.2	150.0	150.0	150.4	150.8	150.4	149.2	149.6	150.0	150.1	149.6	149.6	148.6	146.4	146.0
Machinery and motive products.....	153.0	³ 153.0	152.9	152.8	152.7	152.7	153.0	153.2	153.1	153.1	153.4	153.4	153.1	153.4	153.0
Agricultural machinery and equipment.....	150.8	³ 150.5	149.5	149.0	148.7	148.9	148.8	148.8	148.6	148.6	148.5	148.5	148.0	146.1	143.4
Construction machinery and equipment.....	178.7	178.6	178.6	178.5	178.5	178.5	178.3	178.2	178.5	178.6	178.2	178.2	177.0	175.6	171.9
Metalworking machinery and equipment.....	185.2	³ 184.9	183.6	183.1	182.1	181.7	181.7	181.5	181.7	181.8	183.3	182.7	182.3	179.9	174.5
General purpose machinery and equipment.....	166.9	³ 166.4	165.9	165.5	166.3	166.1	166.3	166.5	166.3	166.2	166.1	166.2	166.1	167.1	165.3
Miscellaneous machinery.....	152.1	³ 151.9	152.3	152.0	152.0	152.0	151.8	151.4	151.4	151.4	151.2	151.2	150.9	150.2	149.4
Special industry machinery and equipment.....	101.4	³ 100.9	100.7	100.7	100.6	100.5	100.5	100.5	100.4	100.3	100.1	100.0	100.1	(⁴)	(⁴)
Electrical machinery and equipment.....	150.4	³ 151.0	151.1	151.1	150.4	150.5	151.8	151.7	151.7	151.9	153.5	153.6	152.4	154.2	154.4
Motor vehicles.....	139.8	³ 139.8	139.9	140.0	140.3	140.5	140.5	140.4	140.3	140.3	140.2	140.4	140.7	140.8	142.8
Transportation equipment, railroad rolling stock.....	100.5	100.5	100.5	100.5	100.3	100.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	(⁴)	(⁴)
Furniture and other household durables.....	122.2	³ 122.1	122.3	122.2	122.2	122.1	122.3	122.4	122.4	122.4	122.2	122.2	122.6	123.1	123.4
Household furniture.....	127.5	127.3	127.5	127.0	126.7	126.4	126.4	126.4	126.4	126.4	126.2	126.2	125.7	125.1	124.1
Commercial furniture.....	156.7	156.7	156.7	156.7	156.7	155.9	155.9	155.9	155.9	155.9	155.9	155.9	155.9	156.8	155.2
Floor coverings.....	128.3	128.7	129.1	129.0	129.3	129.3	129.3	128.6	128.6	128.6	128.6	128.6	130.2	130.4	128.1
Household appliances.....	99.9	99.6	99.8	99.9	99.8	99.8	99.8	99.8	99.8	99.9	100.0	100.0	100.2	101.9	104.7
Television, radio receivers, and phonographs.....	86.7	88.0	88.0	87.9	88.3	88.7	90.0	90.0	89.8	90.7	90.7	90.5	91.2	91.3	92.8
Other household durable goods.....	158.0	³ 156.8	157.4	157.3	157.2	157.2	156.9	157.8	157.8	157.8	156.6	156.6	157.4	157.4	156.4
Nonmetallic mineral products.....	138.6	³ 138.3	138.6	138.9	138.5	138.5	138.4	138.3	138.5	138.6	138.6	138.4	137.9	138.0	137.7
Flat glass.....	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	132.4	132.4	132.4	132.4	132.4	132.7	135.3
Concrete ingredients.....	142.2	³ 140.9	141.6	142.5	142.4	142.4	142.6	142.6	142.6	142.6	142.6	142.3	142.0	142.1	140.3
Concrete products.....	131.0	131.1	131.2	131.5	131.4	131.3	131.3	131.3	131.3	131.3	131.1	131.2	131.0	131.1	129.7
Structural clay products.....	162.2	162.1	162.0	162.1	161.9	161.7	161.6	161.6	161.5	162.1	162.1	162.1	162.3	161.8	160.2
Gypsum products.....	137.3	137.3	137.3	137.3	137.3	137.3	134.6	134.6	134.6	134.6	134.6	134.6	133.2	133.2	133.1
Prepared asphalt roofing.....	119.7	120.4	120.4	120.4	114.2	114.2	114.2	112.9	112.9	114.2	114.2	114.2	106.6	107.3	116.4
Other nonmetallic minerals.....	132.7	³ 132.7	133.1	133.2	133.2	133.7	133.7	133.7	133.7	133.7	133.6	132.9	133.6	134.2	132.4
Tobacco products and bottled beverages.....	133.5	133.4	133.5	133.4	133.4	132.8	132.6	132.1	132.1	132.0	132.1	132.1	132.1	131.8	131.4
Tobacco products.....	130.9	130.9	130.9	130.9	130.9	130.9	130.9	130.9	130.9	130.8	130.8	130.8	130.8	130.8	130.5
Alcoholic beverages.....	121.3	121.1	121.2	121.1	121.2	121.1	121.1	121.1	121.2	121.1	121.3	121.3	121.2	120.8	121.3
Nonalcoholic beverages.....	180.5	180.5	180.5	180.5	180.5	176.3	174.8	171.6	171.6	171.6	171.6	171.6	171.6	171.3	167.4
Miscellaneous products.....	98.5	98.6	97.5	93.4	95.6	95.6	95.6	95.9	99.5	97.7	96.8	95.2	92.4	92.1	94.5
Toys, sporting goods, small arms, ammunition.....	118.6	119.1	119.9	119.9	119.6	119.7	119.0	118.9	118.9	119.0	118.9	118.3	118.6	118.3	117.5
Manufactured animal feeds.....	78.6	78.5	76.8	71.0	74.2	74.3	74.6	75.0	80.3	77.5	76.2	74.1	70.0	69.6	75.1
Notions and accessories.....	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.4	96.4	96.4	96.4	96.9	97.3
Jewelry, watches, and photographic equipment.....	112.0	112.3	112.3	112.0	111.9	111.7	111.0	111.0	111.0	111.2	111.3	111.3	111.0	110.7	108.2
Other miscellaneous products.....	132.5	132.3	133.3	133.0	132.8	133.1	132.3	132.2	131.8	131.7	132.3	132.8	132.4	132.2	132.3

¹ As of January 1961, new weights reflecting 1958 values were introduced into the index. Technical details furnished upon request to the Bureau.

² Preliminary.

³ Revised.

⁴ Formerly titled Fuel, power, and lighting materials.

⁵ January 1958=100.

⁶ New series. January 1961=100.

⁷ Formerly titled Nonmetallic minerals—structural.

TABLE D-4. Indexes of wholesale prices for special commodity groupings¹

[1947-49=100, unless otherwise specified]

Commodity group	1962	1961												1960	Annual average	
	Jan. ²	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Dec.	1960 ³	1959	
All foods.....	107.3	105.6	105.4	105.6	105.4	105.8	105.6	104.2	104.7	105.8	107.5	108.0	107.3	106.0	104.4	
All fish.....	143.0	143.6	141.1	138.1	136.9	137.1	129.2	129.5	128.6	126.2	132.0	133.3	133.2	126.7	124.5	
All commodities except farm products.....	124.7	124.4	124.0	124.0	124.1	124.0	123.9	123.8	124.0	124.6	124.9	125.0	124.6	124.7	124.5	
Textile products, excluding hard fiber products.....	89.6	89.5	89.5	89.2	88.9	88.6	88.1	88.1	88.4	88.4	88.7	89.2	90.0	92.2	91.4	
Refined petroleum products: ⁴																
East Coast petroleum products, refined.....	116.2	115.9	114.6	114.6	114.6	114.6	113.4	113.4	113.4	114.8	116.1	116.6	111.4	111.0	108.9	
Midcontinent petroleum products, refined.....	115.1	117.2	108.9	102.2	108.2	115.0	121.7	121.7	116.0	124.2	125.3	126.0	125.2	117.0	115.7	
Gulf Coast petroleum products, refined.....	124.0	124.0	122.8	122.2	122.2	122.2	121.3	119.8	119.8	122.1	127.3	127.3	122.9	120.4	118.4	
Pacific Coast petroleum products, refined.....	104.9	106.1	107.0	107.0	108.5	110.1	107.0	107.9	109.1	104.3	105.5	106.1	105.5	105.8	108.2	
Midwest petroleum products, refined ⁵	95.8	90.3	90.3	88.7	91.3	92.6	93.9	93.9	88.7	93.5	99.3	99.9	100.0	(⁵)	(⁵)	
Bituminous coal—domestic sizes.....	125.9	125.6	125.6	124.4	123.1	121.7	120.1	118.3	117.3	117.7	126.4	127.9	127.7	124.7	124.9	
Soaps.....	109.6	109.6	109.6	109.6	109.6	109.6	109.6	109.7	109.6	107.5	107.5	107.4	107.6	107.6	109.5	
Synthetic detergents.....	100.3	100.3	100.3	100.3	100.3	100.3	102.0	102.0	102.0	102.0	102.0	102.0	102.9	101.7	101.4	
Pharmaceutical preparations.....	101.1	101.2	101.2	100.9	100.8	100.8	102.2	102.1	102.1	102.0	102.0	102.2	102.1	103.3	103.0	
Ethical preparations ⁴	98.4	98.6	98.6	98.2	98.0	98.0	100.1	99.9	99.9	99.9	99.9	100.1	100.1	(⁵)	(⁵)	
Anti-infectives ⁵	98.9	99.7	99.7	99.7	98.9	98.9	98.9	99.0	99.0	99.0	99.0	100.0	100.1	(⁵)	(⁵)	
Anti-arthritics ⁵	100.6	100.6	100.6	100.6	100.6	100.6	100.6	100.0	100.0	100.0	100.0	100.0	100.0	(⁵)	(⁵)	
Sedatives and hypnotics ⁵	112.5	112.5	112.5	101.9	101.9	101.9	101.0	100.0	100.0	100.0	100.0	100.0	100.0	(⁵)	(⁵)	
Anesthetics ⁵	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	(⁵)	(⁵)	
Anti-spasmodics and anti-cholestergics ⁵	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	(⁵)	(⁵)	
Cardiovasculars and anti-hypertensives ⁵	100.9	100.9	100.9	100.9	100.9	100.9	100.9	100.9	100.0	100.0	100.0	100.0	100.0	(⁵)	(⁵)	
Diabetics ⁵	103.8	103.8	103.8	103.8	103.8	103.8	103.8	103.8	100.0	100.0	100.0	100.0	100.0	(⁵)	(⁵)	
Hormones ⁵	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	(⁵)	(⁵)	
Diuretics ⁵	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	(⁵)	(⁵)	
Dermatologicals ⁵	100.6	100.6	100.6	100.5	100.5	100.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	(⁵)	(⁵)	
Hematologics ⁵	108.5	108.5	108.5	108.5	108.5	108.5	108.5	104.5	104.5	104.5	104.5	104.5	100.0	(⁵)	(⁵)	
Analgesics ⁵	101.8	101.8	101.8	101.8	101.8	101.8	101.8	100.0	100.0	100.0	100.0	100.0	100.0	(⁵)	(⁵)	
Anti-obesity preparations ⁵	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	(⁵)	(⁵)	
Cough and cold preparations ⁵	98.9	98.8	98.8	98.8	98.8	98.8	98.8	100.0	100.0	100.0	100.0	100.0	100.0	(⁵)	(⁵)	
Vitamins ⁵	88.1	88.1	88.1	88.1	88.1	88.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.4	(⁵)	
Proprietary preparations ⁴	100.3	100.2	100.2	100.2	100.1	100.1	100.1	100.2	100.2	100.2	100.0	100.0	100.0	99.8	(⁵)	
Vitamins ⁵	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	(⁵)	
Cough and cold preparations ⁵	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	(⁵)	
Laxatives and elimination aids ⁵	99.7	99.5	99.5	99.5	99.5	99.5	99.5	100.5	100.5	100.5	100.0	100.0	100.0	100.0	(⁵)	
Internal analgesics ⁵	101.2	100.9	100.9	100.6	100.6	100.6	100.6	100.3	100.3	100.3	100.0	100.0	100.0	100.0	(⁵)	
Tonics and alteratives ⁵	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.8	(⁵)	
External analgesics ⁵	100.2	100.2	100.2	100.2	100.2	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	98.3	(⁵)	
Antiseptics ⁵	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	(⁵)	
Antacids ⁵	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	(⁵)	
Lumber and wood products (excluding millwork).....	111.8	111.7	111.9	111.9	113.2	114.0	115.3	115.4	115.4	115.6	112.1	111.1	113.3	118.9	124.5	
Softwood lumber.....	113.4	112.9	11.3	113.2	114.2	114.9	115.9	116.1	116.1	115.6	113.0	111.6	112.7	120.4	128.1	
Pulp, paper, and products (excluding building paper).....	130.5	130.1	129.5	130.0	129.1	125.8	125.8	126.0	125.6	130.6	131.1	131.8	132.0	132.9	131.8	
Special metals and metal products.....	149.9	149.7	149.5	150.0	150.4	150.4	150.1	150.1	149.9	149.7	149.5	149.5	149.5	150.5	150.9	
Steel mill products.....	186.9	186.9	186.9	186.9	186.9	186.9	187.0	187.0	187.5	187.5	187.6	187.6	187.6	187.9	188.2	
Machinery and equipment.....	159.8	159.8	159.6	159.4	159.1	159.1	159.6	159.5	159.5	159.6	160.3	160.2	159.6	160.0	158.5	
Agricultural machinery (including tractors).....	153.0	152.6	151.5	151.0	150.7	150.8	150.8	150.8	150.5	150.5	150.5	150.4	150.0	147.9	144.8	
Metalworking machinery.....	193.2	193.1	192.0	191.4	190.6	190.0	189.9	189.5	189.5	189.5	189.2	189.9	189.6	186.7	181.8	
Total tractors.....	160.5	160.5	159.7	159.3	159.3	159.3	159.1	159.0	159.2	159.2	159.2	159.2	158.9	156.4	153.3	
Industrial valves.....	201.3	201.3	199.5	197.5	200.8	201.9	202.3	202.5	202.5	202.5	202.1	201.1	201.2	205.1	196.9	
Industrial fittings.....	127.6	125.5	120.1	120.1	120.1	119.4	119.4	121.7	121.7	121.7	121.7	122.0	121.7	132.2	139.0	
Antifriction bearings and components.....	128.5	130.0	130.8	130.6	131.8	130.5	130.6	130.6	130.6	130.6	130.6	131.4	131.4	133.6	136.1	
Abrasive grinding wheels.....	153.1	146.9	146.9	146.9	146.9	146.9	146.9	146.9	146.9	146.9	146.9	146.9	146.9	147.5	152.5	
Construction materials.....	129.6	129.5	129.6	129.7	130.0	130.1	130.5	130.5	130.6	130.7	129.9	129.8	130.0	132.6	134.6	

¹ See footnote 1, table D-3.² Preliminary.³ Revised.⁴ The special index for refined petroleum products is now being published as a subgroup index in table D-3.⁵ New series. January 1961=100.

TABLE D-5. Indexes of wholesale prices,¹ by stage of processing and durability of product

[1947-49=100]

Commodity group	1962		1961										1960	Annual average	
	Jan. ²	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Dec.	1960 ³	1959
All commodities.....	119.7	119.2	118.8	118.7	118.8	118.9	118.6	118.2	118.7	119.4	119.9	120.0	119.5	119.6	119.5
<i>Stage of processing</i>															
Crude materials for further processing.....	95.6	³ 94.2	93.3	93.7	93.8	94.8	92.7	91.6	93.2	94.6	95.2	95.1	93.3	94.5	96.7
Crude foodstuffs and feedstuffs.....	86.2	³ 84.6	83.5	83.1	83.4	85.1	82.8	81.5	83.6	85.7	86.9	87.5	85.5	85.7	88.8
Crude nonfood materials except fuel.....	110.5	³ 109.6	109.3	111.5	111.3	110.6	109.2	108.5	108.7	108.6	107.2	105.4	104.1	107.5	112.2
Crude nonfood materials, except fuel, for manufacturing.....	108.8	108.0	107.5	109.9	109.6	108.9	107.4	106.7	106.9	106.7	105.2	103.3	101.8	105.5	110.8
Crude nonfood materials, except fuel, for construction.....	142.2	³ 140.9	141.6	142.5	142.4	142.4	142.6	142.6	142.6	142.6	142.6	142.3	142.0	142.1	140.3
Crude fuel.....	124.7	124.7	124.9	124.7	123.2	122.6	121.9	121.2	122.3	123.3	126.8	127.4	126.3	124.4	123.4
Crude fuel for manufacturing.....	124.2	124.3	124.5	124.2	122.8	122.2	121.5	120.9	121.9	122.7	126.2	126.8	125.8	123.9	122.9
Crude fuel for nonmanufacturing.....	125.5	125.5	125.6	125.4	123.9	123.2	122.5	121.8	123.0	124.2	127.7	128.2	127.1	125.2	124.1
Intermediate materials, supplies, and components.....	126.1	126.1	125.8	125.4	125.7	125.5	125.6	125.8	126.3	126.9	126.9	126.7	126.4	127.0	127.0
Intermediate materials and components for manufacturing.....	127.0	127.0	126.9	127.0	127.0	127.1	127.1	127.4	127.8	127.9	127.9	127.8	127.9	128.9	129.0
Intermediate materials for food manufacturing.....	101.9	101.8	101.4	101.7	101.3	101.4	101.6	102.0	103.0	103.7	103.9	103.6	101.3	99.3	98.5
Intermediate materials for nondurable manufacturing.....	103.9	103.6	103.6	103.6	103.5	103.7	103.6	104.1	104.5	104.8	104.8	104.8	105.2	106.4	106.4
Intermediate materials for durable manufacturing.....	155.6	155.9	155.8	156.0	156.4	156.4	156.2	156.0	156.0	155.6	155.4	155.4	156.6	158.1	157.9
Components for manufacturing.....	148.5	³ 148.7	148.5	148.5	148.4	148.5	³ 149.1	³ 149.1	³ 149.2	³ 149.3	150.0	150.1	149.3	150.7	151.5
Materials and components for construction.....	133.1	133.1	133.1	133.2	133.5	133.6	134.0	134.1	134.1	134.8	133.5	133.5	133.5	135.5	136.5
Processed fuels and lubricants.....	109.8	109.8	109.2	108.3	109.2	110.0	110.5	110.2	109.4	110.3	111.9	111.9	111.6	108.9	106.0
Processed fuels and lubricants for manufacturing.....	110.0	109.9	109.5	108.9	109.4	110.0	110.3	110.1	109.6	110.3	111.6	111.6	111.3	108.9	105.6
Processed fuels and lubricants for nonmanufacturing.....	109.6	109.6	108.6	107.5	108.9	110.1	110.9	110.6	109.1	110.4	112.5	112.5	112.3	109.1	106.8
Containers, nonreturnable.....	139.7	³ 138.7	138.2	138.2	137.6	133.3	133.3	133.1	133.7	139.9	140.6	141.1	139.4	138.6	136.7
Supplies.....	119.1	119.1	118.1	115.5	116.8	115.6	115.8	115.9	118.3	119.2	118.7	117.6	116.1	115.8	116.6
Supplies for manufacturing.....	147.7	147.4	147.1	147.1	147.0	147.1	147.2	147.6	147.6	148.1	149.0	148.4	149.6	149.3	143.5
Supplies for nonmanufacturing.....	105.6	105.7	104.6	101.3	102.9	101.4	101.6	101.7	104.7	105.6	104.8	103.6	101.2	101.0	104.1
Manufactured animal feeds.....	73.3	73.4	71.6	65.2	68.4	68.3	68.7	69.2	74.8	72.3	70.7	68.3	64.2	63.8	74.7
Other supplies.....	122.6	122.6	122.2	122.2	122.2	119.5	119.4	119.2	119.5	123.5	123.4	123.4	123.0	122.9	121.3
<i>Finished goods (goods to users, including raw foods and fuels)</i>															
Consumer finished goods.....	122.2	121.6	121.4	121.3	121.3	121.4	121.2	120.6	120.7	121.3	122.2	122.6	122.2	121.5	120.6
Consumer foods.....	114.3	³ 113.4	113.2	113.2	113.2	113.3	113.1	112.4	112.5	113.3	114.3	114.8	114.4	113.6	112.5
Consumer crude foods.....	108.9	107.1	106.8	107.1	106.9	107.2	106.8	105.0	105.7	106.8	108.6	109.5	109.0	107.7	105.5
Consumer processed foods.....	95.3	³ 90.5	94.4	93.8	92.7	94.8	95.7	90.5	89.9	90.6	97.2	96.8	99.6	98.0	91.9
Consumer other nondurable goods.....	111.7	110.4	109.4	109.9	109.8	109.8	109.1	108.0	108.9	110.1	111.0	112.1	111.0	109.7	108.4
Consumer durable goods.....	114.7	114.5	114.1	113.8	113.9	114.0	113.9	113.8	113.5	114.2	115.0	115.2	114.7	114.1	113.4
Producer finished goods.....	125.3	³ 125.3	125.4	125.3	125.5	125.5	125.6	125.5	125.5	125.5	125.5	125.6	125.8	126.1	126.5
Producer finished goods for manufacturing.....	154.3	³ 154.2	154.1	154.0	153.8	153.8	153.8	153.9	153.7	153.7	153.8	153.9	153.8	153.8	153.2
Producer finished goods for nonmanufacturing.....	161.2	³ 161.1	160.9	160.8	160.6	160.6	160.6	160.7	160.6	160.6	160.6	160.8	160.6	160.0	158.1
Other supplies.....	148.2	³ 148.3	148.3	148.1	147.9	147.8	147.9	147.9	147.7	147.6	147.9	147.9	147.8	148.4	149.1
<i>Durability of product</i>															
Total durable goods.....	145.0	³ 144.9	144.9	145.0	145.2	145.2	145.3	145.4	145.3	145.3	145.1	145.0	145.0	145.7	145.9
Total nondurable goods.....	105.9	105.1	104.7	104.4	104.5	104.6	104.2	103.6	104.3	105.3	106.2	106.3	105.6	105.3	105.0
Total manufactures.....	125.6	125.3	125.0	124.8	125.0	124.9	124.9	124.8	125.1	125.7	126.0	126.1	125.7	125.8	125.5
Durable manufactures.....	146.2	146.2	146.2	146.2	146.3	146.3	146.4	146.5	146.5	146.5	146.3	146.3	146.4	147.0	147.0
Nondurable manufactures.....	109.3	108.7	108.2	107.9	108.2	108.1	107.9	107.7	108.3	109.3	109.9	110.1	109.4	108.9	108.5
Total raw or slightly processed goods.....	99.8	98.5	98.1	98.2	97.8	98.6	97.3	95.8	97.0	98.0	99.3	99.3	98.3	98.6	98.9
Durable raw or slightly processed goods.....	110.6	107.2	106.4	111.7	114.2	112.7	110.8	111.9	109.7	110.7	108.6	105.1	101.8	107.4	114.1
Nondurable raw or slightly processed goods.....	99.2	³ 98.0	97.7	97.5	97.0	97.9	96.6	95.0	96.3	97.4	98.8	99.0	98.1	98.1	98.1

¹ See footnote 1, table D-3.² Preliminary.³ Revised.

NOTE: For description of the series by stage of processing, see New BLS Economic Sector Indexes of Wholesale Prices (in *Monthly Labor Review* December 1965, pp. 1448-1463); and by durability of product and data beginning with 1947, see Wholesale Prices and Price Indexes, 1967, BLS Bull. 1235 (1958).

E.—Work Stoppages

TABLE E-1. Work stoppages resulting from labor-management disputes ¹

Month and year	Number of stoppages		Workers involved in stoppages		Man-days idle during month or year	
	Beginning in month or year	In effect during month	Beginning in month or year	In effect during month	Number	Percent of estimated working time
1935-39 (average).....	2,862	-----	1,130,000	-----	16,900,000	0.27
1947-49 (average).....	3,573	-----	2,380,000	-----	39,700,000	.46
1945.....	4,750	-----	3,470,000	-----	38,000,000	.47
1946.....	4,985	-----	4,600,000	-----	116,000,000	1.43
1947.....	3,693	-----	2,170,000	-----	34,600,000	.41
1948.....	3,419	-----	1,960,000	-----	34,100,000	.37
1949.....	3,606	-----	3,030,000	-----	50,500,000	.59
1950.....	4,843	-----	2,410,000	-----	38,800,000	.44
1951.....	4,737	-----	2,220,000	-----	22,900,000	.23
1952.....	5,117	-----	3,540,000	-----	59,100,000	.57
1953.....	5,091	-----	2,400,000	-----	28,300,000	.26
1954.....	3,468	-----	1,530,000	-----	22,600,000	.21
1955.....	4,320	-----	2,650,000	-----	28,200,000	.26
1956.....	3,825	-----	1,900,000	-----	33,100,000	.29
1957.....	3,673	-----	1,390,000	-----	16,500,000	.14
1958.....	3,694	-----	2,060,000	-----	23,900,000	.22
1959.....	3,708	-----	1,880,000	-----	69,000,000	.61
1960.....	3,333	-----	1,320,000	-----	19,100,000	.17
1961: January ²	170	300	80,000	100,000	700,000	.08
February ²	210	330	120,000	150,000	940,000	.11
March ²	220	350	55,000	75,000	610,000	.06
April ²	320	490	94,000	126,000	1,180,000	.14
May ²	430	620	120,000	165,000	1,530,000	.16
June ²	330	570	140,000	211,000	1,760,000	.18
July ²	330	560	95,000	183,000	1,690,000	.19
August ²	325	550	95,000	160,000	1,320,000	.13
September ²	310	530	334,000	390,000	3,150,000	.35
October ²	300	510	223,000	277,000	2,380,000	.23
November ²	225	430	83,000	156,000	1,000,000	.10
December ²	100	250	27,000	75,000	500,000	.05
1962: January ²	265	400	160,000	185,000	1,040,000	.11

¹ The data include all known strikes or lockouts involving 6 or more workers and lasting a full day or shift or longer. Figures on workers involved and man-days idle cover all workers made idle for as long as 1 shift in establishments directly involved in a stoppage. They do not measure the indirect

or secondary effect on other establishments or industries whose employees are made idle as a result of material or service shortages.

² Preliminary.

³ Revised preliminary.

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