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Major Collective Bargaining Agreements

SUB Plans in Major Agreements

Severance Pay and Layoff Benefit Plans

Election Challenges Under the LMRDA

Work Experience of the Population

UNITED STATES DEPARTMENT OF LABOR

BUREAU OF LABOR STATISTICS



UNITED STATES DEPARTMENT OF LABOR

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Monthly Labor Review

UNITED STATES DEPARTMENT OF LABOR • BUREAU OF LABOR STATISTICS

LAWRENCE R. KLEIN, *Editor-in-Chief*

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This Issue in Brief . . .

HIGHLIGHTING a Labor Department study, Martha F. Riche's article *Union Election Challenges Under the LMRDA* (p. 1) surveys the operation of title IV of the Labor-Management Reporting and Disclosure Act between September 1959 and April 1963. Although it does not embrace a representative sample of all local elections, this study does proffer the most systematic data available to date on locals involved in challenged elections. Of the 211 enforceable cases investigated during the first 3½ years of the act's operation, violations were disclosed in two-thirds, and slightly less than half of these violations affected the election results.

A RECORD 83.2 million men and women were employed at some time during 1963, as reported in Samuel Saben's study *Work Experience of the Population in 1963* (p. 8). Approximately 55 percent of these workers—representing the highest proportion since 1957—were employed full time for the whole year. No appreciable change occurred between 1962 and 1963 in the proportion of the unemployed with work experience who were jobless during the year for more than 6 months or in the number who did not work at all, but who had sought employment at some time during 1963.

TWO OF THIS MONTH'S STUDIES were derived from the Bureau's file of major collective bargaining agreements. In these summaries, the authors examine a series of related provisions aimed at anchoring worker income protection. *Severance Pay and Layoff Benefit Plans* (p. 27) by Leon E. Lunden and Ernestine M. Moore discloses a steady upward trend since 1944 in the percent of agreements with such plans and a particularly significant increase since the 1955-56 survey. In 1963, dismissal pay and layoff benefit plans appeared in 30 percent of the major agreements—mostly in manufacturing—and covered 40 percent of the workers. Almost half of the plans were negotiated with five unions and affected two-thirds of the workers. Dorothy R. Kittner's sum-

mation of *Supplemental Unemployment Benefit Plans in Major Agreements* (p. 19) reveals that 14 percent of the agreements in effect during the winter of 1963-64 encompassed SUB plans—primarily in the durable goods manufacturing industries—that covered 25 percent of the workers. Most of these contracts were also negotiated with five unions.

COMMENTING on the variety of programs already evolved by collective bargaining to meet the manpower problems of technological change, Arnold Weber in *Collective Bargaining Solutions to Technological Change* (p. 17) advances his views of a future program that will effect the greatest progress and some of the major challenges that accompany the systems developed to cope with job insecurity. This article was excerpted from a paper presented to the Conference on the Manpower Implications of Automation sponsored by the Organization for Economic Cooperation and Development. The February issue of the *Review* will publish a brief account of the conference proceedings.

Following are some recent key statistics from continuing BLS series. See *Current Labor Statistics*, pp. 89-128.

	December	
	1964	1963
Total civilian labor force (in thousands).....	73,841	72,461
Employment.....	70,375	68,615
Unemployment.....	3,466	3,846
Unemployment rate (seasonally adjusted) (percent).....	4.9	5.5
Earnings of production workers in manufacturing (preliminary):		
Average hourly earnings.....	2.58	2.51
Average weekly hours.....	41.3	40.9
Average overtime hours.....	3.5	3.1
	November	
Index of average hourly earnings of production workers in manufacturing (excluding overtime and interindustry shifts) (1957-59=100).....	119.3	116.8
Consumer Price Index (including single workers) (1957-59=100).....	108.7	107.4

IN *Output Per Man-Hour, Gas and Electric Utilities* (p. 34), Joseph E. Dragonette and Philip W. Jaynes briefly trace the expansion of the gas and electric utilities industry between 1932 and 1962, examining the industry's rising productivity. From 1947 to 1962, the industry experienced a 186-percent increase in output per man-hour of all employees. Total man-hours rose only 20 percent over this period. Explaining the productivity increase, the authors point to the high level of capital investment and technological advances, which are discussed in detail for both segments of the industry.

The Labor Month in Review

► Early Civil Service Retirement

► Prices Since the Tax Cut

HOW MANY EMPLOYEES elect to retire early, and why? How many of them find other jobs? What kinds of jobs do they find? With about 12 million workers in private pension plans with early retirement provisions, these are significant questions. Some of the answers are provided in a recently published report by the U.S. Civil Service Commission, based on the experience of 3,302 former Federal civil service employees who had chosen to retire early. The survey was undertaken in 1963 at the request of the Subcommittee on Retirement of the Senate Committee on Post Office and Civil Service.

Since October 1956, Federal employees have had the option of retiring at the age of 55 after 30 years' service. Annuities are reduced 1 percent for each year below 60, the earliest age at which full benefits are payable. The Civil Service Commission estimated, in 1963, that 8 percent of those eligible to retire on this basis actually had.

While some of the motives which impel early retirement may be common to public and private employees, conditions differ at two important points—both of which stimulate early retirement by civil servants. First, civil servants face a much smaller reduction of benefits than do most employees in private industry who are covered by early retirement plans; at worst they will lose 5 percent of normal benefits. Typically, for most employees in private industry, benefits at age 60 are about two-thirds of those payable at 65 for equivalent service, and at age 55, they are less than one-half. Second, Federal civil servants are not covered by the Social Security Act, and many find it advantageous to retire before 60 in order to take jobs which will qualify them for social security benefits in addition to their annuities.

A popular view of the retired worker has him withdrawn completely from the labor force to spend his time gardening or woodworking. The subjects of the survey apparently shared this notion. Their principal motive, they said, was to quit while they were still able to enjoy retirement. Yet more than half of them stated that they had retired with the intention of finding jobs, more than half did find jobs, and nearly half of those who found jobs worked full time.

Half the respondents were former postal employees; 80 percent of these had been clerks or carriers, and 20 percent had done other postal work. Of the nonpostal workers, 40 percent had held nonprofessional white-collar jobs, an equal number were skilled and unskilled workers, and 20 percent were engineers, scientists, or other professional workers. Most of the respondents were men, and most had left jobs which paid \$4,000 to \$5,000 and offered limited opportunities.

The average civil service annuity for early retirees was \$299 a month, and 60 percent received between \$200 and \$299 a month. A third of the group retired at 55, and a fifth retired between 59 and 60. Many had more than the mandatory 30 years of service and some had 40 years or more.

ANNUITANTS gave as the one main reason for early retirement, in this order: to quit while still able to enjoy retirement, health and family problems, economic motives, and dissatisfaction with the job. Former postal workers and nonpostal professionals generally gave economic reasons (better paid job, better off with annuity plus outside earnings, wanted to qualify for social security). The professionals, more than others, said that they had become dissatisfied with their jobs, working conditions, supervision, or management.

Fifty-seven percent of the survey group retired with the intention of working at other jobs. Although the Commission report does not show how many of these actually did work, 58 percent of the entire group obtained jobs after retirement.

Postal employees, especially clerk-carriers, had the highest rate of post-retirement employment. Nonpostal professionals ranked second, and nearly half of the skilled and unskilled and slightly more than two-fifths of the nonprofessional white-collar workers were employed after retirement.

Retirees took jobs for preponderantly economic reasons, although a number of respondents mentioned a chance at work they really desired. Fifty-

nine percent of those working gave, among other reasons, the desire to qualify for social security benefits.

Nearly half of those who worked at all after retirement worked full time (but the report does not state the duration of employment), one-quarter worked part time but fairly regularly, and the remainder held full-time jobs for temporary periods, or worked only occasionally. Most of the employed worked shorter hours than they had for the Government—but one-tenth reported longer hours and nearly one-third spent about the same amount of time on the job.

The largest group who worked obtained clerical jobs. More than half of the nonpostal employees acquired new occupations. The remainder reported employment in their earlier occupations: 64 percent of the clerical workers, 56 percent of the unskilled workers, 54 percent of the professionals, 42 percent of the skilled workers, and 25 percent of the administrative and fiscal workers.

The large group of employed former Post Office clerk-carriers went primarily into clerical jobs and secondarily into unskilled work. Other former postal employees went into office work and sales.

* * * * *

IN THOSE INDUSTRIES whose wage rates are tied to the Consumer Price Index, management and labor have been watching this Government figure even more closely since last March's reduction in Federal income taxes. Although business activity and retail sales have gone up and per capita income has increased, the tax cut has had little effect on overall price trends.

The Consumer Price Index, which has been rising between 1 and 1½ percent annually since 1959, has continued up at about the same rate this year. As in most of the post-World War II period, the largest share of the increase in consumer prices since the tax cut was due to rising costs of services. Rent, transportation, medical care, and other consumer services accounted for half the 0.8 percent increase in the CPI between February and October. Among commodities, retail food prices rose almost 1 percent and apparel prices also advanced. Durable goods prices (excluding used cars) declined slightly.

This year's stability in prices has also been evidenced at the wholesale level, where increased busi-

ness activity resulting from the tax cut might also have been expected to result in a price uptrend. Aside from seasonal influences, the Wholesale Price Index remained on the plateau reached 7 years ago.

Industrial commodity prices advanced slightly, but those for farm products averaged less than in 1963, primarily because cattle values declined as slaughter continued high. Wholesale prices of processed foods were about the same as last year.

The WPI for industrial products rose 0.4 percent between February and November. The increases were concentrated among nonferrous metals, which were subject to strong international demand and some production difficulties. A series of strikes in the United States and overseas seriously curtailed copper output in the late summer and fall. World production of tin, zinc, and lead—falling considerably short of industrial needs—had to be supplemented by releases from the U.S. stockpile surplus. Aluminum prices also rose, as did a number of minor metals, including mercury, platinum, and antimony. In general, steel prices have been stable, although increases were posted in the fall for several small-volume items.

The chief downward pressure on wholesale industrial products came from fuel oil and gasoline prices which dropped sharply this year, basically because of persistent overcapacity for production of refined petroleum products. Prices of electrical machinery, also pressured by idle capacity, have continued weak. As a result, average prices of machinery and equipment advanced only slightly despite this year's high level of capital investment.

In addition to the marked advance in prices of nonferrous metals, other basic industrial materials such as woodpulp, sulphur, and a variety of chemicals have also increased in price since February. To some extent, these increases in raw material prices have been passed on to finished products. Copper and brass products prices have risen, as have those for printing paper and chemical fertilizers.

Scattered increases for a number of other industrial products also took place this fall. Most of these increases, however, have been small and limited in scope. The higher prices are a result of generally stronger demand, in some cases representing increases deferred from past periods of slack sales. At this time, there is little evidence of serious pressure on the overall price level.

Union Election Challenges Under the LMRDA

MARTHA F. RICHE*

IF EXPERIENCE up to April 1963 is any indication, local unions whose elections are challenged under title IV of the Labor-Management Reporting and Disclosure Act of 1959 are likely to be those with larger than average membership, although elections among smaller locals are more frequently found to have possibly been affected by violations of the law. Experience also shows that elections in which complaints are verified are likely to be characterized by low rates of member participation and by voting at membership meetings; the latter characteristic is also a factor in election cases where it is determined that the effects on the election were serious enough to require an election rerun. Based on a study by the Department of Labor's Labor Management Services Administration, which administers the act through its Office of Labor-Management and Welfare-Pension Reports (LMWP), this article examines the operations of title IV, as well as some of the characteristics of local unions and local union elections that were the subject of complaints alleging its violation.

Because the number of local elections investigated during the period covered by the study (Sept. 14, 1959, to Apr. 1, 1963), was not large compared with the total number of elections held, this analysis does not cover a representative sample of all local elections. Nevertheless, the material does present pertinent data on locals involved in challenged elections in terms of size, method of voting, and other factors which have not been studied before in any systematic fashion.

The enactment of title IV was foreshadowed by the McClellan Committee disclosures¹ of irregu-

larities in union officer elections. Some of the abuses reported by the Committee had stemmed from failure to require a secret ballot, with the resultant opportunity for coercion and intimidation of voters. Others had been spawned by lax election procedures that resulted in stuffed ballot boxes, falsified ballot count results, prejudiced determinations of voter and nominee eligibility, and other failures to insure free and adequate expression of voter sentiment.

Section 401 of title IV specifies minimum standards for union elections. Among other requirements, it provides that elections must be conducted in accordance with the constitution and bylaws of the labor organization concerned as long as they are consistent with the provisions of the act.

Section 402 states that a union member may file a complaint with the Secretary of Labor alleging violation of section 401 after exhausting remedies available within the union or, after invoking these remedies, failing to obtain a final decision within 90 days. The Secretary, acting through the LMWP, must investigate the complaint and, if the investigation confirms the complaint's validity, bring suit to have the election invalidated. However, the act directs the court to void an election only if the violation committed may have affected the outcome of the election, and for this reason, the LMWP makes this determination administratively before attempting to have an election rerun.²

Extent of Violations

During the first 3½ years of the act's operation, the LMWP found violations in two-thirds of the 211 enforceable cases which it investigated;³ slightly more than half of these did not affect the

*Of the Division of Publications, Bureau of Labor Statistics.

¹*Interim Report of the Select Committee on Improper Activities in the Labor or Management Field* (U.S. Senate, 85th Cong., 2d sess., 1958, Report 1417).

²A recent suit by a defeated candidate for office in a Teamsters' local union sought to force the Secretary to take his complaint to court even though the LMWP could find no indication that the outcome of the election had been affected. He lost the case in which he argued that the law did not intend the Secretary to substitute his judgment for that of the court. (*Altman v. Wirtz* [not officially reported], 56 LRRM 2651, May 5, 1964.) Another such case, filed in Los Angeles in December, employed substantially the same argument.

³The LMWP received several hundred additional complaints during this period which were considered nonenforceable, primarily because the complainant had failed to exhaust the remedies provided by his union, or because the election was not subject to title IV requirements.

TABLE 1. ELECTION CASES CLOSED, BY TYPE OF LABOR ORGANIZATION AND RESULTS OF INVESTIGATION, OCTOBER 1959-APRIL 1963

Type of labor organization	Total cases closed	Results of investigation			
		No violations disclosed	Violations disclosed		
			Total	Did not affect election	May have affected election
Total.....	211	75	136	71	65
National.....	5	2	3	2	1
Intermediate.....	121	9	12	6	6
Local.....	2185	64	121	63	58

¹ Only 20 organizations, since 1 had 2 challenged elections.

² Only 181 organizations, since 4 had 2 challenged elections each.

outcome of the election. In the remaining third, no violations were disclosed. (See table 1.)

A chronological examination of case results shows that the percentage of cases in which violations are found has been steadily increasing. Of the challenged elections held during the first full year after the passage of the act, violations were disclosed in less than half of the cases; but for the second and third years, violations were found in more than 70 percent of the cases, and this proportion was increasing at the end of the period.⁴ To a great extent, this increase can be attributed to greater familiarity with the act on the part of union members and improved investigating procedures on the part of the LMWP.

Nearly 90 percent of the election investigations involved local unions, 10 percent intermediate bodies, and only a few national unions. Though local unions predominated, they represented a smaller proportion of all such unions subject to the act than was the case with the other two types of labor organizations. (Except for government unions and State and local central bodies, unions are subject to the act if their members are engaged in an industry affecting interstate commerce.) Since the number of intermediate and national union election cases was too small to support detailed analysis, this discussion is limited to the local union election cases.

Types of Violations

Of the 741 specific allegations of title IV violation that appeared in the 185 local election cases (allegations averaged 4 per case, and totaled as many as 12), nearly half were verified; nearly

three-tenths appeared in elections whose outcome may have been affected.⁵ (See table 2.) These 741 allegations have been classified into 28 categories. Half of these categories appeared in 20 or more cases each, and accounted for nearly 90 percent of all violations disclosed, and for almost as great a proportion of those violations found in cases where the outcome of the election may have been affected. However, those violations most commonly disclosed were not necessarily among those most commonly alleged. For example, failure to mail election notices to each member at least 15 days before the election—the most commonly disclosed violation—was only the fourth most common allegation.

Whether the LMWP took action to have an election set aside depended partly on the nature of the violation: a complicated allegation (such as use of union money to promote a particular candidate) involving judgment, applicability, and interpretation on the part of both those who conduct and those who investigate elections may be more difficult to sustain than a relatively straightforward failure in procedure or mechanics (such as failing to give proper notice of the election) that is not as likely to affect the outcome of an election.

The allegation that a member in good standing was denied the right to run for or to hold union office, subject to reasonable qualifications uniformly imposed, is a case in point. An allegation often requiring judgment and interpretation, it was validated in only a third of the local election cases in which it was charged, though it was one of the two charges most commonly made. But, since the selection of candidates is an integral part of the election process, it is no wonder that in almost three-fourths of the cases in which this allegation was verified the LMWP determined that the outcome of the election could have been affected.

On the other hand, the allegation that ballots and other election records were not preserved for 1 year was verified in four-fifths of the local elec-

⁴ During the year following the completion of the study, violations were found in more than 80 percent of the elections challenged.

⁵ Since the LMWP took into account all the circumstances surrounding a case in determining whether the outcome of an election could have been affected, it is not possible to ascertain the effect of a particular violation on the final determination.

tion cases in which it was alleged. But, since it involved an after-the-fact housekeeping measure, the finding was that the violation may have affected the election outcome in only two-fifths of the cases in which it was verified. Even in these cases, it is apparent that only its appearance with another more serious violation resulted in this determination.

Failure to mail election notices in accordance with the law, also a procedural matter, has a somewhat more direct bearing on election results. In two-thirds of the cases in which this charge was verified, the LMWP found cause to believe that the election outcome could have been affected. The charge that a secret ballot was required but not used has an even more direct influence on an election outcome. This charge was verified in over three-fourths of the local election cases in which it was charged; and the election outcome was declared suspect in 85 percent of the instances in which this allegation was proved.

Characteristics of Unions

Size of Membership. Local unions involved in election complaints, in general, had more members than the average local reporting to the LMWP. The median membership of locals whose elections were challenged was 1,000; the LMWP estimates that the median membership of locals that file re-

ports with it is well below 200. This may be attributable to the greater competition for an office that is salaried, prestigious, and influential, as is more common with larger unions, as well as to the greater difficulty of guarding against certain kinds of unlawful activity (such as allowing ineligible members to vote) among a large number of voters. In addition, larger locals, occasionally encompassing employees of different skills and of different employers, might be expected to display the divisiveness that results in more hotly contested elections.

However, it is in the local with less than 1,000 members that complaints are more likely to be verified, and once verified, to be determined that they might have affected the outcome of the election. By contrast, locals of 2,500 members and over have a much smaller percentage of allegations confirmed, and the confirmed allegations are seldom deemed likely to have affected the election. Certain violations are easier to trace where a small number of people are involved, and it is probable that where a vote is large violations committed would not have affected enough votes to change the outcome. It is also apparent that to a certain extent, the size of the union determines the nature of the allegation. For example, the great majority of charges of illegal use of union money to promote a particular candidate were made in locals of 1,000 members or more. On the other hand, all

TABLE 2. ALLEGATIONS APPEARING IN AT LEAST 20 LOCAL UNION ELECTION CASES, OCTOBER 1959-APRIL 1963

Type of alleged violation	Total alleged violations	Results of investigation			
		No violations disclosed ¹	Violations disclosed		
			Total	In election whose outcome was not affected	In election whose outcome may have been affected
Total, all allegations.....	741	381	360	153	207
Total allegations appearing in at least 20 cases.....	598	282	316	137	179
Persons of questionable eligibility voted.....	68	30	38	18	20
Member in good standing denied right to be a candidate or to hold office.....	68	46	22	6	16
Election not conducted according to constitution and bylaws.....	58	27	31	13	18
Proper notice of election not mailed to each member.....	55	9	46	17	29
Improper safeguarding of ballots.....	50	17	33	15	18
Fraudulent or improper counting of ballots.....	42	20	22	11	11
Failure to observe secrecy of ballot.....	38	13	25	13	12
Other inadequate safeguards or improper procedures.....	37	24	13	5	8
Denial of reasonable opportunity for nomination of candidates.....	34	13	21	6	15
Labor organization money contributed or applied to promote particular candidacy.....	34	27	7	4	3
Member in good standing denied right to vote.....	31	17	14	7	7
Ballots and other election records not preserved for 1 year.....	31	6	25	15	10
Observer at counting of ballots not allowed or rendered ineffective.....	29	20	9	4	5
Ballot improperly prepared.....	23	13	10	3	7

¹ Since a case was considered a violation case when any allegation was verified and a no violation case only when all of the allegations in it were

found baseless, not all of the 381 allegations shown in this column are related to the 64 local union election cases shown in the column "no violations disclosed."

but 2 of the 16 charges of failure to use a secret ballot were against smaller locals.

Geographical Location. The 211 election cases were distributed around the country in approximately the same proportion as are unions subject to the act. The only exception was the Far West, where union growth has been accelerated by the growth of industry in that area. Though this region had a greater proportion of election complaints than it has union members, it had a smaller proportion of violation determinations.

National Affiliation. The 12 national unions that had 5 locals or more involved in challenged elections accounted for 60 percent of all cases in which violations were verified, though they account for less than 45 percent of all local unions filing reports with the LMWP. (See table 3.) That these 12 nationals accounted for only 45 percent of all cases in which the outcome of the election may have been affected may be partially explained by the generally large membership of these unions, among them some of the Nation's largest (as noted earlier, violations in the elections of larger locals

TABLE 3. LOCAL UNION ELECTION CASES, BY NATIONAL AFFILIATION, OCTOBER 1959-APRIL 1963

National union affiliation ¹	Total cases closed	Number of locals reporting to the LMWP ²	Results of investigation			
			No violations disclosed	Violations disclosed		
				Total	Did not affect election	May have affected election
Total	185	33,738	64	121	63	58
AFL-CIO—directly affiliated local union	1	414	1			
United Automobile Workers	8	1,189	2	6	1	5
American Bakery and Confectionery Workers	1	139		1	1	
Bakery and Confectionery Workers International Union (Ind.)	1	143		1		1
International Brotherhood of Boilermakers	2	440	1	1	1	
Bricklayers' International Union	2	768	1	1	1	
Building Service Employees' International Union	2	202	2			
United Brotherhood of Carpenters	6	2,608	1	5	3	2
International Chemical Workers Union	1	300		1		1
Communications Workers of America	1	731		1		1
Confederated Unions (Ind.) ³	1	21	1			
International Union of Electrical Workers	3	396	2	1		1
International Brotherhood of Electrical Workers	5	1,363	2	3	2	1
International Union of Operating Engineers	10	280	5	5	4	1
International Brotherhood of Fireman and Oilers	1	640		1		1
International Hod Carriers Union	21	919	5	16	11	5
Hotel and Restaurant Employees International Union	7	506	4	3	2	1
International Association of Iron Workers	7	307	4	3	3	
Laborista de Puerto Rico (Ind.)	1	5		1		1
Laundry and Dry Cleaning International Union	1	46		1	1	
Brotherhood of Locomotive Engineers (Ind.)	2	783	1	1		1
International Longshoremen's Association	2	324		2		2
International Longshoremen's and Warehousemen's Union (Ind.)	1	65	1			
International Association of Machinists	3	1,767	2	1		1
Brotherhood of Maintenance of Way Employees	1	1,202	1			
Amalgamated Meat Cutters	2	392		2	1	1
United Mine Workers (Ind.)	2	1,727		2		2
United Mine Workers of America District 50 (Ind.)	3	1,686		3	2	1
American Federation of Musicians	1	505	1			
National Brotherhood of Packerhouse Workers (Ind.)	1	24		1	1	
United Packinghouse, Food and Allied Workers	2	309		2		2
Brotherhood of Painters and Paperhangers	4	1,087	2	2	2	
Petroleum Affiliates (Ind.)	1	15		1	1	
Operative Plasterers' and Cement Masons' International Association	2	448	1	1		1
United Association of Plumbers and Pipefitters	9	644	4	5	3	2
International Printing Pressmen's Union	2	679		2	1	1
International Brotherhood of Pulp, Sulphite and Paper Mill Workers	1	545		1		1
The Order of Railroad Telegraphers	1	86	1			
Brotherhood of Railway and Steamship Clerks	1	1,600		1		1
Retail Clerks International Association	1	330		1	1	
Retail, Wholesale, and Department Store Union	1	226		1		1
Roofers Workers Association	1	213		1		1
United Rubber Workers	1	373		1	1	
Sheet Metal Workers' International Association	1	479	1			
International Alliance of Stage Employees and Moving Picture Machine Operators	4	824	2	2	1	1
United Steelworkers	4	2,611	5	7	5	2
Amalgamated Association of Street, Electric Railway and Motor Coach Employees	1	305	1			
International Brotherhood of Teamsters (Ind.)	14	861	3	11	8	3
Textile Workers Union	1	534		1		1
Transport Workers Union	5	116	4	1		1
Utility Workers Union	1	161		1	1	
Unaffiliated locals	6	1,400	3	16	5	11

¹ All national unions not identified as independent are affiliated with the AFL-CIO.

² As of June 30, 1960.

³ Now a part of the National Federation of Independent Unions following merger with the National Independent Union Council.

⁴ Involved 10 locals since 2 locals had 2 challenged elections each.

⁵ Involved 4 locals since 1 local had 2 elections challenged.

⁶ Involved 18 locals since 2 elections of the Salaried Employees Union, Chicago, Ill., were challenged.

were less likely to have affected the election outcome).

Only 7 of the 12 national unions with at least 5 election cases had 1 percent or more of their reporting locals involved in election complaint cases; 3 of these had over 2 percent, and 1 had over 3 percent. Of all reporting affiliated locals, only 1 in 300 was involved in an election case; the equivalent relationship for unaffiliated locals was 1 in 75.

Locals of only 1 of the 12 national unions had a greater than average determination of violations that may have affected an election, with 5 of its 6 violation cases in this category. The record of unaffiliated locals was similar: in 11 of the 16 unaffiliated local violation cases the outcome may have been affected. Unaffiliated locals also had a greater number of allegations per election case than affiliated locals did. Most of the unaffiliated locals were smaller than the average local involved in an election complaint.

In addition to size, location, and the other factors characteristic of unions whose elections are challenged, other elements, such as the degree of education in union practices, use of violation charges as a campaign tactic, and the frequency of elections, are very likely to determine the relative frequency of election complaints within locals of various national unions.

Characteristics of Elections

Method of Election. Approximately two-thirds of the local elections in which violations were alleged were conducted by voting at polls,⁶ with the remainder divided between membership meetings and mail referendum. Allegations concerning elections conducted at membership meetings were confirmed in 5 out of 6 cases and were thought to have possibly affected the outcome of the election in 4 out of 6 cases in which violations were found. On the other hand, 2 out of 3 poll elections were found to have violations, but less than half of those marked by violations were considered to have a doubtful election outcome. Again, this finding probably stems from the locals' size, since the larger locals, which have a lower rate of confirmed violations, are those most likely to vote at polls.

⁶ Since the unions whose elections were challenged had larger than average membership, this proportion is greater than it would be if all union elections had been studied.

Voting at membership meetings was frequently characterized by violations of ballot secrecy, while voting at polls was more often accompanied by procedural errors. In addition, most of the charges of voting by ineligible persons were against poll elections; approximately half of these elections involved this charge.

Voting by mail referendum took place almost as frequently among the election cases as voting at membership meetings, but usually in locals either geographically dispersed, or with transient membership (such as some of the transportation unions) where other methods of voting would be impractical. The violations alleged in mail elections, like those at polls, were generally of a procedural nature, such as failure to provide adequate election safeguards; over half of the complaints were verified, and for half of these it was determined that the outcome of the election could have been affected.

Voting at polls attained the highest levels of membership participation, but was almost matched by voting through mail referendum. The greater participation that results from the extended time period offered by poll voting is, of course, one of the reasons for holding this kind of election instead of voting at a membership meeting. The few large locals that voted at membership meetings had very low rates of voter participation.

Kind of Supervision. More than 80 percent of the contested local elections had been conducted by members of the local unions themselves. There was a somewhat higher incidence of complaint confirmation and a greater proportion of determinations that the election outcome could have been affected when the election was supervised by members of a local union than when it was conducted by a representative from the international or an independent body.

Source of Complaint. The great majority of complaints were filed by defeated candidates who had opposed incumbent officers. Only 13 defeated incumbents filed complaints in local elections, some of whom made the allegation, more often made by defeated opposition candidates, that the group controlling the election machinery discriminated against them. Whether the complainant was a defeated opposition candidate or a noncandidate, the

proportion of violation confirmation was the same. However, violations possibly affecting the outcome of the election were verified in proportionately fewer of the cases initiated by a defeated opposition candidate than in cases where the complainant was a noncandidate. This suggests that, in lodging complaints, noncandidates are not inclined to complain unless they are certain of an election irregularity.

Election Participation. No relationship was noted between the extent of membership participation in the election and the type of violation charged. However, the percentage of members voting in contested elections showed that with the exception of those elections where 80 percent or more of eligible voters cast their ballots, the smaller the percentage of members voting the greater the likelihood that the charges of violation would be confirmed.⁷ It is possible that elections with more than 80 percent participation were characterized by such vigorous competition for office that LMRDA violations resulted.

Remedial Action

The LMWP encourages voluntary remedial action in cases which could be litigated: if compliance is obtained, the case is not taken to court. Of the 65 cases in which the LMWP decided that the violations uncovered could have affected the outcome of the election, only 13, or one-fifth, were eventually taken to court. The remaining 52 were settled by voluntary compliance: in 40 cases, the challenged election was voided and the election rerun, while in 12, the union took appropriate administrative action. In 5 of these 12 cases, remedial action—usually a new regular election—was taken as soon as or sooner than civil action could be instituted; and in 5 other cases the person whose election was challenged resigned and the vacancy was filled by a procedure consistent with the act.

The LMWP observed 24 of the 51 rerun elections—11 rerun by court order, and 13 under voluntary arrangements (although elections rerun under conditions of voluntary compliance do not invariably require LMWP supervision).

The LMWP has information on 21 of the cases rerun under its aegis: The results of the original

election were reversed in 4 instances, while the original results were repeated in 10 cases and partially repeated in 7. In the 25 of 27 elections rerun without supervision for which information is available, 14 returned the same officers, 6 reversed the previous results, and 5 partly reversed and partly sustained the original outcome.

Most of the second elections were conducted by the same method of voting as the first, the only significant change being that in 10 of the 15 elections previously held at membership meetings, a type of balloting resulting in a disproportionate number of violations, another method was chosen.

Membership participation rates remained about the same for elections voluntarily rerun under LMWP observation, but increased by approximately 14 percent in elections rerun under court order and decreased by about 22 percent for those rerun voluntarily without LMWP supervision. (The latter decrease was accounted for almost completely by one election.) In a large majority of the elections where voting participation declined, only a partial slate of candidates were running, and sometimes only a single, perhaps minor office was at stake. Only three partial rerun elections showed an increase in membership participation.

When the LMWP uncovers title IV violations that need not be remedied through court action, it attempts to rectify the situation by notifying officials of the union of the violations and requesting their cooperation in avoiding further violations.

Where violations have been committed as a result of conflicts between title IV and the union's constitution, the unions generally have amended their constitutions to comply with the provisions of the law.

The Scope of Title IV

The part that voluntary compliance plays in carrying out the directives of title IV is prominent. Not only do many violations not meet the tests for rerunning an election, but also the median time lapse between a challenged election and its rerun is 60 weeks for elections voided by court order, as compared with only 39 weeks for those volun-

⁷ The majority of the 135 cases for which this information was available had at least 50 percent participation.

tarily rerun and supervised by the LMWP and 31 weeks for those voluntarily rerun without such supervision.

Since the offenses that brought about the passage of the LMRDA had been committed by only a small minority of unions, the LMWP attempts to avoid undue interference in union affairs by allowing offenders an opportunity to remedy their errors. Court action is reserved for only the more serious violations when voluntary compliance is not forthcoming.

Although the LMRDA requires voiding an election in which violations are found if there is cause to believe that the outcome of the election could have been affected, the LMWP does not take violation cases to court unless it has been determined administratively that there is evidence to that effect. Where there is not sufficient evidence, the complainant is so informed, generally with an explanation of the determination. Where violations are of a technical nature, such as failure to preserve ballots and other election records for 1 year, they can only be remedied through voluntary compliance unless they occur concomitantly with more serious violations. In other cases, where serious or substantial violations cannot be shown to have affected an election because of a heavy vote, and compliance is not forthcoming, the only recourse for members injured by the violations (for example, suffering reprisals for not supporting the winning candidate) is for them to file suit under title I, sometimes a lengthy and expensive procedure.

Many of the election cases that reach the courts result from a basic disagreement between the union and the LMWP on the interpretation of those

provisions of title IV that specify "reasonable" nominating and election procedures. Thus, the reasonableness of requiring candidates to have a record of 2 years of continuous on-time payment of dues or of attendance at 75 percent of union meetings—a requirement that all but a small percentage of union members failed to meet—has been questioned. Other requirements which the LMWP has deemed unreasonable are those limiting the right to hold office to members working in certain of several occupations which the union encompasses, and those that require both nominators and nominees to be present at nomination meetings even though the membership is geographically scattered or working hours preclude the attendance of some.

Administrative rulings that have delimited the area in which the Secretary of Labor will exercise jurisdiction may result in a decrease in complaints. For example, the Secretary ruled that elections to fill vacancies were not subject to title IV and, therefore, irregularities in such elections are no longer to be investigated by the LMWP. The Secretary also announced recently that enforcement action would no longer be taken solely because of failure to hold a secret ballot election where candidates are unopposed and write-in votes are not permitted, assuming that reasonable opportunity to nominate candidates and other provisions of title IV have been complied with, since the election outcome could not be affected.

Other rulings that may have limited the scope of the act's enforcement were those holding that certain union officials, are not officers as defined by the act, and that elections held as part of a merger agreement are not covered by the act.

Special Labor Force Report

Work Experience of the Population in 1963

SAMUEL SABEN*

THE EXPANSION in the American economy during 1963 was reflected in a rise of 1.2 million in the number who worked at some time during the year. New heights in production and sales were accompanied by a rise to an alltime high of 83.2 million in the number of men and women who worked during the year (table 1). The 1.1 million more men and 300,000 more women who worked all year at full-time jobs raised the total who were fully employed to 45.4 million. These achievements are a measure of the sustained economic expansion of the Nation.

At the same time, however, the Nation did not use its manpower to its full potential. In 1963, 14.2 million people were unemployed for 1 week or more at least once during the year (table 2). There was no appreciable change from 1962 in the proportion (15 percent) of the unemployed with work experience who had been jobless for a total of more than 6 months during the year, and only a slight decrease in the proportion of unemployed with more than one spell of joblessness. Furthermore, the number of persons who sought employment at some time during 1963 but did not work at all, at 1.8 million, was not significantly different from 1962.

The above findings and those that follow are taken from the 1963 annual survey of work experience of the population.¹

Employment

Women accounted for about two-thirds of the 1.2 million rise in the number of persons who worked at some time during 1963. There was little

change in the proportion of persons in each age group who worked during the year, with the major exception of young women 20 to 24 years old (table 3); 66 percent of these young women worked, equalling the proportion for 18- and 19-year-old girls who historically have had the highest work rate for any group of women.

Among men 65 and over, there has been a continuing decline in the number doing some work during the year, despite an increase in the population of this age group. In 1950, 49 percent of this age group worked during the year; in 1963, only 38 percent worked. The considerable rise in retirements during the past decade has been spurred by the increase in the number of workers covered by private and public pension plans effective on the 65th birthday as well as by declining employment opportunities in agriculture, where many of these older men used to work.

Between 1962 and 1963, the largest increases in employment were among workers whose longest job was in manufacturing (especially durable goods manufactures), transportation and public utilities, and service and finance. Only farmers and farm managers, among occupational groups, showed a decline in the number of persons with work experience. On the other hand, employment increased among professional and technical, clerical, and service (except private household) workers, and operatives.

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¹Data pertain to the work experience of persons 14 years and over in the civilian noninstitutional population in February 1964. The annual survey for 1963 was taken in February 1964 as a supplement to the regular monthly survey of the labor force conducted for the Bureau of Labor Statistics by the Bureau of the Census through its Current Population Survey. Earlier surveys of work experience of the population have been analyzed in the *Monthly Labor Review*, December 1960, pp. 1272-1283, December 1961, pp. 1324-1337, December 1962, pp. 1347-1358, January 1964, pp. 18-27, and reprinted with additional tabular material in Special Labor Force Reports Nos. 11, 19, 25, and 38. Reprints of all articles in the series are available while the supply lasts upon request to the Bureau or to any of its regional offices.

TABLE 1. WORK EXPERIENCE DURING THE YEAR, BY EXTENT OF EMPLOYMENT AND BY SEX, 1960-63

Work experience	Both sexes				Male				Female			
	1963	1962	1961	1960	1963	1962	1961	1960	1963	1962	1961	1960
Number (thousands of persons 14 years of age and over)												
Total who worked during the year ¹	83, 227	82, 057	80, 287	80, 618	51, 039	50, 639	49, 854	50, 033	32, 188	31, 418	30, 433	30, 585
Full time: ²												
50 to 52 weeks.....	45, 449	44, 079	43, 006	43, 265	33, 587	32, 513	31, 769	31, 966	11, 862	11, 566	11, 237	11, 299
27 to 49 weeks.....	11, 565	12, 102	12, 042	12, 132	6, 686	7, 185	7, 434	7, 653	4, 879	4, 917	4, 608	4, 479
Part time or intermittently.....	26, 213	25, 876	25, 239	25, 221	10, 766	10, 941	10, 651	10, 414	15, 447	14, 935	14, 588	14, 807
1 to 26 weeks at full-time jobs.....	9, 153	9, 146	9, 170	8, 756	4, 021	4, 289	4, 264	3, 857	5, 132	4, 857	4, 906	4, 899
At part-time jobs.....	17, 060	16, 730	16, 069	16, 465	6, 745	6, 652	6, 387	6, 557	10, 315	10, 078	9, 682	9, 908
50 to 52 weeks.....	5, 229	5, 130	5, 191	5, 307	2, 098	2, 114	2, 240	2, 247	3, 131	3, 016	2, 951	3, 060
27 to 49 weeks.....	3, 353	3, 368	3, 068	3, 290	1, 274	1, 305	1, 163	1, 267	2, 079	2, 063	1, 905	2, 023
1 to 26 weeks.....	8, 478	8, 232	7, 810	7, 868	3, 373	3, 233	2, 984	3, 043	5, 105	4, 999	4, 826	4, 825
Percent distribution												
Total who worked during the year ¹	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Full time: ²												
50 to 52 weeks.....	54.6	53.7	53.6	53.7	65.8	64.2	63.7	63.8	36.9	36.8	36.9	36.9
27 to 49 weeks.....	13.9	14.7	15.0	15.0	13.1	14.2	14.9	15.3	15.2	15.6	15.1	14.6
Part time or intermittently.....	31.5	31.5	31.4	31.3	21.1	21.6	21.4	20.8	48.0	47.5	47.9	48.4
1 to 26 weeks at full-time jobs.....	11.0	11.1	11.4	10.9	7.9	8.5	8.6	7.7	15.9	15.5	16.1	16.0
At part-time jobs.....	20.5	20.4	20.0	20.4	13.2	13.1	12.8	13.1	32.0	32.1	31.8	32.4
50 to 52 weeks.....	6.3	6.3	6.5	6.6	4.1	4.2	4.5	4.5	9.7	9.6	9.7	10.0
27 to 49 weeks.....	4.0	4.1	3.8	4.1	2.5	2.6	2.3	2.5	6.5	6.6	6.3	6.6
1 to 26 weeks.....	10.2	10.0	9.7	9.8	6.6	6.4	6.0	6.1	15.9	15.9	15.9	15.8

¹ Time worked includes paid vacations and paid sick leave.
² Usually worked 35 hours or more per week.

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

TABLE 2. EXTENT OF UNEMPLOYMENT DURING THE YEAR, BY SEX, 1961-63

Extent of unemployment	Both sexes			Male			Female		
	1963	1962	1961	1963	1962	1961	1963	1962	1961
Number (thousands of persons 14 years of age and over)									
Total working or looking for work.....	85, 038	83, 944	81, 963	51, 817	51, 412	50, 610	33, 221	32, 532	31, 353
Percent with unemployment.....	16.7	18.2	18.4	17.2	18.8	19.4	15.9	17.1	16.7
Total with unemployment.....	14, 211	15, 256	15, 096	8, 923	9, 686	9, 846	5, 288	5, 570	5, 250
Did not work but looked for work.....	1, 811	1, 887	1, 676	778	773	756	1, 033	1, 114	920
With work experience.....	12, 400	13, 369	13, 420	8, 145	8, 913	9, 090	4, 255	4, 456	4, 330
Year-round workers ¹ with 1 or 2 weeks of unemployment.....	1, 239	1, 129	1, 036	934	817	791	305	312	245
Part-year workers ² with unemployment.....	11, 161	12, 240	12, 384	7, 211	8, 096	8, 299	3, 950	4, 144	4, 085
1 to 4 weeks of unemployment.....	2, 708	2, 993	3, 098	1, 521	1, 668	1, 709	1, 187	1, 325	1, 389
5 to 10 weeks of unemployment.....	2, 407	2, 759	2, 559	1, 609	1, 891	1, 878	798	868	681
11 to 14 weeks of unemployment.....	1, 595	1, 700	1, 669	1, 122	1, 194	1, 217	473	506	452
15 to 26 weeks of unemployment.....	2, 611	2, 768	2, 849	1, 802	1, 960	2, 027	809	808	822
27 weeks or more of unemployment.....	1, 840	2, 020	2, 209	1, 157	1, 383	1, 468	683	637	741
Total with 2 spells or more of unemployment.....	4, 635	5, 219	4, 963	3, 269	3, 805	3, 618	1, 366	1, 414	1, 345
2 spells.....	2, 246	2, 524	2, 299	1, 526	1, 788	1, 603	720	736	696
3 spells or more.....	2, 389	2, 695	2, 664	1, 743	2, 017	2, 015	646	678	649
Percent distribution									
Unemployed persons with work experience, total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Year-round workers ¹ with 1 or 2 weeks of unemployment.....	10.0	8.4	7.7	11.5	9.2	8.7	7.2	7.0	5.7
Part-year workers ² with unemployment.....	90.0	91.6	92.3	88.5	90.8	91.3	92.8	93.0	94.3
1 to 4 weeks of unemployment.....	21.8	22.4	23.1	18.7	18.7	18.8	27.9	29.7	32.1
5 to 10 weeks of unemployment.....	19.4	20.6	19.1	19.8	21.2	20.7	18.8	19.5	15.7
11 to 14 weeks of unemployment.....	12.9	12.7	12.4	13.8	13.4	13.4	11.1	11.4	10.4
15 to 26 weeks of unemployment.....	21.1	20.7	21.2	22.1	22.0	23.3	19.0	18.1	19.0
27 weeks or more of unemployment.....	14.8	15.1	16.5	14.2	15.5	16.1	16.1	14.3	17.1
Total with 2 spells or more of unemployment.....	37.4	39.0	37.0	40.1	42.7	39.8	32.1	31.7	31.1
2 spells.....	18.1	18.9	17.1	18.7	20.1	17.6	16.9	16.5	16.1
3 spells or more.....	19.3	20.2	19.8	21.4	22.6	22.2	15.2	15.2	15.0

¹ Worked 50 weeks or more.
² Worked less than 50 weeks.

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

TABLE 3. PERCENT OF POPULATION WHO WORKED DURING THE YEAR, BY AGE AND SEX, 1958-63

Age and sex	1963	1962	1961	1960	1959	1958
Both sexes, 14 years and over	63.7	63.8	63.5	64.8	64.0	64.1
14 to 17 years	39.0	39.7	39.8	42.4	42.8	43.3
18 and 19 years	73.7	74.9	72.2	74.9	73.7	73.3
20 to 24 years	77.8	76.5	74.5	76.2	75.2	73.4
25 to 34 years	72.0	71.3	70.9	71.7	70.3	70.8
35 to 44 years	74.4	74.6	74.2	74.9	73.8	73.7
45 to 54 years	77.4	77.6	75.8	76.7	76.1	75.9
55 to 64 years	67.2	67.3	66.6	66.7	65.4	66.2
65 years and over	25.0	25.0	26.7	28.0	26.7	27.5
Male, 14 years and over	82.3	82.8	83.1	84.5	84.1	84.4
14 to 17 years	46.3	46.7	46.1	49.7	49.0	50.4
18 and 19 years	82.5	83.9	80.9	84.1	82.1	82.5
20 to 24 years	91.6	92.2	92.5	92.9	92.0	89.2
25 to 34 years	97.9	97.5	97.7	98.1	97.2	97.5
35 to 44 years	97.6	97.9	97.7	97.9	97.7	97.7
45 to 54 years	97.1	96.5	95.9	96.6	96.3	96.3
55 to 64 years	88.7	90.1	89.7	89.6	89.3	89.9
65 years and over	37.6	38.4	41.0	43.1	42.4	43.4
Female, 14 years and over	46.9	46.5	45.8	46.9	45.6	45.7
14 to 17 years	31.6	32.5	33.2	34.8	36.5	36.1
18 and 19 years	66.3	67.2	64.7	66.8	66.4	65.5
20 to 24 years	66.1	63.3	59.4	62.1	61.3	60.5
25 to 34 years	48.5	47.5	46.6	47.4	45.7	46.3
35 to 44 years	53.1	53.2	52.8	53.7	51.8	51.5
45 to 54 years	58.9	59.6	57.0	58.0	56.9	56.6
55 to 64 years	47.4	46.3	45.6	45.7	43.5	44.3
65 years and over	15.1	14.3	15.2	15.8	13.9	14.2

Year-Round Full-Time Employment. Approximately 55 percent of those who worked in 1963 (about 45.4 million persons) worked full time for the whole year, the highest proportion since 1957. The 1.4 million rise over the year was the largest gain since 1955.

The increase in the proportion of fully employed year-round workers was uneven. It was greatest among men 25 to 54 years old and higher for white than nonwhite men. The significant increase in the proportion of durable goods workers who worked steadily (undoubtedly sustained by rises in investment in producers' durable equipment and expenditures for consumers' durables) was concentrated in the stone, clay, and glass, primary metals, and transportation equipment industries. Occupation groups in which the proportion of full-year full-time workers rose in 1963 were craftsmen, operatives, and laborers; the increase among craftsmen and operatives was limited to white men. Meanwhile, the proportion of private household workers engaged in full-time work all year declined.

Several developments are discernible in regard to full-year full-time employment in recent years. Between 1960 and 1963, for instance, the proportion of men who were fully employed rose by 2 percentage points to 66 percent, with most of the

rise occurring in 1963. Among women, however, there was no change in the proportion so employed. A greater proportion of married men (77 percent) had year-round full-time jobs in 1963 than in any of the prior 3 years. For married women also the proportion was higher in 1963 than in 1960. Among single persons, both men and women, the ratios declined somewhat.

Since 1950, there has been a considerable decline in the proportion of men 65 years old or older working all year at full-time jobs, from 52 percent in 1950 to 38 percent in 1963 (chart 1). In part, this is due to liberalized social security provisions. During the same period, the proportion of the older men in the work force who had part-time jobs has risen sharply. This increase in part-time work would seem to point to income from partial retirement augmenting social security payments due to less rigid limitations on earnings.

A similar downward trend has been observed in the proportion of full-year full-time workers among several occupational groups, most markedly among farmers, nonfarm laborers, and private household workers (table 4).

Chart 1. Work Experience of Men 65 Years and Older, 1950-63



TABLE 4. YEAR-ROUND FULL-TIME WORKERS,¹ BY MAJOR OCCUPATION GROUP OF LONGEST JOB, 1955, 1960, and 1962-63

Major occupation group	Number (thousands)				Percent of total with work experience during the year			
	1963 ²	1962 ²	1960 ²	1955	1963	1962	1960	1955
	Total.....	45,449	44,079	43,265	42,624	54.6	53.7	53.7
Professional, technical, and kindred workers.....	5,878	5,630	5,557	4,452	62.4	62.3	63.7	65.8
Farmers and farm managers.....	1,724	1,896	2,121	3,243	73.0	72.8	72.0	81.9
Managers, officials, and proprietors, except farm.....	6,548	6,523	6,281	5,536	82.7	82.3	80.9	82.7
Clerical and kindred workers.....	7,305	7,022	6,875	6,068	56.2	56.8	56.8	60.2
Sales workers.....	2,442	2,531	2,528	2,497	43.2	44.9	45.9	47.3
Craftsmen, foremen, and kindred workers.....	6,670	6,319	6,327	6,355	70.3	67.5	67.5	69.6
Operatives and kindred workers.....	8,529	7,918	7,434	8,214	57.6	54.6	52.8	56.0
Private household workers.....	481	572	591	611	14.4	16.6	18.5	21.2
Service workers, except private household.....	3,599	3,481	3,222	2,808	41.3	41.4	40.6	42.6
Farm laborers and foremen.....	638	664	806	992	16.0	16.1	17.5	19.4
Laborers, except farm and mine.....	1,637	1,521	1,523	1,847	35.9	32.8	34.8	44.2

¹ Persons employed 50 to 52 weeks at full-time jobs.

² Beginning with 1959, data include Alaska and Hawaii and are therefore not strictly comparable with previous years. For 1959, this inclusion resulted

in an increase of about 300,000 in the total who worked during the year, with about 150,000 in the group working 50 to 52 weeks at full-time jobs.

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

TABLE 5. EXTENT OF UNEMPLOYMENT IN 1962 AND 1963, BY AGE, MARITAL STATUS, COLOR, AND SEX

Characteristics	Unemployed as percent of total working or looking for work		Percent of unemployed who worked during the year having unemployment of—					
			15 weeks or more		2 spells		3 spells or more	
	1963	1962	1963	1962	1963	1962	1963	1962
Total, 14 years and over.....	16.7	18.2	35.9	35.8	18.1	18.9	19.3	20.2
AGE AND SEX								
Male, 14 years and over.....	17.2	18.8	36.3	37.5	18.7	20.1	21.4	22.6
14 to 17 years.....	18.5	19.4	32.2	28.7	22.2	17.8	11.0	20.0
18 and 19 years.....	31.4	37.1	34.9	39.3	19.9	20.8	16.9	23.8
20 to 24 years.....	29.6	33.2	35.4	30.1	21.3	22.6	17.2	16.7
25 to 34 years.....	18.8	19.7	30.5	34.6	17.6	18.4	17.6	21.2
35 to 44 years.....	14.2	16.2	35.3	36.5	18.8	20.8	22.0	21.1
45 to 64 years.....	13.7	14.9	40.6	43.9	17.2	19.1	28.4	28.0
65 years and over.....	11.8	11.4	60.1	60.3	18.1	22.2	34.7	31.3
Female, 14 years and over.....	15.9	17.1	35.1	32.4	16.9	16.5	15.2	15.2
14 to 17 years.....	15.4	15.4	16.5	21.5	12.8	15.0	8.5	8.0
18 and 19 years.....	30.8	32.7	26.3	23.9	15.8	15.5	10.9	10.2
20 to 24 years.....	20.2	24.2	30.5	24.8	17.1	17.1	10.0	11.4
25 to 34 years.....	17.5	17.4	36.2	35.9	15.0	14.7	11.9	13.9
35 to 44 years.....	15.4	16.6	39.4	34.9	15.9	17.5	16.6	16.3
45 to 64 years.....	12.1	12.9	39.3	37.5	19.0	17.0	21.6	21.1
65 years and over.....	8.8	9.7	(¹)	46.6	(¹)	20.4	(¹)	16.5
MARITAL STATUS AND SEX								
Male:								
Single.....	24.5	27.5	41.2	38.8	21.3	20.6	18.0	22.1
Married, wife present.....	14.5	15.6	32.3	35.1	17.9	19.4	21.3	22.1
Other marital status.....	25.6	28.8	51.3	52.4	16.5	23.5	33.9	28.5
Female:								
Single.....	17.7	18.4	29.4	26.9	14.2	14.7	13.3	11.7
Married, husband present.....	14.3	15.6	34.0	32.6	16.5	16.5	14.5	15.7
Other marital status.....	18.7	20.3	43.8	37.8	21.1	18.7	18.9	17.8
COLOR AND SEX								
Both sexes:								
White.....	15.4	16.7	33.8	33.7	18.2	18.6	17.7	18.7
Nonwhite.....	27.1	29.8	45.7	46.1	17.5	20.3	26.7	27.1
Male:								
White.....	15.9	17.4	33.9	35.5	18.7	19.8	19.6	21.4
Nonwhite.....	29.2	31.9	48.5	47.9	18.8	21.5	30.4	29.4
Female:								
White.....	14.6	15.6	33.8	29.9	17.2	16.0	14.1	13.2
Nonwhite.....	24.5	27.2	40.8	43.0	15.3	18.1	20.1	23.6

¹ Percent not shown where base is less than 100,000.

Part-Year Work. The rise in full-year full-time employment among men was accompanied by a drop of about 660,000 in the number who had worked only part of the year. All of the decline was among men in the prime age group, 25 to 64 years old. About half the men age 25 and over mentioned unemployment as the major reason why they had not worked all year. The number mentioning this reason fell by 11 percent between 1962 and 1963 although the number of part-year workers declined by 8 percent. Among men under age 25, however, going to school was by far the most important reason for part-year work; about two-thirds reported this as the major reason as compared with one-fourth who indicated unemployment.

The number of women who worked part of the year increased by about 360,000, in contrast to the decline among men. Only a small proportion of the women, 15 percent, attributed their failure to work all year to unemployment; half said that taking care of their home was the major reason, and another 18 percent said attendance at school limited their work to only part of the year (chart 2).

Unemployment

The 14.2 million persons unemployed at some time during 1963 comprised 16.7 percent of the persons working or looking for work during the year. Of this total, 12.4 million had worked at some time during the year. There was no overall change from 1962 in the proportion of the jobless who had been unemployed for a total of 15 weeks or more, and only a slight decrease in the percentage with more than one spell of joblessness (table 5).

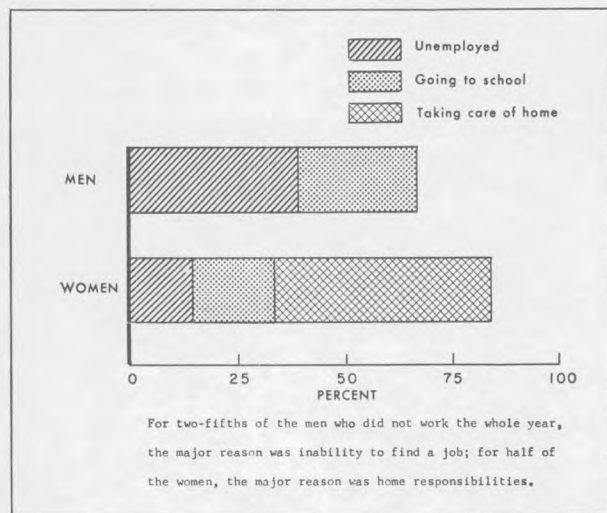
Unemployment by Industry and Occupation. The proportion unemployed declined somewhat from the 1962 level in a majority of the industries and occupations (table 6). As usual, unemployment was most likely among wage and salary workers in agriculture, construction (where short-term projects and loose employer-employee attachments prevail), lumber products, and apparel, where about one-third of the workers or more were jobless at least once during the year. Nevertheless, very long-term unemployment (a total of 27 weeks or more) and repeated spells of joblessness de-

TABLE 6. EXTENT OF UNEMPLOYMENT IN 1962 AND 1963 AMONG PERSONS WHO WORKED DURING THE YEAR, BY MAJOR OCCUPATION AND INDUSTRY GROUP OF LONGEST JOB

Major occupation or industry group	Unemployed as percent of total who worked		Percent of unemployed who worked during the year having unemployment of—					
	1963	1962	15 weeks or more		2 spells		3 spells or more	
			1963	1962	1963	1962	1963	1962
All groups.....	14.9	16.3	35.9	35.8	18.1	18.9	19.3	20.2
OCCUPATION GROUP								
Professional, technical, and kindred workers.....	5.6	6.6	25.2	23.0	15.3	15.1	12.2	13.6
Farmers and farm managers.....	1.9	2.6	(1)	(1)	(1)	(1)	(1)	(1)
Managers, officials, and proprietors, except farm.....	5.7	5.1	28.4	31.4	12.8	19.7	10.4	14.2
Clerical and kindred workers.....	11.6	12.5	30.1	25.7	15.7	12.1	8.5	9.9
Sales workers.....	10.0	11.7	35.8	28.1	12.4	13.1	10.1	11.3
Craftsmen, foremen, and kindred workers.....	19.2	21.9	37.2	35.1	18.5	18.7	27.3	26.0
Operatives and kindred workers.....	24.8	26.5	33.8	35.7	18.3	19.9	18.8	18.5
Private household workers.....	12.4	14.1	37.5	44.7	13.2	18.0	25.2	26.2
Service workers, except private household.....	16.0	16.9	40.6	37.4	20.7	20.7	13.6	13.5
Farm laborers and foremen.....	13.2	15.8	45.2	47.0	25.7	22.5	35.0	33.2
Laborers, except farm and mine.....	32.6	35.3	42.8	46.7	20.8	23.4	27.5	32.7
INDUSTRY GROUP								
Wage and salary workers.....	16.7	18.3	35.6	35.7	18.1	18.9	18.6	19.6
Agriculture.....	21.7	26.6	45.1	47.2	24.1	22.3	34.7	34.4
Nonagricultural industries.....	16.5	17.9	35.1	35.0	17.8	18.7	17.8	18.7
Forestry, fisheries, and mining.....	25.4	25.5	39.1	44.8	20.1	23.2	20.7	26.3
Construction.....	38.1	43.0	39.2	43.9	22.5	24.6	30.4	33.0
Manufacturing.....	19.4	20.5	31.6	31.3	17.1	18.9	15.8	14.3
Durable goods.....	20.1	21.6	30.7	31.1	16.1	18.8	13.1	12.4
Nondurable goods.....	18.5	19.0	32.9	31.6	18.4	19.0	19.6	17.2
Transportation and public utilities.....	13.9	14.3	36.5	39.1	18.3	17.0	18.0	22.5
Wholesale and retail trade.....	17.0	17.9	36.4	33.0	17.7	17.1	14.1	15.0
Service industries.....	11.6	13.0	35.5	34.5	16.1	16.7	15.8	17.8
Private households.....	13.7	15.2	41.7	46.1	14.5	17.3	30.0	33.1
Other services.....	11.1	12.5	33.9	31.2	16.6	16.5	12.0	13.4
Public administration.....	6.0	7.0	39.3	36.6	15.2	11.2	17.6	12.3

¹ Percent not shown where base is less than 100,000.

Chart 2. Major Reason for Working Less Than a Full Year¹



¹ As given by persons who worked 1 to 49 weeks during 1963.

clined among workers in the construction industry, which was marked by a steady upward movement of residential building during the year. Occupationally, unemployment was most common among nonfarm laborers and operatives. The extent of unemployment was most severe among farm and nonfarm laborers and service workers (excluding private household), with at least 4 out of every 10 unemployed persons out of work for a total of 15 weeks or more during the year.

The Unemployed With No Work in 1963. In addition to the 12.4 million unemployed who did some work in 1963, another 1.8 million persons looked for jobs for 1 week or more during the year but did not work at all (table 7). About one-third were teenagers and another 40 percent were women age 20 or over. As in 1962, half of the persons who looked but found no employment in 1963 reported that the main reason for not working was inability to find a job; among teenagers, going to school was the most important reason. The proportion of men offering unemployment as a reason declined to 54 percent from 61 percent in 1962.

Two-fifths of the men who were unsuccessful in finding work in 1963 looked for more than half the year—a proportion about twice as great as for women. As many as 7 out of 10 of the 250,000 jobless men 25 to 64 years old who had not worked

during the year, almost all of whom were married, had vainly sought employment for more than 6 months.

As in previous years, nonwhite persons were disproportionately represented among those who looked for work at some time but didn't find any. In both 1963 and 1962, about 25 percent of the persons looking for jobs unsuccessfully during the year were nonwhite. In contrast, in each of the years, only 11 percent of all persons who did some work were nonwhite.

Repeated Spells of Unemployment. Persons who had more than two spells of unemployment were concentrated to a considerable degree in two seasonal industries, construction and agriculture, and in private household work where job changes are frequent. Carpenters, other construction craftsmen, and farm laborers again had the highest incidence of more than two spells, with private household workers and laborers in construction and other nonmanufacturing activities not far behind.

A greater proportion of men than of women continued to have more than two separate periods of joblessness primarily because of the low incidence of unemployment in office and sales jobs, where women predominate, and the less firm attachment of women to the work force.

TABLE 7. UNEMPLOYED PERSONS WITH NO WORK EXPERIENCE IN 1963, BY EXTENT OF UNEMPLOYMENT, AGE, MARITAL STATUS, COLOR, AND SEX

Age, marital status, color, and sex	Total looking for work		Percent distribution, by number of weeks unemployed				
	Number (thousands)	Percent	Total	1 to 4 weeks	5 to 14 weeks	15 to 26 weeks	27 weeks or more
Total, 14 years and over.....	1,811	100.0	100.0	39.5	23.0	8.1	29.5
Age:							
14 to 17 years.....	405	22.4	100.0	49.0	33.2	9.7	8.2
18 to 24 years.....	460	25.4	100.0	40.0	28.5	7.7	23.7
25 to 64 years.....	815	45.0	100.0	35.8	16.8	7.5	39.9
65 years and over..	131	7.2	100.0	30.4	9.6	8.0	52.0
Marital status:							
Single.....	756	41.7	100.0	41.8	28.8	8.6	20.8
Married, spouse present.....	798	44.1	100.0	41.6	19.2	7.7	31.5
Other marital status.....	257	14.2	100.0	26.6	17.5	7.5	48.4
Color:							
White.....	1,382	76.3	100.0	41.0	22.2	8.1	28.6
Nonwhite.....	429	23.7	100.0	34.5	25.3	7.8	32.4
Sex:							
Male.....	778	43.0	100.0	30.3	22.1	8.0	39.7
Female.....	1,003	57.0	100.0	46.4	23.6	8.1	21.8

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

Although older workers are less likely than younger ones to be unemployed during the year, among those who do become jobless the frequency of several spells of unemployment tends to increase with age. About 20 percent of the unemployed men 25 to 44 years old had more than two spells of unemployment compared with about 30 percent of those age 45 and over.

Among part-year workers with unemployment, those who had worked primarily on a part-time basis were more likely to have had more than two spells of unemployment than were those generally employed full time. As the following tabulation shows, this was particularly evident for men:

	Percent of part-year workers in 1963 affected by specified number of unemployment spells	
	Full-time workers	Part-time workers
<i>Men</i>		
Total spells.....	100.0	100.0
One spell.....	57.5	42.0
Two spells.....	21.5	19.8
Three spells or more.....	21.1	38.2
<i>Women</i>		
Total spells.....	100.0	100.0
One spell.....	67.6	59.1
Two spells.....	18.6	17.0
Three spells or more.....	13.7	23.9

The part-time workers were apt to be teenagers attending school and married women who had several short periods of unemployment as they moved into and out of the labor force.

Not in the Labor Force

Some 45.6 million persons, over three-fourths of them women, did not work or look for work at all during 1963. Their main reasons for not working were attendance at school or college, home responsibilities, illness or disability, and miscellaneous reasons, such as retirement and voluntary idleness. Only a small number, under 100,000, reported they did not work because they could not find work, as shown below:

	Persons not in the labor force (thousands)		
	Both sexes	Male	Female
All reasons, total.....	45,588	10,190	35,398
Illness.....	4,238	2,109	2,129
Household responsibilities....	26,163	-----	26,163
Attending school.....	8,927	3,884	5,043
Could not find work.....	85	32	53
All other.....	6,175	4,165	2,010

Illness

A substantial minority of the men who had not worked at all during 1963 or had worked less than a full year reported illness or disability as the main reason. As shown below, one-fourth of the men age 25 or over who worked part year or not at all were unable to work a full year or even do some work because of illness or disability:

	Number working part year or not at all (thousands)	Proportion due to illness or disability (percent)			
		Total	Did not work		
			Part-year workers	Did not look for work	Looked for work
Total, all ages.....	26,322	15.5	7.2	8.0	0.2
14 to 24 years.....	10,863	1.9	1.2	.6	.1
25 to 64 years.....	9,446	25.5	15.6	9.5	.5
65 years or over....	6,013	24.1	4.9	19.0	.1

Workers Age 20 to 24

The first large crop of wartime babies, those born in 1942, are now swelling the ranks of the young workers. A sharp rise in the number of young people between 20 and 24 years old will continue for the remainder of the 1960's, in sharp contrast with a decrease in the 1950's:

	Estimated population changes for persons age 20 to 24		
	1950-60	1960-65	1960-70
Number (thousands).....	-525	+2,486	+5,967
Percent change.....	-4.5	+22.3	+53.6

Having just passed their teens and just before entering the prime working years of 25 to 64, persons in their early twenties share to some extent the characteristics—and problems—of both the younger and older groups. Some are still unmarried and in school or college, but others are family breadwinners. As a group they are more permanently attached to the work force than are teenagers, but not so settled in jobs as are their elders. Their distribution by marital status in February 1964 is shown in the following tabulation:

	Persons age 20 to 24			
	Men		Women	
	Number (thousands)	Percent	Number (thousands)	Percent
Total population..	5,423	100.0	6,402	100.0
Single.....	2,905	53.6	1,931	30.2
Married, spouse present..	2,401	44.3	4,003	62.5
Other marital status.....	117	2.1	468	7.3

Employment. In 1963, 92 percent of the young men age 20 to 24 worked during the year, and half of the remainder gave as a reason for not working that they were still in school. Only 66 percent of the women worked at some time during the year; more than four-fifths of those who did not work had assumed marital and family responsibilities. Inability to find work was rarely given as a reason for not working; altogether about 120,000 gave this reason (11 percent of the men and 3 percent of the women).

Although almost half the young men worked all year at full-time jobs, this was considerably below the rate of 78 percent for men 25 to 64 (table 8). Many of the young men were attending college and were unable to work a full year; also they were more likely to be unemployed at some time during the year than older men. On the other hand, 37 percent of the young women were full-time workers for the full year, a somewhat smaller proportion than that for older women.

In the age group 20 to 24, white and nonwhite men were much alike in the proportions who were in the work force or who were working either part time or full time all year. Among older men, however, a much smaller proportion of the nonwhite men were fully employed all year and relatively more of them held primarily part-time jobs. Although the work experience rates of young white and nonwhite women workers were about the same, the less favorable position of nonwhite women in regard to all-year full-time work (attributable primarily to their concentration in less skilled occupations where part-time work is prev-

alent) is clearly evident. The proportion of nonwhite girls fully employed was a third smaller than for white girls, and the proportion working part time was half again as great.

The work participation rate for young men is high regardless of marital status; as might be expected, the rate for married men, at 98 percent, was higher than for single, by about 11 percentage points. Among the young women, however, the situation was reversed. About 84 percent of the single women age 20 to 24 worked during the year, nearly as high a proportion as among single men; for the married women in the same age group the rate was down to 57 percent.

Over half—54 percent—of the young workers age 20 to 24 years were part-year workers compared with 30 percent of older persons. The prevalence of part-year workers among youth was primarily attributable to three reasons as the tabulation below of a percent distribution of major reasons for part-year work shows:

Major reason	Men		Women	
	20 to 24 years	25 to 64 years	20 to 24 years	25 to 64 years
All reasons.....	100	100	100	100
Unemployment.....	41	58	16	18
Illness or disability.....	5	19	4	11
Taking care of home.....	---	---	53	61
Going to school.....	39	2	19	1
Other ¹	15	21	9	9

¹ Includes retirement, service in the Armed Forces, summer vacations for students, unpaid vacations, and strikes.

Among men, the effects of both the vicissitudes of youth in looking for work as well as the importance

TABLE 8. WORK EXPERIENCE DURING 1963, BY EXTENT OF EMPLOYMENT AND SEX FOR SELECTED AGE GROUPS
[Percent distribution]

Work experience	Both sexes			Male			Female		
	18 and 19 years	20 to 24 years	25 to 64 years	18 and 19 years	20 to 24 years	25 to 64 years	18 and 19 years	20 to 24 years	25 to 64 years
Total who worked during the year:									
Percent of population.....	73.7	77.8	73.1	82.5	91.6	95.8	66.3	66.1	52.3
Number (thousands).....	3,719	9,198	60,694	1,911	4,965	38,121	1,808	4,233	22,573
Percent.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Full time.....	61.0	83.8	86.9	58.6	86.3	95.9	63.4	81.0	71.8
50 to 52 weeks.....	14.1	42.4	65.0	14.8	47.3	78.2	13.3	36.7	42.8
27 to 49 weeks.....	12.7	18.6	14.6	11.8	18.5	13.7	13.7	18.7	16.2
1 to 26 weeks.....	34.1	22.8	7.3	32.0	20.5	4.0	36.4	25.5	12.8
Part time.....	39.0	16.2	13.1	41.4	13.7	4.1	36.6	19.0	28.2
50 to 52 weeks.....	8.5	4.0	4.7	11.5	4.0	1.4	5.3	3.9	10.3
27 to 49 weeks.....	8.3	3.7	3.0	8.9	3.7	1.1	7.5	3.7	6.3
1 to 26 weeks.....	22.3	8.4	5.3	20.9	5.9	1.6	23.7	11.4	11.6

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

TABLE 9. EXTENT OF UNEMPLOYMENT DURING 1963, BY SEX, FOR SELECTED AGE GROUPS
[Percent distribution]

Extent of unemployment	Both sexes			Male			Female		
	18 and 19 years	20 to 24 years	25 to 64 years	18 and 19 years	20 to 24 years	25 to 64 years	18 and 19 years	20 to 24 years	25 to 64 years
Total working or looking for work.....	3,925	9,452	61,509	1,999	5,064	38,377	1,926	4,388	23,132
Percent with unemployment.....	31.1	25.2	14.9	31.4	29.6	15.2	30.8	20.2	14.4
Total with unemployment (thousands).....	1,220	2,384	9,140	627	1,498	5,815	593	886	3,325
Unemployed persons with work experience, total:									
Number (thousands).....	1,014	2,130	8,325	539	1,399	5,559	475	731	2,766
Percent.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Year-round workers with 1 or 2 weeks of unemployment.....	3.0	8.4	11.9	3.9	9.1	13.6	1.9	7.0	8.4
Part-year workers with unemployment.....	97.0	91.6	88.1	96.1	90.9	86.3	98.1	92.9	91.5
1 to 4 weeks of unemployment.....	33.6	27.5	18.3	29.7	23.2	15.9	38.1	35.9	23.0
5 to 14 weeks of unemployment.....	32.5	30.4	33.1	31.5	32.4	34.6	33.7	26.5	30.1
15 to 26 weeks of unemployment.....	17.8	19.7	22.3	19.7	22.0	22.8	15.6	15.3	21.5
27 weeks or more of unemployment.....	13.1	14.0	14.4	15.2	13.4	13.1	10.7	15.2	16.9
Total with 2 spells or more of unemployment.....	32.1	34.6	38.6	36.7	38.5	40.8	26.7	27.1	34.1

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

of education are evident. For the young women, the responsibilities of marriage and motherhood was the dominant reason.

Unemployment. A relatively high proportion of young persons 20 to 24 years old were jobless at least once during the year, but generally they were out of work for comparatively few weeks. Many of them were looking for their first regular job. There was also the greater propensity of youth to job-shop and job-hop. One-fourth of the young adults 20 to 24 years old were jobless at least once during 1963, a somewhat lower proportion than for older teenagers (18 and 19 years old) but much higher than for workers age 25 to 64 (table 9).

The percent distribution of weeks of unemployment for 20- to 24-year-old men resembled the pattern for men ages 25 to 64. The pattern of distribution for young women was somewhat more favorable than it was for women in the 25 to 64 year age group. However, the proportion of young persons, of either sex, with more than two spells

of unemployment was less than that for the older persons.

Outlook

In the next few years, the changes now underway in the economy (such as the growth of service industries, more complex technical products, and automation) bespeak an increasing demand for professional and technical workers, clerks, and sales personnel. Furthermore, as a result of the low birth rate of the 1930's, the 35- to 44-year-old group—the age group usually constituting a major portion of the skilled and managerial personnel—will decline in number. This lack of growth will leave openings which can be filled by younger workers—provided they are equipped for employment in an economy which is constantly requiring greater technical and educational skills. Already many young persons—inadequately equipped—are finding that lack of salable skills and knowledge is hampering them in their search for work.

Summaries of Studies and Reports

Collective Bargaining Solutions to Technological Change

THE RESPONSE of collective bargaining to the challenges posed by technological change once again demonstrates that institution's capacity to engender a variety of programs to deal with the problems at hand.¹ The variety of programs, in turn, reflects the diversity in the tempo and impact of technological change in the American economy. Where the pace of the change is slow and the extent of displacement is moderate, the imaginative use of normal economic and administrative processes can do much to mitigate the impact of new technology on employment in the bargaining unit. When technical innovations come in large, discrete doses and threaten the economic status of a substantial number of employees, the parties are likely to supplement "natural" forces with their own defenses. Various measures may be adopted to distribute available employment opportunities among the incumbents and, in some cases, to provide economic guarantees. At the same time, recognition of the inevitability of some displacement creates pressures for the indemnification of the casualties of technological change. As a last step, the parties may extend the adjustment process into the labor market by engaging in active placement and retraining efforts.

The Main Approaches

To date, collective bargaining has given major emphasis to the refinement and utilization of normal economic processes and programs for distributing available job opportunities. In a market economy, where competitive pressures are often harsh and unsentimental, the prospects for the widespread establishment of long-term employment and income guarantees are dim at this point. Nor

are private efforts to facilitate the transition of displaced workers to the labor market likely to become prevalent on the American industrial relations scene. However, unions and employers are increasingly aware of the importance of these measures and doubtlessly will serve as active liaison agents with the appropriate governmental units operating in these areas.

This analysis should not imply that in any particular collective bargaining relationship there is a fixed pattern in the development of programs to deal with technological change. To a considerable extent, the specific tactics adopted by the parties will be determined by traditional policies and the immediate economic circumstances. Thus, the fact that shorter hours has been a traditional device for coping with cyclical fluctuations in the construction industry gave impetus to the use of this practice as a defense against technological change as well. In the petroleum refining industry, on the other hand, a history of generosity in the area of fringe benefits made "induced" attrition through early retirement an attractive alternative.

The parties will also shift their emphasis as the economic environment within which they operate changes. In this respect, it is significant to note that when aggregate job opportunities in the automobile industry contracted sharply in response to market and technological factors, the UAW raised vocal demands for reducing the hours of work by controlling overtime. As employment levels have risen with expanded sales and production, this demand has receded in importance and higher priority has been given to early retirement provisions. At the same time, leaders of the United Packinghouse Workers Union contend that methods for distributing available employment op-

¹ EDITOR'S NOTE.—This is the concluding section of a paper delivered to the Conference on the Manpower Implications of Automation held in Washington, D.C., under the sponsorship of the Organization for Economic Cooperation and Development, Dec. 8-10, 1964. An account of the proceedings is to be published in the February 1965 issue of the *Review*.

portunities have been inadequate to handle the displacement associated with the modernization of the meatpacking industry and have served notice that they intend to push seriously for some form of economic guarantee. In this case, the economic climate has not softened the impact of far-reaching technological change and plant relocation.

Choice Versus Coherence

Undoubtedly, unions and companies will continue to experiment with solutions to the problems posed by technological change. This capacity for experimentation has been one of the enduring virtues of the American system of collective bargaining. In the immediate years ahead, however, the greatest progress can be made not by a series of random innovations but rather by refining available measures and tying them together in a coherent program. For example, almost every conscious effort to deal with technological displacement includes some provision for the payment of a separation allowance which may constitute a sizable amount of money. There is some indication that the immediate attraction of this lump-sum payment is so glittering that it may blind the worker to the longrun benefits of other alternatives, such as interplant transfer. Similarly, the availability of economic guarantees to incumbent workers may slow down the rate of attrition that establishes the necessary base for any ameliorative effort. To be sure, it is desirable to provide a wide set of options so that different remedies can be applied to different individual cases as appropriate. Nonetheless, the set of choices should not create incentives that may impair the process of

adjustment. Thus, a major challenge to the parties is to develop systems of administration that will preserve elements of choice without undermining the effectiveness of the overall program to deal with job insecurity in a context of technological change.

The Achievements of Bargaining

It has been said that collective bargaining cannot change the economic climate, it can only ration the sunshine—or the rain—as the case might be. To some degree, this is true. Under a decentralized system of decisionmaking, the contribution made by collective bargaining is necessarily limited to the scope of the units within the control of the parties. It should not be concluded, however, that collective bargaining has or will play only a minor role in adjustments to technological and economic change. Collective bargaining has helped create a greater awareness of the magnitude of the problem where casual indifference might have prevailed. It has substituted orderly procedures for improvisation. It has sought some acceptable basis for distributing the costs and benefits of the new technology among those who are directly affected. To this extent, collective bargaining has, in some cases, actually promoted the diffusion of new methods of production. And it has attempted to deal with the difficult questions of equity that frequently have been ignored in previous periods of change.

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We want free enterprise and free collective bargaining to support each other. They stand as the cornerstones of the labor policy of this Administration. All our experience teaches us free collective bargaining must be responsible. So long as it is responsible, it will remain free.

—President Lyndon B. Johnson, in his speech to the delegates to the 19th Constitutional Convention of the United Automobile Workers, March 23, 1964.

Supplemental Unemployment Benefit Plans in Major Agreements

SUPPLEMENTAL UNEMPLOYMENT benefit plans, designed primarily to provide weekly supplements to State unemployment insurance benefits, were included in 247 of the 1,773 major collective bargaining agreements in effect in the winter of 1963-64, according to a recent Bureau of Labor Statistics survey.¹ These contracts covered 1.9 million workers, or about 25 percent of all workers under major contracts.

The 247 agreements with supplemental unemployment benefit (SUB) provisions, in effect during the winter of 1963-64, were primarily in the durable goods manufacturing industries, chiefly primary and fabricated metals, nonelectrical machinery, and transportation equipment industries. Substantial numbers of workers in two nondurable goods manufacturing industries—the apparel industry (ladies garment segment) and the rubber industry—were also employed under agreements with SUB plans. In nonmanufacturing industries, only 18 agreements, chiefly in retail food stores in California (10 agreements), included SUB plans.

Agreements with SUB plans applied to nearly all workers employed under large union contracts in the primary metals industry and to more than 4 out of 5 of those in the rubber industry. In the transportation equipment industry, the SUB contracts covered workers engaged in the manufacture of motor vehicles, motor vehicle equipment, and railroad equipment; but because aerospace and shipbuilding employees were not covered by SUB agreements, these provided coverage to only 3 out of 5 of the workers employed under large agreements in the entire transportation equipment industry.²

Most of the agreements with SUB plans were negotiated by the following international unions: the Steelworkers (84 agreements), the Automobile Workers (66), the Ladies' Garment Workers (40), the Rubber Workers (11), and the Retail Clerks (9). While the Glass and Ceramic Workers negotiated only three SUB agreements within the scope of this study, these contracts applied to all work-

ers under major agreements in the flat glass industry and to about 7 out of 10 of all production workers in that industry. The National Maritime Union's agreement covered all its members (unlicensed seamen) employed by Atlantic and Gulf coast shipping companies.

Four-fifths of the contracts were negotiated in single-employer bargaining units. With seven exceptions, the multiemployer agreements were confined to the following industries where multiemployer bargaining prevailed: Apparel (35 agreements), printing and publishing (1), retail trade (11), water transportation (1), and construction (3). The seven multiemployer SUB agreements found in industries where single-employer contracts predominated were those negotiated by the Ladies' Garment Workers in industries other than apparel (five agreements); by the Detroit Tooling Association and the Automobile Workers (one agreement); and by the Glass and Ceramic Workers with four of the smaller flat glass companies (one agreement).

Characteristics³

For this study, the scope of a SUB plan was defined as the scope of the fund established for the payment of benefits under that plan. Thus, although the Ladies' Garment Workers negotiated 38 separate multiemployer agreements and 2 single-employer agreements providing SUB benefits, only one SUB plan was established because all signatory companies contribute to a single central SUB fund from which benefits are paid. In a few companies, like the U.S. Steel Corp. and the Budd Co., a single plan with a single fund is provided for by several of their collective bargaining agreements. In contrast, four distinct SUB plans were established under the one multiemployer

¹ Full results of the study will be presented in *Supplemental Unemployment Benefit Plans and Wage-Employment Guarantees*, a forthcoming bulletin. The study is part of a new series described in a Program Note in the *Monthly Labor Review* for October 1964, pp. 1184-1185. Additional information on the financial aspects will be provided in the Bureau's study of plan finances, which is now in progress.

Major collective bargaining agreements, as defined by the Bureau, are agreements covering 1,000 workers or more.

² Most of the large contracts in the aerospace industry provided lump-sum benefit payment to workers on an extended layoff. Will be presented in a forthcoming bulletin, *Major Collective Bargaining Agreements: Severance Pay and Layoff Benefit Plans*.

³ The terms used in this article to describe certain benefits or features of SUB plans are not necessarily the same as those used in the SUB agreements or in the descriptive materials on plans.

agreement negotiated by the Glass and Ceramic Workers: each of the four signatory companies set up a separate fund for the payment of benefits to its workers. Altogether, 179 plans were established by the 247 agreements providing unemployment benefits. In three industries—apparel, primary metals, and retail trade—there was a marked difference between the number of agreements incorporating provisions for plans and the number of plans established by these agreements.

All except 5 of the 179 SUB plans were paying benefits at the end of 1963. This article, therefore, is concerned only with the major features of the 174 operating plans—167 single-employer plans and 7 multiemployer plans.⁴

Financing

All SUB plans were financed solely by the company.⁵ Four types of funding arrangements were used: Individual account, company fund, multi-employer pooled fund, and unfunded plans.⁶ All but 3 of the 174 plans were funded programs requiring employer contributions into separately maintained trust funds. The overwhelming majority (88 percent) required contributions to be placed in a company fund; contributions of employers signatory to six multiemployer plans went into a multiemployer pooled fund. One multi-employer and ten single-employer plans had individual account funding arrangements; under these plans, however, the monies from each employee's account were commingled only for investment purposes.

All benefit payments generally came from the fund or from the worker's individual account. The only funded plans with a different procedure were the Continental Can Co.'s plans negotiated with the Steelworkers and the Machinists. Under these two plans, benefits could be paid directly by the company, and these payments reduced the company's contribution liability.

To prevent excessive accumulation of money and to encourage companies to stabilize their employment, the company fund plans always clearly defined the maximum size of the fund. Company contributions for any one period depended upon the financial condition of the fund: when fund finances fell below a specified amount, the employer contributed at the maximum rate of the

plan. About half of the plans negotiated by the Automobile Workers and a few of those negotiated by other unions also provided that when the fund finances drop below a certain level, the employers must, in addition to the cents-per-hour contributions, reimburse the funds for benefits paid for scheduled short workweeks.

With few exceptions, total employer contributions to funded plans were based either on total hours actually worked by employees (as in virtually all of the plans in the primary metals industry) or on total hours for which workers were paid (as in the transportation equipment industry plans). Although somewhat over half the plans (55 percent) used the hours-worked basis, plans employing the hours-paid-for formula covered more workers (table 1). Both methods required a cents-per-hour contribution on behalf of each worker. Only three plans, including two multi-employer plans, used other methods to determine the employer's total contribution. The Ladies' Garment Workers' plan used a percent of total payroll as a basis. In contrast, the New York City photoengraving industry plan required a uniform contribution for each week during which a photoengraver worked.

The maximum amount for which the companies were liable under the funded plans requiring a cents-per-hour employer contribution ranged—with a few exceptions—from 2 cents to 10 cents per hour. It was most frequently 5 cents—required by most of the plans in the flat glass, trans-

⁴ Since this article deals with SUB plans in effect in the winter of 1963-64, the recent changes made in some of the plans negotiated by the Automobile Workers are not described.

⁵ A special BLS study now in progress deals with the finances of SUB plans. Recent financial statistics are analyzed to determine the nature and extent of SUB plan operations.

⁶ Under an "individual account" plan, company contributions are credited to the account of each employee and his benefits are charged to that account; any balance remaining in his account when his employment terminates is paid to him at that time. Under the "company fund" plan, the benefits are paid from a fund to which the employer contributes. Individual employees are credited with the time they work and charged with the time for which they draw benefits; these credits and charges are determined independently of company contributions. Terminated employees have no vested rights to unused credits or contributions. A "multiemployer pooled fund" is one to which contributions are made by more than one employer. An "unfunded" plan is one that does not require the company to put money into a separate fund for the payment of benefits; instead, benefit payments are made from the current operating funds or general assets of the company. A "company fund" is often referred to in the SUB literature as a "pooled fund." Because this term has frequently been associated with multiemployer funds (e.g., vacation pooled fund), it has been avoided in this summary.

portation equipment, and machinery (electrical and nonelectrical) industries—or 9½ cents, the rate specified in virtually all of the primary metals industry plans. More significant than the differences in the maximum contribution rates were the basis of the contribution (hours worked or hours paid for) and the nature of the company's financial obligation (cash liability only or cash plus contingent liability). About an equal number of funded plans called for one of the following kinds of company obligation: (1) a cash contribution only, usually the estimated amount required to keep the fund at a level previously agreed upon (89 plans), or (2) a cash amount plus an amount held as contingent liability payable into the fund whenever needed for the payment of benefits (82 plans). While the contingent liability provision was found in a majority of the plans in the primary metals (55 plans), fabricated metals (11 plans), and mining (3 plans), it was seldom included in plans in other industries.

Cash contribution rates of less than 5 cents per hour were usually found in plans requiring that part of the company's maximum contribution be held as contingent liability (e.g., 5 cents of the 9½ cents payable under many of the plans in the primary metals industry was in the form of a contingent liability).

Virtually all plans with a maximum contribution rate of 9½ cents per hour provided that the difference between the amount required by the plan and 4½ cents be earmarked for the vacation and saving plan provided for by the basic collective bargaining agreement. This amount was, however, transferrable to the SUB fund if needed prior to being used as a vacation benefit.

Under the individual account plans and the multiemployer pooled fund plans, the contribution rate remains the same regardless of the fund's financial status. Even though the six individual account plans negotiated by the Glass and Ceramic Workers limited to \$600 the total amount that

TABLE 1. MAXIMUM CONTRIBUTION RATE AND CONTRIBUTION BASE IN SUB PLANS IN MAJOR COLLECTIVE BARGAINING AGREEMENTS, WINTER 1963-64

[Workers in thousands]

Maximum contribution rate	All plans		Contribution base					
	Plans	Workers	Hours worked		Hours paid for		Other	
			Plans	Workers	Plans	Workers	Plans	Workers
All plans studied.....	174	1,848.4	96	702.0	71	818.1	7	328.3
All funded plans.....	171	1,844.2	96	702.0	71	818.1	4	324.1
Cash contribution only.....	89	1,187.0	18	109.2	68	799.7	3	278.1
\$0.02.....	14	42.7	2	36.6	2	6.1		
\$.03.....	3	3.8	1	1.0	2	2.8		
\$.033.....	1	30.0	1	30.0				
\$.04.....	13	95.2	1	2.9	12	92.3		
\$.05.....	² 59	712.0	8	15.3	51	696.7		
\$.07.....	³ 1	1.8			1	1.8		
\$.10.....	2	15.2	2	15.2				
\$.15.....	4	3.3	1	3.3				
\$.571.....	⁴ 1	3.0	1	3.0				
\$1.50.....	⁵ 1	2.0					1	2.0
Other.....	7	278.0	1	1.9			1	276.1
Cash contributions and contingent liability.....	82	657.2	78	592.8	3	18.4	1	46.0
Cash.....								
Contingent liability.....								
Total liability.....								
\$0.025.....	1	1.0	1	1.0				
\$.030.....	12	35.0	9	16.6	3	18.4		
\$.050.....	1	1.5	1	1.5				
\$.045.....	67	573.7	67	573.7				
\$.107.....	1	46.0					³ 1	46.0
All unfunded plans.....	3	4.2					3	4.2

¹ 1 plan covering 1,700 workers did not require company to contribute during the period Mar. 4, 1961, to Aug. 31, 1964.

² Under 1 plan, covering 7,000 workers, if finances of fund were less than current benefit liabilities, company made necessary advanced contribution.

³ Company contributed this amount when finances of fund were less than 50 percent of maximum funding. When finances of fund were at least 50 percent but less than 66⅔ percent of maximum funding, company contributed up to 6 cents per hour for which employees were paid, and when finances are at least 66⅔ percent, company contributed up to 5 cents for each hour.

⁴ This plan paid 20 cents per overtime hour worked.

⁵ Employer contributed \$4 per day; \$0.571 based on 7-hour day specified in collectively bargained agreement.

⁶ Company contributed \$1.50 per week regardless of total hours worked by employee or paid for by company; contribution per apprentice was 75 cents per week.

⁷ Includes 1 plan covering 274,000 workers which required employers to contribute .5 percent of payroll and 1 plan covering 2,100 workers which required the company to contribute 2 percent of available net annual earnings if gross annual profit was at least \$5,000, and 1 plan covering 1,900 workers which required the company to contribute 8 cents per hour for supplemental employment, sick, and insurance benefits.

⁸ Company contributed 5 cents per hour for which employees were paid plus \$0.057 per hour worked by employee. Total contingent liability of \$2 million became effective on Jan. 1, 1962, and was accumulated during 1962 at the rate of \$500,000 per quarter; contingent liability to be eliminated by June 29, 1964.

could accumulate in an individual worker's account, the companies' contributions were unaffected after this level was reached. Any excess was used to increase the worker's vacation benefits. Two of these plans required the employer to contribute 10 cents for each hour worked by each employee, and four required 5 cents per hour worked. Three other individual account plans also called for a company contribution of 5 cents for each hour worked.

Types of Benefits

All SUB plans paid a weekly unemployment benefit to wholly unemployed workers (table 2). About nine-tenths of the plans, accounting for approximately eight-tenths of the covered employees, provided that partially employed workers were eligible for either a special or a short workweek benefit.⁷ Separation pay and moving allowance benefits were provided by 50 percent and 40 percent of plans, respectively; however, plans with nearly two-thirds of the coverage provided the former benefit while those with less than half provided the latter. These proportions reflected the fact that moving allowances were generally included in plans negotiated by the Steelworkers and separation pay in those negotiated by the Automobile Workers and the Ladies' Garment Workers. Less than 20 percent of the plans negotiated by the Automobile Workers had a moving allowance, while the Steelworkers' plans seldom provided separation pay. Over half of the SUB plans negotiated by the Automobile Workers also paid the health insurance premiums for laid-off workers. The only plans of other unions that provided health benefits for laid-off workers were the two General Motors plans (one negotiated by the Rubber Workers for employees of the company's Inland Manufacturing Division and the other by the Electrical Workers (IUE)) and the Dana Corporation-USA plan, all patterned on the plans negotiated by the Automobile Workers with the same companies.

Benefits for active workers were seldom provided under SUB plans. Thirteen plans—eight "individual account" plans, the Ideal Cement Co.-Cement, Lime and Gypsum Workers' plan, two Retail Clerks plans, the Carpenters' plan, and the National Maritime Union's plan—provided benefits for temporarily disabled workers.⁸ Eleven

TABLE 2. TYPES OF BENEFITS IN SUB PLANS IN MAJOR COLLECTIVE BARGAINING AGREEMENTS, WINTER 1963-64

[Workers in thousands]

Type of benefits provided	Plans	Workers
All plans studied.....	174	1,848.4
Benefits for laid-off workers.....	174	1,848.4
Regular weekly.....	174	1,848.4
Special weekly.....	160	1,642.8
Short workweek.....	151	1,462.2
Other benefits:		
Separation pay.....	82	1,196.4
Moving allowance.....	73	810.8
Health premiums.....	133	641.4
Benefits for active workers:		
Accident and sickness benefit.....	13	96.9
For all disabilities.....	212	95.1
For occupational disabilities only.....	1	1.8
Benefits for worker's beneficiary.....	11	34.3
Death.....	11	34.3

¹ 1 plan covering 1,900 workers paid the premium for all insurance benefits, including health insurance.

² 1 plan covering 30,000 workers provided the benefit only to workers disabled while on vacation or on leave of absence.

individual account plans giving workers a vested right to the company's contribution, paid a death benefit—the balance in the workers' account—regardless of the worker's employment status at the time of his death.

The maximum contribution rate was not related to the number of benefits provided. By and large, plans with high contribution rates provided fewer types of benefits than did plans with low rates. For example, plans with contributions rates of 5 cents and 9½ cents per hour provided benefits for both wholly unemployed and partially unemployed workers. While the 5-cent-per-hour plans usually provided two other benefits—separation pay and reimbursement of health premiums for laid-off workers—the plans with the 9½-cent rate provided only one other benefit—moving allowance.

⁷ Although all States disqualify otherwise eligible workers for benefits for a week during which their earnings exceeded a specified amount, SUB plans usually pay benefits to these workers. Common contract terminology, which has been used in this study, distinguishes between the benefits payable when earnings do not disqualify workers for State unemployment insurance benefits and when they do, as follows: *Special weekly unemployment benefits*, available to laid-off workers partially employed by their regular employers, whose earnings with the company were not sufficient to disqualify them for State unemployment insurance benefits to which they would, in most cases, be entitled; and *short-workweek benefits*, provided workers employed for less than a full week, including laid-off workers whose earnings from their regular employer disqualified them for State benefits for that week. These terms may not be found in all plans providing these benefits or may be used somewhat differently. The U.S. Steel-Steelworkers plan, for example, does not distinguish between the "special" benefit and the "short workweek" benefit.

⁸ Under the National Maritime Union's plan, the benefit was payable only if a seaman's disability commenced while he was on vacation or on leave of absence. However, if a seaman becomes disabled while aboard ship, he is protected by other benefit programs.

Service Requirements. Workers had to meet certain service requirements to qualify for any plan benefit. Usually 1 year of service was required except for the Steelworkers' plans which had a 2-year service requirement. Only the unfunded plan established by the Minnesota Mining and Manufacturing Co. and the Oil, Chemical and Atomic Workers required as much as 5 years of service.

Regular Unemployment Benefits

To collect the regular weekly unemployment benefits under a SUB plan, workers also had to qualify for State unemployment insurance (UI) benefits. There were, however, certain exceptions. For example, all but a few plans paid benefits to workers disqualified for State benefits because they were serving the second week of a 2-week waiting period or because they had exhausted the State benefits for the current benefit year.⁹ In addition, all but one of the plans negotiated by the Rubber Workers, 2 out of 5 of those negotiated by the Automobile Workers, and a few others paid benefits to workers laid off out of line of seniority during an adjustment period even though they were disqualified for State UI benefits because the week was a waiting period week. Most of the Steelworkers' plans and the Ideal Cement Co.-Cement, Lime and Gypsum Workers' plan, to cite another exception, continued to pay unemployment benefits to laid-off workers whose State benefits ceased because of a disabling accident or sickness.

Benefit Determination. In general, regular weekly unemployment benefits were determined according to similar formulas. The total amount (considering SUB, State UI, and earnings from other employers) under almost 4 out of 5 plans was a percent of before-tax wages (table 3). Only about one-tenth of the plans paid an amount which was not affected by the UI benefit.

The weekly benefit amount (based on consideration of State UI benefit and outside earnings) for wholly unemployed workers under plans using before-tax earnings as the basis was the equivalent of 55 to 80 percent of weekly wages. Most

Steelworkers' plans paid 60 percent of weekly wages, and most Automobile Workers' plans and all Rubber Workers' plans, 62 percent. A less liberal benefit was provided by 18 plans which paid 65 percent of after-tax earnings. Nine of the eleven individual account plans allowed a worker to determine the amount of his weekly benefit within the range set by the plan.

A weekly allowance for each dependent—usually in addition to the weekly unemployment benefit—was paid by all except 10 of the company fund plans. Over 4 out of 5 of the 154 plans gave workers \$1.50 for each dependent up to four. Twenty plans allowed \$2 for each dependent up to four. Allowances for dependents were not included in the other types of plans.

Benefit Limits. In addition to limiting the total amount of benefit payments (including State UI benefits) to workers to a certain percentage of their wages, and the amount for each dependent, every plan—including the 11 individual account plans and the 3 unfunded plans—placed a limit on

TABLE 3. REGULAR WEEKLY UNEMPLOYMENT BENEFIT FORMULA IN SUB PLANS IN MAJOR COLLECTIVE-BARGAINING AGREEMENTS, WINTER 1963-64

[Workers in thousands]

Formula	Plans	Workers
All plans studied.....	174	1,848.4
Computed weekly benefit includes State UI benefit.....	154	1,482.1
Percent of before-tax earnings.....	136	1,448.3
80 percent.....	1	2.1
65 percent.....	2	36.6
62 percent.....	56	792.4
60 percent.....	75	608.3
55 percent.....	2	8.9
Percent of after-tax earnings:		
65 percent.....	18	33.8
Computed weekly benefit excludes State UI benefit.....	20	366.3
Nonuniform dollar amount.....	13	320.4
Graduated according to earnings ²	3	290.2
Graduated according to seniority.....	1	1.0
Amount requested by worker.....	9	29.2
Uniform dollar amount.....	7	45.9
\$50.....	1	3.0
\$30.....	1	3.3
\$25.....	2	31.0
\$20.....	1	2.0
\$17.....	1	5.5
Other.....	1	1.1

¹ Includes 1 plan covering 3,100 workers which paid 72 percent of after-tax earnings and another plan covering 3,000 workers which provided a total regular weekly benefit of 60 percent of after-tax earnings after the first 4 full weeks of layoff. Under the latter plan, when the trust fund reached 49 percent of maximum fund the reduced benefit (60 percent) was not payable until after the 8th week of layoff.

² Total benefit was stated as dollar amount varying according to wage groupings.

³ Includes 1 plan covering 1,000 workers which paid \$30 after exhaustion of State UI benefit and 1 plan covering 30,000 workers which paid workers ineligible for UI benefits \$40.

⁴ This plan paid the greater of the difference between maximum State UI benefits for which the worker was eligible plus \$20 and the amount he actually received and \$25.

⁹ However, three plans did not pay benefits to workers ineligible for State UI benefits, irrespective of the reason for ineligibility.

the total weekly amount payable by the plan. The maximum in 89 plans was higher after the worker exhausted his UI benefits than while he was receiving them. Under 78 plans, accounting for 3 out of 5 employees under SUB plans, it was the same during the entire employment period (table 4).¹⁰

With one exception, benefits payable by these 78 plans ranged between \$17 and \$55. Almost 3 out of 4 limited payments, excluding dependent allowances, to \$40¹¹ and about 1 out of 7, to \$30. Most of the plans with a \$40 maximum were negotiated by the Automobile Workers and the Rubber Workers. Under nine Rubber Workers' plans, dependent allowances increased the \$40 maximum plan payment to \$48 for married workers; marital status had no effect on the maximum plan payment for workers covered by the Automobile Workers' plans.

Almost 4 out of 5 of the 96 plans in which the maximum weekly payment was determined by whether the worker had received a UI benefit paid \$37.50 while the employee collected State UI benefits and \$60 thereafter.¹² Under these plans, which with few exceptions were negotiated by the Steelworkers, dependent allowances were payable in addition to these amounts.

Because of dependent allowances, over half the plans (55 percent) provided a higher maximum payment to a worker with dependents than to one without dependents. In 1 out of 3 of the plans

with dependent allowances, however, the allowances did not affect the maximum payments. They were payable in addition to the regular benefit amounts only to the extent that the total payment by the plan did not exceed the maximum payment.

There was usually a relationship between the maximum employer contribution rate (including the contingent liability) and the maximum plan payment. For example, maximum plan payments of \$40 per week (including dependent allowances, where provided) were found primarily in plans requiring employers to contribute 5 cents or less per hour. Maximum payments of over \$40 were common, on the other hand, in plans with a 9½-cent employer contribution rate.

Duration of Benefits. The duration of regular weekly benefit payments provided by 155 plans (154 company fund plans and 1 individual account plan) was based on the number of credit units a worker had accumulated up to the time of layoff.¹³ Immediately upon becoming employed, workers acquired credit units at the rate of one-half unit for each week they received pay. When they had completed sufficient service to become eligible for unemployment benefits (1 or 2 years), they were credited with units previously earned. When the financial condition of a fund was at a sufficiently high level, one unit was canceled for each week of benefits. Under 1 out of 2 plans, however, when the fund fell below a certain level, the number of credit units canceled for each weekly benefit increased thereby shortening the duration of benefits. Because the number of units canceled when the value of the fund decreased varied according to the worker's seniority, laid-off workers with long service were assured protection for a proportionately longer period of time than employees with less service.

TABLE 4. MAXIMUM REGULAR WEEKLY PLAN PAYMENT FOR SINGLE WORKERS, IN SUB PLANS, IN MAJOR COLLECTIVE BARGAINING AGREEMENTS, WINTER 1963-64
[Workers in thousands]

Maximum plan payment	Maximum not affected by receipt of State UI benefit		Maximum varies according to receipt of State UI benefit			
			Maximum while receiving State UI benefit		Maximum while not receiving State UI benefit	
	Plans	Workers	Plans	Workers	Plans	Workers
All plans studied.	78	1,124.7	96	723.7	96	723.7
\$17.00.....	1	5.5				
\$20.00.....	1	2.0				
\$25.00.....	3	5.2	11	46.8		
\$30.00.....	12	29.5	1	3.3	1	1.0
\$35.00.....	1	7.0				
\$37.50.....			74	606.5		
\$40.00.....	57	793.6			1	30.0
\$47.50.....					8	13.9
\$50.00.....	1	5.8	1	3.0	1	1.9
\$55.00.....	1	2.1				
\$60.00.....					76	622.7
Other.....	1	274.0	9	64.1	2	7.1
No benefit.....					7	47.1

¹⁰ See footnote 11, below. The higher benefit of most plans was also payable for certain periods during which the worker was ineligible for UI benefits for reasons other than exhaustion of benefits.

¹¹ Included in this group of plans were those negotiated by the Rubber Workers which provided \$62 maximum plan payments for workers ineligible for State UI benefits during the first 26 weeks of layoff for specified reasons other than the exhaustion of benefit rights.

¹² Under certain conditions, the lower maximum was payable if the worker did not receive State UI benefits.

¹³ The discussion here excludes the individual account plan provisions. It concerns only the 154 company fund plans.

All 154 plans limited the number of units a worker could accumulate. Over 4 out of 5 permitted accumulation of up to 52 units, so that regular weekly unemployment benefits were payable for a maximum of 52 weeks. The remaining plans were about equally divided between those which limited credit unit accumulation and weekly benefit payments to 39 and 26 weeks. Under almost 7 out of 10 of the 154 plans, a worker who had less than a whole unit received a reduced benefit as a final payment. In the remaining plans, the full weekly benefit amount was provided even though only a fraction of a unit remained. Of course, when all units were canceled, benefit payments ceased.

One multiemployer pooled fund and one unfunded plan varied the number of weekly benefit payments according to the worker's seniority. In seven plans—five multiemployer pooled fund plans and two unfunded plans—the number of payments was uniform for all eligible workers; four plans offered 26 weeks, the other three provided 8, 15, or 25 weeks. The duration of weekly benefit payments in all individual account plans, with one exception, was directly related to the amount of money credited to the worker, at the time of layoff and to the amount of his weekly payments.

Special Weekly Benefits

In addition to the regular weekly unemployment benefit, most plans (160) also paid benefits to a worker only partially employed by his regular employer and earning wages from that employer which did not disqualify him for State UI benefits. To qualify for this special unemployment benefit, workers had to meet eligibility requirements other than the no-work requirement for regular unemployment benefits. Of the 14 plans without the special unemployment benefit, 7 were individual account plans, 1 was a multiemployer pooled fund plan, and 3 were unfunded plans.

Almost half of these plans, mostly those negotiated by the Steelworkers, paid a partially employed and eligible worker the difference between his lost wages in excess of 8 hours and his full-time

TABLE 5. SHORT WORKWEEK BENEFIT FORMULA, IN SUB PLANS, IN MAJOR COLLECTIVE BARGAINING AGREEMENTS, WINTER 1963-64

[Workers in thousands]

Short workweek benefit amount	Plans	Workers
All plans studied.....	174	1,848.4
All plans with a short workweek benefit.....	151	1,462.2
Percent of lost earnings indemnified.....	54	789.1
100 percent.....	1	5.8
65 percent.....	44	755.7
58 percent.....	1	1.4
50 percent.....	8	26.2
Percent of lost earnings in excess of 8 hours.....	76	628.1
100 percent.....	74	619.0
70 percent.....	1	2.1
60 percent.....	1	7.0
Percent of lost hours in excess of 4 hours.....	1	2.9
65 percent.....	1	2.9
Percent of average weekly earnings.....	17	31.5
72 percent.....	1	3.1
65 percent.....	8	14.2
62 percent.....	5	8.2
60 percent.....	2	4.1
55 percent.....	1	1.9
Other.....	3	10.6
All plans without a short workweek benefit.....	23	386.2

pay in excess of 8 hours less UI benefits. Under these plans, no limitation was placed on the amount the plan would pay or the number of weeks of partial employment during which the worker could collect benefits.

In nearly all of the remaining 84 plans, the special benefit was the amount required to increase the worker's income (including earnings from the company, earnings in excess of a specified amount—usually \$10—from other sources, and State UI benefits) to a specified percent of average weekly earnings (usually 62 percent). Three out of five of these plans—chiefly the Rubber Workers' and Automobile Workers' plans—guaranteed that the plan benefit, including dependent allowances, would be at least a specified percentage of lost earnings¹⁴ less State UI benefits and earnings from outside sources in excess of \$10. Special benefits under these 84 plans were affected by the dependent allowance, the maximum plan payments, and the maximum number of regular weekly benefits provided for.

Short Workweek Benefit

As noted previously, the short workweek benefit is provided workers who did not complete a full week's work or whose earnings from their regular employer disqualified them for State UI benefits (table 5). Nine out of ten plans immedi-

¹⁴ Sixty-five percent if the partial employment was during a scheduled short week, 50 percent if it was during an unscheduled short week. A scheduled short workweek is one scheduled by management for adjustment of production due to customer demand.

ately paid a benefit to employees not working a full week without their having to apply for it. The remainder called for payment of the short workweek benefit after the first week of layoff during the benefit year (the waiting period week for regular weekly unemployment benefits); some required an application for benefits, others did not.

Higher short workweek benefits were usually paid by plans providing for the immediate payment of these benefits than by those with a waiting period requirement. With one exception, plans without a waiting period requirement either paid a percentage of all lost earnings (54 plans) or a percentage of lost earnings in excess of 8 hours (76 plans). The proportion of lost earnings indemnified under the former group of plans was commonly 65 percent if the short workweek was scheduled and 50 percent if unscheduled. In contrast, under the latter group, all lost wages (100 percent) in excess of 8 hours were indemnified by all except two plans.

The short workweek benefit of the 16 plans with a waiting period requirement was the same as the benefit provided wholly unemployed workers and partially unemployed workers collecting UI benefits. With few exceptions, the plan paid the difference between a specified percentage of average

weekly earnings and actual earnings from the company.

Most of the 135 plans without a waiting period requirement for short workweek benefits did not place a limit on the maximum amount payable from the plan or the maximum number of weekly payments. In contrast, the short workweek benefits of the 16 plans with a waiting period requirement were subject to such limitations.

Administration and Appeals

In general, SUB plans were administered by the employer. Only the six multiemployer pooled fund plans and the one multiemployer individual account plan required joint union-management administration. In all plans, the administrator was responsible for initial determinations regarding the worker's eligibility for benefits and the amount due him. All except eight plans (including the three unfunded programs) permitted workers to appeal unfavorable decisions, using—with one exception—a procedure especially designed for SUB grievances.

—DOROTHY R. KITTNER

Division of Industrial and Labor Relations

Severance Pay and Layoff Benefit Plans

To WORKERS facing loss of job through no fault of their own, severance pay, in its traditional meaning, was intended to help tide them over a period of unemployment and to compensate, at least in part, for the loss of seniority and other rights and privileges accruing to them by reason of their length of service. Benefits through the State unemployment compensation system were also intended to help the displaced worker through the transition period. In recent years, through collective bargaining, the concepts of severance pay and unemployment insurance have been merged in a variety of devices, made even more diversified by tax and legal considerations and a certain blurring of the distinction between severance and layoff. To an increasing degree, moreover, workers who are laid off—with or without the expectation that the layoff will be permanent—are also realizing in cash or in vested rights their equity in various fringe benefits.¹

Types and Prevalence

Severance pay and layoff benefit plans appeared in 30 percent of the major agreements studied and covered about 40 percent of workers under all agreements (table 1). Manufacturing agreements contained the bulk of dismissal pay and layoff benefit plans. Nonmanufacturing industries accounted for only 148 plans, 97 of these in communications and utilities. The communications, primary metal, and transportation equipment industries accounted for more than a third of the plans and for over half of the worker coverage. In communications, plans have been in effect since the 1930's, and in primary metal since 1947.

Five unions were parties to almost half of the plans: Steelworkers, 65; Auto Workers, 63; Communications Workers, 47; Ladies' Garment Workers, 36; and Electrical Workers (IBEW), 30. (All IBEW plans were in the public utilities and communications industries, none in construction contracts.) These five unions represented 23 percent of the total contracts in the study, and 46 percent of those with dismissal pay or layoff benefit plans. They accounted for 30 percent of the

workers in the study, and two-thirds of the workers covered by plans:

Union	Percent with severance pay or layoff benefit plans	
	Agreements	Workers
All unions	29.6	40.9
Steelworkers	51.6	82.8
Auto Workers	55.8	87.0
Communications Workers	100.0	100.0
Garment Workers (ILGWU)	97.3	98.8
Electrical Workers (IBEW)	30.9	41.0

Multiemployer agreements accounted for only 86 of the 525 plans. Nearly half the multiemployer plans (36) involved the Ladies' Garment Workers' pooled industry funds.

Since 1944,² there has been a steady upward trend in the percent of agreements with such plans, with a marked rise since the 1955-56 survey. (See chart.) Contributing to this growth were the separation pay provisions added to SUB plans in the automobile industry in 1958 and in rubber in 1961, and extended layoff benefit plans negotiated in the aerospace industry in 1960. In the latter industry, the original union demand had been for supple-

¹ This article is based on a comprehensive study, *Major Collective Bargaining Agreements: Severance Pay and Layoff Benefit Plans*, to be issued shortly as one of a new series of bulletins. For details of the new series, see *Monthly Labor Review*, October 1964, pp. 1184-1185.

For this study, BLS analyzed 1,773 major collective bargaining agreements, each covering 1,000 workers or more, or virtually all agreements of this size in the United States, exclusive of those in the railroad and airlines industries and in Government. These agreements applied to approximately 7.5 million workers or almost half of the total coverage of collective bargaining agreements outside of the excluded industries. Virtually all contracts were in effect in 1963; for a few that had expired during the last months of 1962, renewed agreements were not available at the time that tabulations for this study were completed.

The Bureau tabulated traditional severance pay plans, plans which had no explicit statement of termination (labeled for the purpose of this analysis as "layoff benefit plans"), separation pay provisions in supplemental unemployment benefit (SUB) plans, the aerospace industry's funded extended layoff benefit plan, combination plans, and other variations providing payments upon separation or layoff, exclusive of provisions incorporated into pension plans. The decision to combine these plans into one study was not intended to have any implications for legal or tax purposes. It is also important to emphasize that this study deals with formal plans as set forth in agreements, and thus does not take into account the modifications in practice dictated by special circumstances and the informal or unilateral arrangements that prevail in this area.

In a separate study, the Bureau is investigating the operation of the plans covered in this study, along with several case studies of actual layoff situations.

² The present study constitutes the fourth conducted by the Bureau. Earlier studies were *Dismissal Pay Provisions in Union Agreements, December 1944* (BLS Bulletin 808, 1945), *Labor-Management Contract Provisions, 1949-50: Dismissal Pay Provisions in Union Agreements, 1949* (BLS Bulletin 1022, 1951), and *Collective Bargaining Clauses: Dismissal Pay* (BLS Bulletin 1216, 1957).

mental unemployment benefits, but extended layoff benefit plans emerged at the conclusion of negotiations. In 1958, severance pay provisions were included in a large number of agreements in the ladies' apparel industry. Excluding funded arrangements, the prevalence of plans increased from 15.7 percent in 1955-56 to 21.7 percent in 1963.

Explicit Statements of Termination. Of the 525 severance or layoff benefit plans, 419 (covering 2.5 million workers) explicitly stated that termination of the employment relationship was a requisite to, occurred simultaneously with, or resulted from, receiving an allowance. These were unambiguous statements. In one form, they appeared as

straightforward declarations that the receipt of the award terminated seniority, or ended pension, insurance, and other rights, or both. In another form, they defined a condition for granting pay which meant permanent separation, such as plant shutdown or retirement. In several textile contracts, retirement was the only condition under which severance awards would be granted. In still a third form, workers were given an option between layoff and severance pay, thus making it clear that choice of the latter meant permanent termination.

Some agreements gave no details of the plan's characteristics: i.e., when allowances would be paid, benefit levels, how it would be administered,

TABLE 1. SEVERANCE PAY AND LAYOFF BENEFIT PLANS IN MAJOR COLLECTIVE BARGAINING AGREEMENTS, BY INDUSTRY, 1963
[Workers in thousands]

Industry	Total number studied		With severance pay and layoff benefit plans								No reference to severance pay or layoff benefit plans	
			Total		With explicit statement of termination		No explicit statement of termination		Combination plans ¹			
			Agreements	Workers	Agreements	Workers	Agreements	Workers	Agreements	Workers		
All industries.....	1,773	7,454.1	525	3,051.0	368	2,193.9	106	509.6	51	347.6	1,248	4,403.1
Manufacturing.....	1,023	4,137.1	377	2,332.0	312	2,010.7	56	227.4	9	94.0	646	1,805.1
Ordnance and accessories.....	19	78.3	11	49.1	5	16.5	6	32.6			8	29.3
Food and kindred products.....	124	373.1	40	129.9	40	129.9					84	243.2
Tobacco manufactures.....	11	24.1									11	24.1
Textile mill products.....	28	79.8	11	36.2	11	36.2					17	43.6
Apparel and other finished products.....	52	427.8	35	248.4	35	248.4					17	179.4
Lumber and wood products, except furniture.....	12	19.0									12	19.0
Furniture and fixtures.....	15	26.0	3	4.6	3	4.6					12	21.5
Paper and allied products.....	56	127.3	10	24.1	3	4.1	7	20.0			46	103.3
Printing, publishing, and allied industries.....	37	73.5	6	10.9	6	10.9					31	62.6
Chemicals and allied products.....	61	112.7	36	63.7	22	39.9	11	15.6	3	8.3	25	49.0
Petroleum refining and related industries.....	18	54.8	6	25.0	4	17.4	2	7.6			12	29.8
Rubber and miscellaneous plastics products.....	24	111.1	12	90.2	12	90.2					12	21.0
Leather and leather products.....	22	76.7	3	3.6	3	3.6					19	73.2
Stone, clay, and glass products.....	30	114.3	5	19.8	5	19.8					25	94.5
Primary metal industries.....	109	599.3	56	488.0	51	481.8	4	5.2	1	1.0	53	111.3
Fabricated metal products.....	57	141.5	17	69.1	17	69.1					40	72.4
Machinery, except electrical.....	98	262.7	25	124.6	22	120.0	2	3.6	1	1.0	73	138.2
Electrical machinery, equipment, and supplies.....	98	396.9	37	222.6	26	94.3	7	44.6	4	83.7	61	174.3
Transportation equipment.....	121	975.5	52	697.9	38	605.2	14	92.7			69	277.7
Instruments and related products.....	22	45.4	10	17.4	7	11.7	3	5.7			12	28.0
Miscellaneous manufacturing industries.....	9	17.7	2	7.5	2	7.5					7	10.2
Nonmanufacturing.....	750	3,317.0	148	719.0	56	183.2	50	282.2	42	253.6	602	2,598.0
Mining, crude petroleum, and natural gas production.....	20	238.8	7	16.7	6	15.7	1	1.0			13	222.1
Transportation ²	107	688.4	12	63.6	9	59.7	3	3.9			95	624.8
Communications.....	81	513.7	76	496.5	3	5.7	38	253.8	35	237.1	5	17.2
Utilities; Electric and gas.....	86	207.2	21	50.3	13	26.9	3	9.4	5	14.0	65	156.9
Wholesale trade.....	15	28.4	3	7.8	3	7.8					12	20.6
Retail trade.....	116	303.9	9	27.1	8	18.6	1	8.5			107	276.8
Hotels and restaurants.....	38	175.4	2	3.5	2	3.5					36	171.9
Services.....	62	218.5	16	50.7	12	45.4	3	4.3	1	1.1	46	167.8
Construction.....	221	898.1									221	898.1
Miscellaneous nonmanufacturing industries.....	4	44.9	2	2.9			1	1.4	1	1.5	2	42.0

¹ Includes agreements with an explicit statement of termination applying under some, but not all, conditions.

² Excludes railroad and airline industries.

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

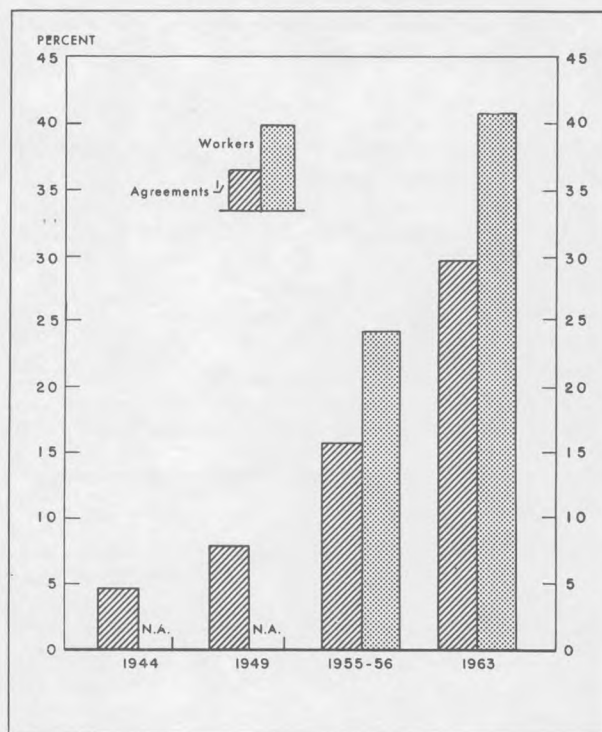
etc. Instead, a brief mention of the existence of such a plan was found in a seniority clause, or a vacation provision, or clauses referring to details in other benefit plans. The language of these clauses, however, likewise implied permanent separation. Still other agreements adopted severance pay in principle, but left the working out of details to some later time—usually until a situation arose in which such payments were called for.

No Explicit Statement of Termination. One hundred fifty-seven plans (covering 850,000 workers) contained no explicit declaration that termination of the employment or job relationship was a requisite to receiving benefits.³ These plans resembled other severance pay arrangements in that payments were ordinarily given in lump sums and were graduated according to length of service. In the absence of a clear-cut statement of permanent severance, however, compensation could conceivably be granted under conditions short of permanent dismissal. On the other hand, the omission of a statement of permanent termination and of specifications that could clearly be interpreted as meaning permanent termination may simply reflect the significance of layoff in an industry or company which does not experience short-term fluctuations in employment and whose manpower needs are declining; that is, once laid off the chance of reemployment is negligible. The bulk of the plans without termination language were concentrated in the communications industry, specifically in telephone agreements.

In the telephone industry and in other industries, plans with no explicit termination statement usually provided compensation for "layoff" or "layoff for lack of work." Some of these excluded short-term layoffs of specified duration, such as a "layoff of 30 days or less." Among these plans were "extended layoff benefit plans," prevalent in the aerospace industry. These contained statements which clearly differentiated them from traditional severance pay provisions, although they had adopted some of the latter's features. The statements declared that the benefits offered were ". . . intended to supplement and not replace

³ Included were 51 agreements covering 347,550 workers which had explicit termination statements applicable in some circumstances, but not in others.

Severance Pay and Layoff Benefit Plans in Union Agreements, 1944-63



¹ Agreements studied: 1944—9,500; 1949—2,137; 1955-56—1,692; 1963—1,773.

or duplicate the State system of unemployment insurance."

Fifty-one contracts, mainly in the telephone industry, contained explicit statements of termination applicable only in certain circumstances. Usually, these provided for benefits in "layoff for lack of work" with no termination statement set forth, and then, in the same or in a separate clause, also provided benefits in case of retirement to workers ineligible for pensions. The latter constituted the only clear condition of permanent separation. Also included in this category was General Electric's income extension aid, available in both layoff and plant closing.

Funded Arrangements. Unfunded plans continued to prevail, but the significant growth in funded arrangements, particularly among large companies in the rubber, automobile, and farm machinery industries, may foreshadow a change. Although only a little more than a fourth of all

plans were funded, they covered about 42 percent of all workers under plans (table 2).⁴

Of the 141 funded arrangements, 118 carried an explicit statement of termination.

	Agree- ments	Workers
Total funded arrangements..	141	1, 286, 000
Plans with explicit statement of termination.....	118	1, 149, 200
Pooled industry funds.....	51	332, 350
In SUB plan.....	67	817, 150
Plans with no explicit statement of termination ¹	16	112, 400
Combination plans ²	1	6, 900
Plans with no details given ³	6	17, 200

¹ All extended layoff benefit programs in the aerospace industry.

² Separation pay is included in the pension plan, according to the agreement provision.

³ All plans which referred to severance, but gave no additional details of plan characteristics.

Separation provisions in SUB plans accounted for most funded arrangements, weighted heavily by Auto Workers' agreements in transportation equipment and machinery industries. This addition of separation pay to the SUB fund was a logical extension to a fund which already dealt with the allied problem of indefinite layoff. Among industries having SUB plans, only primary metal did not integrate severance pay into the fund, although under certain circumstances SUB payments could be deducted from separation

⁴ The prevalence of funded arrangements is understated since separation provisions in pension plans were not tabulated and separation provisions in SUB plans were included only where there was a reference to a SUB plan in the basic collective bargaining agreement. Another study, *Supplemental Unemployment Benefit Plans and Wage-Employment Guarantees*, will account for all major SUB plans and will also discuss severance pay features in such plans.

TABLE 2. FUNDED AND UNFUNDED ARRANGEMENTS IN SEVERANCE AND LAYOFF BENEFIT PLANS IN MAJOR COLLECTIVE BARGAINING AGREEMENTS, BY INDUSTRY, 1963

[Workers in thousands]

Industries	Total number with severance pay and layoff benefit plans		Unfunded ¹		Funded					
					Pooled		In SUB ²		Other or no detail ³	
	Agree- ments	Workers	Agree- ments	Workers	Agree- ments	Workers	Agree- ments	Workers	Agree- ments	Workers
All industries.....	525	3, 051. 0	384	1, 765. 0	51	332. 4	67	817. 2	23	136. 5
Manufacturing.....	377	2, 332. 0	242	1, 098. 5	47	288. 6	67	817. 2	21	127. 8
Ordnance and accessories.....	11	49. 1	6	18. 1					5	31. 0
Food and kindred products.....	40	129. 9	34	116. 7	6	13. 3				
Tobacco manufactures.....										
Textile mill products.....	11	36. 2	8	17. 3	3	18. 9				
Apparel and other finished products.....	35	248. 4			35	248. 4				
Lumber and wood products, except furniture.....										
Furniture and fixtures.....	3	4. 6	1	1. 4	1	2. 0			1	1. 2
Paper and allied products.....	10	24. 1	10	24. 1						
Printing, publishing, and allied industries.....	6	10. 9	6	10. 9						
Chemicals and allied products.....	36	63. 7	36	63. 7						
Petroleum refining and related industries.....	6	25. 0	6	25. 0						
Rubber and miscellaneous plastics products.....	12	90. 2	5	29. 9	1	4. 5	6	55. 8		
Leather and leather products.....	3	3. 6	3	3. 6						
Stone, clay, and glass products.....	5	19. 8	3	10. 0			2	9. 8		
Primary metal industries.....	56	488. 0	52	479. 7			4	8. 3		
Fabricated metal products.....	17	69. 1	8	19. 5			9	49. 6		
Machinery, except electrical.....	25	124. 6	9	11. 6			16	113. 0		
Electrical machinery, equipment, and supplies.....	37	222. 6	32	206. 2			3	13. 2	2	3. 2
Transportation equipment.....	52	697. 9	13	39. 9			26	565. 6	13	92. 4
Instruments and related products.....	10	17. 4	9	15. 3			1	2. 1		
Miscellaneous manufacturing industries.....	2	7. 5	1	6. 0	1	1. 5				
Nonmanufacturing.....	148	719. 0	142	666. 5	4	43. 8			2	8. 7
Mining, crude petroleum, and natural gas production.....	7	16. 7	7	16. 7						
Transportation ⁴	12	63. 6	10	26. 6	2	37. 0				
Communications.....	76	496. 5	76	496. 5						
Utilities: Electric and gas.....	21	50. 3	19	41. 6					2	8. 7
Wholesale trade.....	3	7. 8	1	1. 0	2	6. 8				
Retail trade.....	9	27. 1	9	27. 1						
Hotels and restaurants.....	2	3. 5	2	3. 5						
Services.....	16	50. 7	16	50. 7						
Construction.....										
Miscellaneous nonmanufacturing industries.....	2	2. 9	2	2. 9						

¹ Includes 244 traditional severance pay plans (24 of which give no details of their characteristics), 90 layoff benefit plans, and 50 combination severance and layoff benefit plans.

² Includes 3 individual security accounts.

³ Includes 16 extended layoff benefit plans, 1 combination severance pay

and layoff benefit plan, and 6 plans which give no details of their characteristics.

⁴ Excludes railroad and airline industries.

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

allowances. The primary metal severance pay provision preceded the negotiation of SUB plans by 9 years; in automobiles, SUB plans already existed when severance pay was adopted.

Fifty-one funded plans were pooled industry funds, that is, funds formed by contributions from a number of employers in an industry with the purpose of paying out benefits to separated workers of all contributing employers. These arrangements usually paralleled other pooled funds providing other benefits, e.g. pensions. Among the larger plans were the Ladies' Garment Workers' Supplementary Unemployment-Severance Benefits Program and the National Maritime Union's Employment Security Plan.

Other funded arrangements were the limited liability financing arrangements of extended layoff benefit plans (found only in the aerospace industry) and individual income security accounts in which account balances went to workers upon termination.

Amount of Benefits

The following analysis of plan provisions is based upon 377 of the 525 plans.⁵ The 377 plans examined in full included 220 traditional severance pay plans (including primary metal plans), 106 layoff benefit plans (those with no explicit statement of termination), and 51 combination plans. These 377 plans accounted for 71.8 percent of all plans tabulated and 1.8 million of the 3.1 million workers coming under such arrangements.

In almost all plans, benefits increased with length of service. Only 23 had a different basis of payment—15 graduated payments according to another factor (e.g., reason for separation, age) and 8 provided the same number of weeks of pay to all eligible workers.

Service-graduated plans increased benefits according to length of service by a fixed amount (for instance, 1 week's pay for each year of service) or, more commonly, the unit of payment varied at different service levels. In the latter case, the plans favored either the low-seniority or high-seniority workers.

Proportionately larger payments went to low-seniority workers where allowances increased at a decreasing rate, that is, additional years of service did not earn a proportionately higher benefit. This type of provision was found in the primary metals industry, for example, where maximum benefits were attained after 10 years of service. Significantly, in the Steelworkers' agreements, provisions on interplant transfer in major multi-plant units granted wider transfer rights to workers having 10 years or more of service.

When the rate of allowance increased with the length of service, usually by grouped years of service, there was an implied recognition that long-service employees had accrued seniority rights whose loss called for extra compensation. Frequently, this variation provided allowances at the rate of 1 week for each year in a low-service interval, as defined, 2 weeks for each year in an intermediate interval, and 3 weeks for each year in the highest grouping. These plans differed in the service groupings (i.e., 1 to 5, or 1 to 7, or 1 to 10 years) and in providing for maximum benefits.

A significant number of plans (111) granted allowances based on a fixed amount per unit of service. Usually these provided 1 week's pay for each year of service. Some of these plans did not have maximums.

In 15 plans, amounts varied according to factors other than length of service or length of service alone. In some of these, the reasons for separation determined which of two payment schedules was to be applicable. For example, in one case, separation because of layoff or retirement provided a higher benefit schedule than separation for inability to do the job; and in a second, separation because of technological change meant a greater allowance than separation because of layoff or physical disability. In a few agreements, benefits differed according to the age of the separated worker or his method of pay.

Eight plans provided no variations in benefits, once minimum service requirements had been met, other than differences determined by the wages of individual workers.

Levels of Benefits in Graduated Plans. Normally, the plans provided allowances computed in multiples of the weekly pay of individual workers. Plans determining allowances in dollar amounts,

⁵ Among the 148 excluded plans were 51 pooled industry funds, 67 SUB plans having separation provisions, and 30 plans which referred to severance pay but failed to set forth any details.

as in extended layoff benefit plans, have become more common in recent years.

Weeks of pay. Both the minimum and maximum payments provided by the plans tended to relate to the corresponding years of service in the ratio of 1 week's pay for 1 year of service, but variations from this practice were frequent. In the steel industry, for example, a minimum of 4 weeks' pay was provided for workers with 3 years of service, graduated up to a maximum of 8 weeks of pay for 10 years or more. Under most plans, low-service workers could not expect more than a week or two of pay. The graduations upward for the most part rewarded longer years on a proportionate basis, if not exactly on a 1-week-for-1-year basis. Only a small portion of the plans cut off payments at 4 weeks or less. About half of the plans set no maximum—i.e., every year of service carried an increment in the separation compensation to which a displaced worker was entitled.

As a general rule, allowances tended to cluster at levels equivalent to 1 week for each year of service for low-service workers (table 3). The range of payments broadened progressively with

increased service. Except for primary metal plans, with an 8-week maximum, plans falling below the ratio of 1 week for each year of service at the higher levels were significantly fewer than plans allowing more liberal benefits. At 15, 20, and 25 years of service, higher than proportionate allowances—up to 60 weeks at 15 and 20 years and up to 80 to 105 weeks at 25 years—were provided by almost a third of the plans. A few, however, paid only nominal benefits to workers with up to 25 years of service.

The relationship between years of service and weeks of pay is further illustrated in the average payments due workers at specific service points. Including plans providing no benefits at particular levels (an especially important factor at the 1-year level), average payments rose from 0.6 weeks of pay for 1 year of service to 31.8 weeks for 25 years. The extra reward for long service became particularly noticeable at the 15-year level. The marked variations in average levels among the selected industries demonstrate the absence of a uniform approach to compensate workers for loss of jobs.

TABLE 3. AMOUNT OF BENEFITS PROVIDED AT SELECTED LENGTH-OF-SERVICE LEVELS IN GRADUATED SEVERANCE AND LAYOFF BENEFIT PLANS, IN MAJOR COLLECTIVE BARGAINING AGREEMENTS, 1963

Amount of benefits	Agreements providing pay after—									
	6 months	1 year	2 years	3 years	4 years	5 years	10 years	15 years	20 years	25 years
All graduated plans providing benefits.....	73	232	261	334	339	362	365	368	369	368
None.....	296	137	108	35	30	7	4	1	-----	1
Less than 1 week.....	15	4	2	4	2	-----	-----	-----	-----	-----
1 week.....	43	154	35	17	13	11	1	1	1	1
2 weeks.....	6	24	153	37	35	29	17	10	9	9
3 weeks.....	1	4	13	151	13	18	5	9	8	6
4 weeks.....	-----	4	6	69	207	14	17	5	7	8
5 weeks.....	-----	-----	5	1	13	128	13	3	3	4
6 weeks.....	-----	-----	1	4	1	90	4	8	2	2
7 weeks.....	-----	-----	-----	4	1	2	3	15	3	1
8 weeks.....	-----	-----	-----	1	4	3	68	64	65	66
9 weeks.....	-----	-----	-----	-----	3	1	1	3	12	-----
10 weeks.....	-----	-----	-----	-----	1	6	77	6	12	11
11 but less than 15 weeks.....	-----	-----	-----	-----	-----	3	30	12	7	21
15 weeks.....	-----	-----	-----	-----	-----	-----	31	59	3	1
16 but less than 20 weeks.....	-----	-----	-----	-----	-----	-----	17	15	6	2
20 weeks.....	-----	-----	-----	-----	-----	-----	19	2	53	12
21 but less than 25 weeks.....	-----	-----	-----	-----	-----	-----	2	-----	5	2
25 weeks.....	-----	-----	-----	-----	-----	-----	-----	27	1	44
26 but less than 30 weeks.....	-----	-----	-----	-----	-----	-----	1	14	13	2
30 weeks.....	-----	-----	-----	-----	-----	-----	-----	15	3	3
31 but less than 40 weeks.....	-----	-----	-----	-----	-----	-----	-----	26	24	19
40 weeks.....	-----	-----	-----	-----	-----	-----	1	14	5	-----
41 but less than 50 weeks.....	-----	-----	-----	-----	-----	-----	-----	-----	23	3
50 weeks.....	-----	-----	-----	-----	-----	-----	-----	-----	9	4
51 but less than 60 weeks.....	-----	-----	-----	-----	-----	-----	-----	-----	19	35
60 weeks.....	-----	-----	-----	-----	-----	-----	-----	1	14	3
65 weeks.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	3
70 weeks.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	9
71 but less than 80 weeks.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	21
80 to 105 weeks.....	-----	-----	-----	-----	-----	-----	-----	-----	1	14
Other ²	8	42	46	46	46	57	58	59	61	62

¹ 1 agreement provided no payment to workers having 25 years or more of service.

² Includes agreements establishing the principle of graduated payments without specifying the amounts to be paid, provisions in which payments

vary by reason for separation or age, and those in which payments are not computable to weeks of service, such as payments computed in dollars or as percentages of earnings.

An increase in the average benefit payments in recent years is reflected in the following comparison of data from this study and the Bureau's 1955-56 study:

Years of service	Weeks of pay	
	1963	1955-56
1.....	0.6	0.8
5.....	5.2	4.6
10.....	11.0	10.0
15.....	17.4	16.4
20.....	24.7	24.0
25.....	31.8	30.7

Others. Most provisions specifying payments in dollar amounts rather than in weeks of pay, established a fixed sum which would be paid for each year of service. These amounts ranged from \$25 up to \$130, but clustered at \$50 and \$75, reflecting the practice in the aerospace industry. Less frequently, benefits for long-service employees were increased by raising dollar amounts.

Dollar payments generally were available to workers having a minimum of 1 year of service. Twelve of the thirty-eight agreements providing for this method of payment set a maximum at 10 years, and 13 established no maximums.

Provisions designating payments on a percentage-of-earnings basis were uncommon. In six plans based on this method, either a flat percentage was applied to earnings for a given time period (such as the last period of unbroken employment) or the percentage decreased with years of service.

Eligibility Requirements

Each of the 377 plans studied in detail stipulated the conditions under which payments would or would not be made: i.e., for voluntary or involuntary separation; under broadly defined, relatively liberal conditions, or under narrowly defined, very specific conditions; for causes related to the job, or for causes related to the worker. Some plans set forth policies applicable in case of retirement or death. Virtually all set minimum length-of-service requirements which displaced workers had to meet before they could be considered qualified for payments.

Voluntary and Involuntary Separation. Plan provisions were predominantly operative in situations where the separated worker had no control over his continued employment.

Commonly, provisions granting pay only for involuntary separation listed the applicable conditions (such as, plant closing, transfer of operations, or physical disability), but some plans specifically declared that voluntary separation was excluded.

Voluntary separation as a condition for compensation was written into only 24 plans, covering about 65,000 workers. The practice of paying for voluntary quits is probably more common than a study of formal provisions reveals, since management might prefer to handle such situations informally, at its own discretion.

Limiting the plan's applicability to involuntary termination often serves to hold workers on the job when separations are imminent. From the employer's point of view, this assures an orderly shutdown of operations. Some clauses explicitly stated that eligibility for payment depended upon the worker's remaining on the job. Other provisions left earlier termination to the discretion of management.

Some plans which allowed severance compensation for voluntary quits limited it to employees with a specified length of service, to those who resigned in the face of layoff, or to those who were induced to resign because of inability to perform their work.

Conditions. Nearly all the plans established conditions for granting benefits that related to the employee's work situation, while almost a third set forth conditions of separation relating directly to the worker himself.

Applicability	Agreements	Workers
Total.....	377	1,794,310
Conditions inherent in—		
Work situation.....	264	1,286,750
Worker.....	13	36,450
Work situation and worker.....	100	471,110

Under both categories, conditions were sometimes sufficiently nonspecific to allow liberal payment policies at the time of separation.

Under broadly defined conditions, employees on "layoff" or "laid off for lack of work"—language typical in plans having no explicit statement of termination—would receive payment. Since the causes triggering the layoff were not spelled out, it can be assumed that such payments were to be made in all situations. Such "layoff for lack of

work" provisions were found in 114 agreements. In 106 of these clauses, "layoff for lack of work" constituted the only eligibility requirement concerned with the work situation for which the separated worker could receive allowances.

Other agreements with broadly defined eligibility clauses specified reasons for which pay would not be granted. This approach was noted in a number of extended layoff benefit plans. In thus defining applicability by exclusion, some provisions also ruled out conditions beyond the company's control, especially those likely to cause only a temporary interruption to employment. Thus, benefits would not be paid where the layoff was caused by strikes, floods, acts of God, mechanical or electrical breakdowns, riots, etc., but would be paid in case of layoff for any other cause.

A number of plans provided allowances to any employee who had been on layoff for an extended period. Usually, payment was simultaneous with

the break in seniority caused by the extended layoff. Whatever the original causes for layoff might have been, they were no longer the determinants in giving compensation. Meatpacking agreements frequently contained this provision.

To narrow the area of applicability, plans specifically defined the conditions for which compensation would be paid. Plant, business, or department closings, mergers, transfer of operations, technological change, discharge for other than cause, or physical disability were among the reasons leading to payment of benefits.

Provisions also specifically listed conditions under which employers would be exempt from making payments. Among these were refusal to accept an offered transfer or recall, eligibility for pension, discharge for cause, voluntary resignation, and conditions beyond the employer's control.

—LEON E. LUNDEN and ERNESTINE M. MOORE
Division of Industrial and Labor Relations

Output Per Man-Hour, Gas and Electric Utilities

THE GAS AND ELECTRIC UTILITIES industry has been a vital factor in the development of our economy, supplying increasing amounts of energy for industrial, commercial, and residential use. Industrial demand for gas and electricity has increased with general economic expansion and greater use of energy per worker. Farm demand has grown as electrical networks reached into formerly isolated rural areas, bringing power for the operation of farm machinery as well as for lighting and other uses. Population expansion, rising incomes, and the greater use of gas and electric appliances have caused residential demand to grow. Also important has been the greater

use of gas and electricity for space heating and air conditioning of homes and commercial buildings. Advances in productivity and employment, as described below, have enabled the industry to meet this growing demand. Contributing to the rise in productivity have been technological developments and a high level of capital investment.¹

Output Per Man-Hour Trends

Output per man-hour of all employees for gas and electric utilities increased 186 percent from 1947 to 1962, an average rate of increase of 7.5 percent per year.² This average includes increases in every year, but they ranged between 2 percent in 1949 and more than 11 percent in 1955 (table 1). Output per man-hour closely followed the movement of output, particularly in the most recent years of the period (chart 1). Output increased substantially every year; man-hours increased until 1957 and then fluctuated mildly to a level in 1962 almost identical with the 1956 level. Overall, output increased 243 percent from 1947 to 1962 while total man-hours rose 20 percent.

¹ This article is based on the Bureau of Labor Statistics' report, *Indexes of Output Per Man-Hour, Gas and Electric Utilities Industry, 1932-62* (April 1964), which includes a description of the methods and data sources used in deriving the indexes. A general technical note on the techniques used in developing industry indexes of output per man-hour appears in the *Monthly Labor Review*, November 1962, pp. 1269-1273.

² All average annual rates of change are based on the least squares trend of the logarithms of the index numbers.

For nonsupervisory workers³ alone, output per man-hour during this postwar period increased at an average annual rate of 8.1 percent (chart 2). The higher rate for nonsupervisory workers reflects an overall increase of nonsupervisory man-hours of only 11 percent compared with an increase of total man-hours of 20 percent, as nonsupervisory workers declined from 95 percent of total employment in 1947 to 88 percent in 1962.

Output per man-hour trends differed somewhat during the pre-World War II years, the war, and the postwar period. From 1932 to 1941, output per man-hour of all employees increased 85 per-

³ The term "nonsupervisory workers" includes line and cablemen, maintenance and repairmen, power dispatchers, electricians, meter readers, gas-producer men, laborers, general office clerks, office-machine operators, janitors and watchmen, and other employees below the supervisory level whose services are closely associated with those of the employees listed. It does not include force-account construction workers, i.e., those engaged in major additions or alterations to the plant who are utilized as a separate work force.

⁴ The first year for which adequate data are available is 1932. Separate data for nonsupervisory worker man-hours are not available prior to 1947.

cent, or 6.1 percent a year.⁴ This was almost equivalent to the increase of output for those years, as man-hours fluctuated for a net increase of barely 1 percent. Output per man-hour had peak rates of advance from 1941 through 1943 (about 20 percent per year), as output continued to grow while man-hours were sharply reduced. Output levelled off somewhat by 1944, however, and an uptrend in man-hours resulted in a temporary setback of output per man-hour for 2 years (1945 and 1946). In 1947, output increased substantially and output per man-hour resumed its general upward trend. For the war and immediate postwar years (1941-47), output per man-hour had a total increase of 40 percent and an average annual increase of 4.7 percent. The long-term result of these earlier developments and the postwar trend of output per man-hour was an average annual rate of increase, 1932 to 1962, of 6.6 percent.

TABLE 1. OUTPUT, EMPLOYMENT, MAN-HOURS, AND OUTPUT PER MAN-HOUR IN THE GAS AND ELECTRIC UTILITIES INDUSTRY, 1932-62

[Indexes, 1957-59=100]

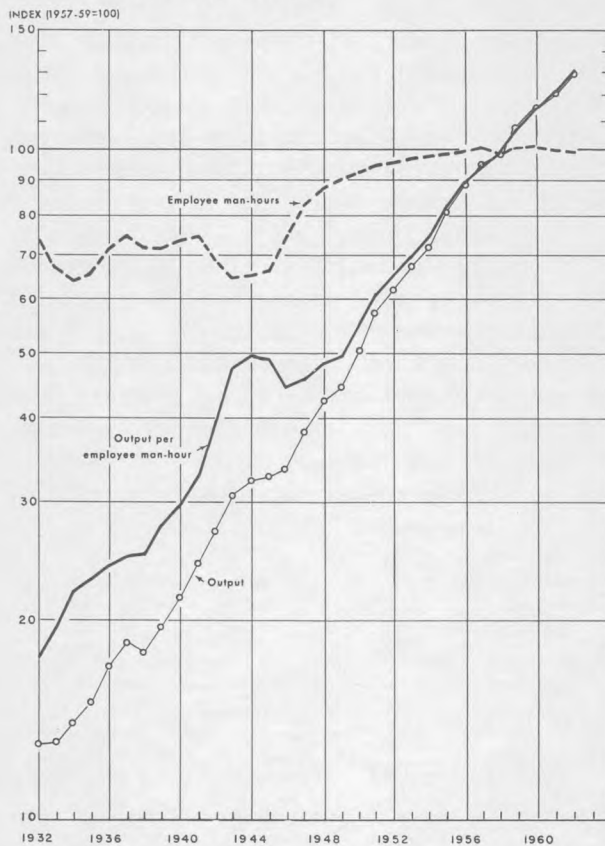
Year	Output	Employment		Man-hours		Output per—			
		All employees	Nonsupervisory workers ¹	All employee	Nonsupervisory worker ¹	Employee	Nonsupervisory worker ¹	Employee man-hour	Nonsupervisory worker man-hour ¹
1932.....	13.0	68.7	(2)	73.8	(2)	18.9	(2)	17.6	(2)
1933.....	13.1	65.2	(2)	66.9	(2)	20.1	(2)	19.6	(2)
1934.....	14.0	67.1	(2)	63.5	(2)	20.9	(2)	22.0	(2)
1935.....	15.1	68.1	(2)	65.3	(2)	22.2	(2)	23.1	(2)
1936.....	17.1	72.7	(2)	71.1	(2)	23.5	(2)	24.1	(2)
1937.....	18.5	76.0	(2)	74.7	(2)	24.3	(2)	24.8	(2)
1938.....	17.9	73.4	(2)	71.5	(2)	24.4	(2)	25.0	(2)
1939.....	19.6	73.4	(2)	71.0	(2)	26.7	(2)	27.6	(2)
1940.....	21.6	75.6	(2)	73.3	(2)	28.6	(2)	29.5	(2)
1941.....	24.3	76.7	(2)	74.5	(2)	31.7	(2)	32.6	(2)
1942.....	27.1	70.0	(2)	68.5	(2)	38.7	(2)	39.6	(2)
1943.....	30.5	63.2	(2)	64.2	(2)	48.3	(2)	47.5	(2)
1944.....	32.0	61.4	(2)	64.6	(2)	52.1	(2)	49.5	(2)
1945.....	32.3	62.3	(2)	66.1	(2)	51.8	(2)	48.9	(2)
1946.....	33.1	73.1	(2)	74.2	(2)	45.3	(2)	44.6	(2)
1947.....	37.8	80.7	85.8	82.6	87.7	46.8	44.1	45.8	43.1
1948.....	42.0	85.6	90.5	87.4	92.3	49.1	46.4	48.1	45.5
1949.....	44.1	88.5	93.1	89.7	94.3	49.8	47.4	49.2	46.8
1950.....	50.3	90.4	94.5	92.1	96.2	55.6	53.2	54.6	52.3
1951.....	57.0	91.7	95.6	94.0	98.1	62.2	59.6	60.6	58.1
1952.....	61.5	93.4	97.2	95.1	98.9	65.8	63.3	64.7	62.2
1953.....	66.8	95.0	97.9	96.4	99.4	70.3	68.2	69.3	67.2
1954.....	71.6	95.8	97.8	96.8	98.8	74.7	73.2	74.0	72.5
1955.....	80.6	96.6	98.1	97.7	99.1	83.4	82.2	82.5	81.3
1956.....	88.7	98.2	99.1	99.2	100.2	90.3	89.5	89.4	88.5
1957.....	94.1	100.0	100.5	100.4	100.9	94.1	93.6	93.7	93.3
1958.....	98.2	100.0	100.0	99.6	99.6	98.2	98.2	98.6	98.6
1959.....	107.7	100.0	99.5	100.1	99.6	107.7	108.2	107.6	108.1
1960.....	114.9	100.1	99.2	100.2	99.3	114.8	115.8	114.7	115.7
1961.....	120.7	99.6	98.3	99.4	98.1	121.2	122.8	121.4	123.0
1962.....	129.7	98.8	97.0	99.1	97.4	131.3	133.7	130.9	133.2

¹ For definition of nonsupervisory workers, see text footnote 3, p. 35.

² Data not available.

Source: Output index based on data from American Gas Association, Edison Electric Institute, Federal Power Commission, Rural Electrification Administration of U.S. Department of Agriculture, and Bureau of Labor Statistics. Employment and man-hours indexes based on BLS data.

Chart 1. Output per Employee Man-Hour, Output, and Employee Man-Hours in the Gas and Electric Utilities Industry, 1932-62



Development of the Industry

The Growth of Output. In 1962, the level of output for gas and electric utilities was nearly 10 times what it had been in 1932. This represented an average annual increase of 8.4 percent for the 30-year period. Output expanded in every year except 1938, when there was a slight decline. The rate of increase has been relatively steady over the period, with the exception of the latter part of World War II, when the growth of output slowed because defense priorities curtailed investment in the industry. The last few years indicate that output expansion may have slowed somewhat, but the evidence of a new trend is not yet conclusive.

Changes in Production and Distribution Patterns. Over the last 30 years, changes have taken place in the composition of output and in the class of

customers being served by the industry. These shifts are indicated for selected years in table 2. For electric utilities, there has been a trend toward steam generation of power and away from hydroelectric generation, although the latter has continued to increase in absolute terms. In 1932, hydroelectric generation accounted for 42 percent of all electric power. By 1962, this had fallen to 10 percent, although the absolute amount about doubled. Several factors are responsible for the relative decline of hydroelectric generation, such as the growing scarcity of good hydroelectric sites, changes in the relationship between steam fuel costs and capital costs for hydroelectric installations, and the increasing efficiency of steam turbines. Nuclear generation of electricity, accounting for 0.3 percent of total generation in both 1961 and 1962, may in the future become economically competitive with conventional fuels.

A shift has also occurred in the classes of customers served by electric utilities. There has been a gradual increase in residential sales relative to commercial, industrial, and other types of sales. In 1932, residential service accounted for 17 percent of total sales; by 1962, this service had increased to 28 percent of the total.

Another shift is the decline in the use of manufactured and mixed gases. In general, it has become more economical for the industry to purchase natural gas, which has a high energy content, and to use manufactured and mixed gases as needed to meet peak loads. In 1932, natural gas amounted to 78 percent of sales; by 1962, it had reached 98 percent of the total. As with electric utilities, shifts also took place in the class of service. In 1932, residential service accounted for 45 percent of total sales. This fell to 30 percent in 1945, but residential sales have been increasing in the years since and in 1962 were 35 percent of the total.

Employment Changes. Employment for gas and electric utilities increased only 44 percent from 1932 to 1962, despite the very substantial growth of output. This is a reflection of the large productivity gains of the industry. Most of the employment increase occurred between 1945 and 1957. From 1932 to 1944, employment actually declined by about 11 percent, falling to a level of 356,900 which was a low for the 1932-62 period.

(In the war years, the Armed Forces and other vital industries claimed first priority on manpower, causing declines of about 40,000 employees in both 1942 and 1943.) After a slight increase in 1945, employment began a steady though moderate up-trend, increasing about 60 percent from 1946 to 1957.

Since 1957, employment has been stable as the trends of output and productivity have been very similar. This stability has been the net result of two offsetting movements, as supervisory employment has increased but nonsupervisory employment has decreased.

Employment changes have not corresponded closely with output changes. This is due, in large measure, to the unusually high proportion of maintenance labor in the industry, performing essentially the same duties regardless of the level of productive activity. An increase in a generating station's output can take place without a proportionate increase in overhead labor. To a lesser degree, this may also be true of some operating jobs. The level of demand, and therefore the degree of capacity utilization in the industry, can strongly influence the trend of output per man-hour.

Influences on Output Per Man-Hour Trends

Output per man-hour trends are a function of several interrelated factors. Two of the major influences in the gas and electric utilities industry have been changing technology and a high level of capital expenditures.

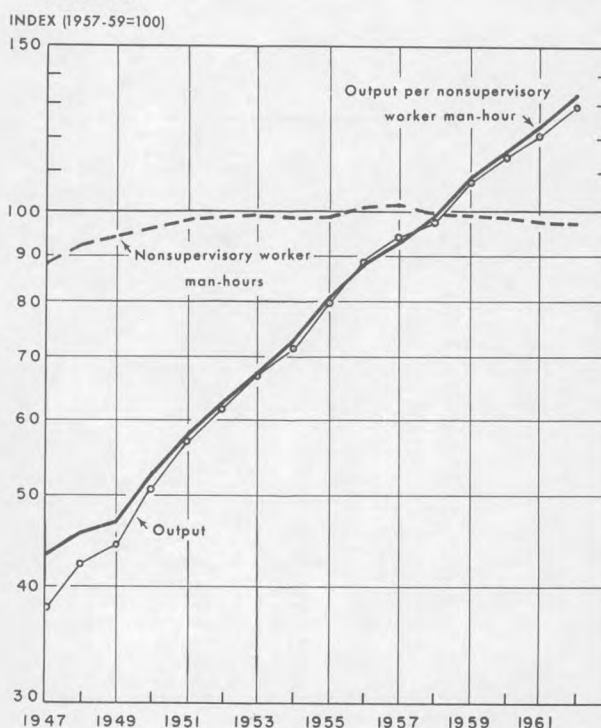
Changing Technology. Both gas and electric utilities have experienced technological developments which played an important part in raising productivity. These developments include new and better equipment capable of producing more output per unit of labor. Also important in reducing labor requirements were improvements in organization, techniques, and utilization of existing equipment.

Electric Utilities. Technological advances took place in the generation, transmission, and distribution of electric power. These advances were of an evolutionary nature, representing gradual improvement in the technical efficiency of the industry, rather than radical breakthroughs. In the

field of generation, substantial improvement in thermal efficiency of steam plants occurred during the period covered by this study, particularly in the postwar years. This was reflected by a decline in the amount of coal required to generate a kilowatt hour of electricity. In 1932, 1.49 pounds of coal were required per kilowatt hour, on the average. This declined to an average of 1.31 pounds in 1947, a reduction of about 12 percent for the 15-year period. In the next 15 years, there was a further reduction of 34 percent, to 0.86 pound per kilowatt hour in 1962.

The increasing thermal efficiency of steam generating plants was in large part due to the development of larger capacity turbines operating at higher temperatures and pressures. Advances in metallurgy, along with better design and improved construction techniques, made such turbines feasible. Improvements in cooling and higher generator speeds permitted the construction of lighter and more compact high capacity units. Operating speeds of 3,600 r.p.m. became more common, as stronger generator components were developed.

Chart 2. Output per Nonsupervisory Worker Man-Hour, Output, and Nonsupervisory Worker Man-Hours in the Gas and Electric Utilities Industry, 1947-62



During the 1950's, turbines operating at pressures greater than 3,206 pounds per square inch were developed. At such pressures, water is converted directly into steam without going through an intermediate boiling stage. A plant put into operation in 1960 used pressures of 5,000 pounds per square inch, using less than 0.70 pound of coal per kilowatt hour generated.

Improvements have also taken place in the transmission of electric power. Development of better line equipment made feasible the transmission of power at increasingly higher voltages, which is more efficient for long distances. High voltage, long distance transmission has raised productivity because there is less loss of power in transmission and generating stations may be placed in more efficient locations, rather than being centered exclusively near market areas. Some generating stations are being located at the mine, with savings in coal transportation and handling costs.

Another factor responsible for increases in productivity has been the growth of interconnections. These permit more efficient utilization of generating capacity because sudden demands for power in one area may be met by borrowing power from another area where demand is lighter. Thus, the

effective capacity of a system can be increased without expanding generating capacity or manpower.

As power networks became more complex, automatic dispatching equipment came into increasing use. Such equipment automatically allocates generating capacity to meet load conditions in a more efficient manner than can be done manually. The result is a saving not only in manpower, but also in fuel, because of more precise calculation of load conditions.

Computers also came into use during the latter part of the period, for data logging, scanning, alarming, and performance calculations. Automatic data processing is also being used for billing and accounting operations, with savings in clerical labor.

Gas Utilities. During the 1930's, an important revolution was taking place in the gas industry. Although natural gas reserves were very large, development of the industry had been relatively slow up to this time. The greatest barrier to industry expansion had been the distance between sources of supply and market areas. Major reserves of natural gas were located in the Southwestern United States, while the largest areas of consumer demand were in the North and East.

TABLE 2. SHIFTS IN PRODUCTION AND DISTRIBUTION PATTERNS IN THE GAS AND ELECTRIC UTILITIES INDUSTRY, SELECTED YEARS, 1932-62

[Percent Distributions]

Year	Electric utilities									
	Production by method of generation					Sales by class of customer				
	Total	Steam	Hydroelectric	Internal combustion	Nuclear	Total	Residential	Commercial and industrial	Other ¹	
1932-----	100.0	57.3	42.4	0.3	-----	100.0	17.3	67.4	15.3	
1940-----	100.0	70.2	29.5	.3	-----	100.0	17.5	70.0	12.5	
1945-----	100.0	72.9	26.8	.2	-----	100.0	16.5	70.9	12.5	
1950-----	100.0	80.0	19.8	.2	-----	100.0	21.3	67.6	11.1	
1955-----	100.0	87.8	12.1	.1	-----	100.0	23.6	68.0	8.4	
1962-----	100.0	90.1	9.5	.1	0.3	100.0	28.1	67.7	4.2	
	Gas utilities									
	Sales by type of gas					Sales by class of customer				
	Total	Natural	Manufactured	Mixed	Liquefied petroleum	Total	Residential	Commercial	Industrial	Other ¹
1932-----	100.0	78.4	16.6	5.0	-----	100.0	44.7	11.4	43.4	0.4
1940-----	100.0	85.2	9.8	5.0	-----	100.0	33.8	9.3	55.4	1.6
1945-----	100.0	87.2	8.1	4.6	0.1	100.0	30.0	9.7	56.1	4.2
1950-----	100.0	91.5	5.3	3.1	.2	100.0	32.9	9.8	54.4	3.0
1955-----	100.0	94.6	.7	4.6	.1	100.0	33.6	9.1	53.1	4.2
1962-----	100.0	97.9	.1	2.0	(²)	100.0	34.6	10.7	49.8	4.9

¹ Includes public street and highway lighting, other public authorities, and railroads and railways.

² Less than 0.1 percent.

Note: Because of rounding, columns do not always add to 100.0.

SOURCE: American Gas Association and Federal Power Commission.

Pipelines to carry gas from production centers to markets had been built on a small scale in the 1920's and earlier, but greater expansion awaited innovations in pipeline technology. Long-distance transport of natural gas became feasible with the advent of new techniques for electric welding and the development of strong, thin-walled pipes. In the early 1930's, pipelines capable of operating at pressures of 500 pounds per square inch became economically feasible, in diameters up to 20 inches. Also contributing to more efficient pipeline transmission was the use of large reciprocating compressors of high horsepower for boosting the gas.

The development of a long-distance pipeline network, expanded during World War II, had an important effect upon gas industry productivity. Savings in labor requirements resulted from large-scale, more efficient systems, in contrast to the smaller more localized transmission systems previously in existence.

Throughout the period of this study, advances in pipeline technology continued. By 1960, pipelines of up to 36 inches in diameter were operating at pressures of 1,000 pounds per square inch. In some cases, automatic welding was being used to join pipes, and more powerful compressors had been developed, including centrifugal units driven by jet engines of up to 15,000 horsepower. Packaged compressor stations came into use, featuring ease of installation and maintenance, with resulting reductions in labor requirements.

The development of underground storage facilities was another significant advance, giving the gas industry a much larger storage reserve. The greater storage capacity meant that day-to-day and season-to-season fluctuations in the growing demand for gas could be more easily handled. More efficient utilization of facilities and manpower was possible because not as much excess capacity needed to be maintained to meet peak demands. Depleted gas and oil fields, salt formations, underground caverns, and porous rock formations have been used for underground storage. The total capacity of underground reservoirs has increased rapidly, from 135 billion cubic feet in 1944 to nearly 3 trillion cubic feet in 1959. Even this expansion of storage capacity is not sufficient to meet seasonal variations in gas de-

mand, and substantial excess capacity is available in off-peak periods. The development of off-peak uses for gas, for example as a fuel for electric power generation, may affect productivity by enabling fuller year-round utilization of capacity.

Another development has been the growth of automatic and remote control in pipeline operations, leading to greater system integration and reduction in manpower needs. Computers are being used increasingly for dispatching and accounting tasks.

Capital Expenditures. New technology becomes embodied in an industry's plant and equipment through the yearly flow of capital expenditures. The greater this flow in relation to the level of plant and equipment, the faster can be the rate of technical progress in the industry.

Capital expenditures in the gas and electric utilities industry have been very large. Since 1945, a total of \$70.2 billion has been invested, an average of \$3.9 billion per year. Expenditures ranged from a low of \$0.49 billion in 1945 to a high of \$6.07 billion in 1957. The 1962 figure (\$5.32 billion) comprised 14 percent of the total capital expenditures of United States business.

These amounts are relatively as well as absolutely large. In 1951 and 1957, capital expenditures were almost equal to one-half of total utility revenues; the proportion had receded to less than a third by 1962, but this was still high compared to other industries. Capital expenditures per employee per year averaged over \$7,800 during the period from 1947 to 1962; this was over 15 times the average for all manufacturing industries. Since 1957, capital expenditures per employee have averaged close to \$10,000 per year.

Both capital expenditures and capital expenditures per employee increased in every year between 1947 and 1957 with the exception of 1954, then levelled off somewhat in the last few years from the peak reached in 1957.

A high level of capital expenditures for gas and electric utilities is expected to continue, helping the industry meet the future power requirements of the economy.

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Wage Rates of Communications Workers

BASIC WAGE RATES of the 637,805 employees of the Nation's principal communications carriers averaged \$2.87 an hour in late 1963—an increase of 3.6 percent above the average of \$2.77 recorded in late 1962.¹ Employees of class A telephone carriers—accounting for 95 percent of the workers covered by the study—averaged \$2.88 an hour in December 1963, compared with \$2.78 a year earlier. Nonmessenger employees of Western Union's wire-telegraph operations averaged \$2.71 an hour in October 1963, 3 percent above the October 1962 average of \$2.63. Pay rates for employees of international telegraph carriers (ocean-cable and radio-telegraph carriers) averaged \$3.22 in October 1963.²

Class A Telephone Carriers

Basic wage rates of the 604,984 employees (excluding officials and managerial assistants) of the 57 class A telephone carriers included in the study averaged \$2.88 an hour in December 1963 (table 1). Individual rates of pay were widely dispersed. The middle half of the workers' rates ranged from \$2 to \$3.43 an hour. This dispersion was due to a variety of factors, including the great diversity of skills and responsibilities required in the industry, pay differences among regions, and the widespread practice of providing a range of rates for workers in a given job and locality. Frequently, the top rate was as much as 100 percent above the beginning rate for workers in the same company and job, with advancement through the various steps based on the employee's length of service with the company. Thus, for linemen, the highest rate exceeded the lowest by more than \$1 in 36 of the 57 reporting carriers.

Average rates of pay among the occupational groups studied separately ranged from \$1.59 an hour for a small number of laborers (mostly in non-Bell companies) to \$5.15 for professional and semi-professional employees (except draftsmen). Women, accounting for 56 percent of the work force, were chiefly employed as telephone operators and as clerical workers; experienced switchboard operators comprised 18 percent of the work force. Average hourly rates of pay in occupations in

which women predominated were generally lower than those in categories largely staffed by men (linemen, central office repairmen, PBX and station installers, test-board men and repeatermen, cable splicers, and exchange repairmen).

Occupational pay relationships varied by region. To illustrate, nonsupervisory clerical employees averaged from 2 to 8 percent more than experienced switchboard operators in all regions except the Southeast, where the pay advantage was 14 percent. Average pay rates for central office repairmen exceeded the averages for experienced switchboard operators by 44 to 58 percent in 7 of 9 regions, and by 66 percent in the Southeast and North Central regions.

Average pay rates for the 10 occupational categories shown in table 1 were usually highest in the Middle Atlantic region and lowest in the Southeast or Mountain regions. The interregional spread in average pay rates varied by occupation. For example, experienced switchboard operators in the Middle Atlantic region averaged about 23 percent more than their counterparts in the Southeast; the corresponding spread for test-board men and repeatermen was 12 percent.

Compared with the overall nationwide average (\$2.88), average rates of pay for class A telephone

¹ Based on annual reports filed with the Federal Communications Commission (FCC) by carriers engaged in interstate or foreign communications by means of their own facilities or through connections with the facilities of another carrier under direct or indirect common control. The reports do not include international telegraph carriers with annual operating revenues below \$50,000 or telephone carriers with annual operating revenues below \$250,000. It is estimated that this study covered nearly nine-tenths of the workers in the telephone communications industry in December 1963 and over nine-tenths of the workers in the telegraph communications industry in October 1963. A more comprehensive account of the study will be published in BLS Bulletin 1426.

Prior to 1961, information included in these reports related to an October payroll period for all carriers. In 1961, the reference date for class A telephone carriers was changed to December. For a summary of communications workers' earnings in late 1962, see *Monthly Labor Review*, October 1963, pp. 1157-1161.

The pay data contained in this summary, which pertain to all workers except officials and managerial assistants, were computed by dividing scheduled weekly compensation by scheduled weekly hours. "Scheduled weekly compensation," as defined by the FCC, includes the basic weekly pay rate plus any regularly scheduled supplementary compensation, such as differentials for evening and night tours and certain perquisites. It excludes pay for overtime work and pay in excess of weekday rates for Sunday and holiday work. Scheduled weekly compensation of Western Union Telegraph Co. employees excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

² Prior to 1963, data were tabulated separately for ocean-cable and radio-telegraph carriers. The current survey combines data for the 2 international telegraph carrier groups. Although many of the occupational categories studied separately are common to both radio-telegraph and ocean-cable carriers, some are found exclusively in one carrier group or the other. For example, radio operators and radio-telegraph riggers were reported only by radio-telegraph carriers; cable operators, on the other hand, were found in ocean-cable operations only.

stallation of new and improved equipment. It is not possible to make precise comparisons of occupational employments (or pay rates) for 1963 and the preceding years, in part because of the adoption by Bell System companies in 1963 of a new system of occupational classification. The revised system provides an increased number of occupational classifications and resulted in some reclassification of workers, usually within major occupational groups, but in some instances from one major group to another.

Average rates of pay for all class A telephone carrier employees increased 3.6 percent between 1962 and 1963, from \$2.78 to \$2.88 an hour. The increase amounted to 4.1 percent between December 1961 and December 1962. The December 1963 average was 129 percent above the pay level recorded in October 1947. Differences among regions in overall average pay rates for class A telephone carrier employees remained generally similar between October 1951 and December 1963.³ For each of the three periods shown in the following tabulation, the lowest pay level was recorded in the Southeast, whereas the highest

regional average shifted from the Pacific to the Middle Atlantic region between 1952 and 1957, and the relative advantage for the Middle Atlantic region increased between 1957 and 1963.

Region	All-employee ¹ averages as a percentage of national averages in—		
	Oct. 1952	Oct. 1957	Dec. 1963
New England.....	101	98	100
Middle Atlantic.....	104	106	108
Great Lakes.....	103	103	102
Chesapeake.....	99	99	97
Southeast.....	87	87	87
North Central.....	90	94	92
South Central.....	90	92	90
Mountain.....	87	91	91
Pacific.....	107	105	104

¹ Excludes officials and managerial assistants.

Western Union Telegraph Co.

Straight-time rates of pay (exclusive of premium pay for overtime and work on weekends, holidays, and late shifts) for the 23,259 non-messenger employees⁴ of Western Union's wire-telegraph operations averaged \$2.71 an hour in October 1963 (table 2), an increase of 8 cents (3 percent) above the average recorded a year earlier. The 4,447 messengers averaged \$1.53 an hour, an increase of 8 cents (5.5 percent) since October 1962. These increases were largely the result of general wage increases effective during the period.⁵

TABLE 2. WESTERN UNION TELEGRAPH CO.: PERCENTAGE DISTRIBUTION OF WIRE-TELEGRAPH EMPLOYEES,¹ BY STRAIGHT-TIME AVERAGE HOURLY RATES,² IN SELECTED OCCUPATIONS, OCTOBER 1963

Average hourly rates of pay ²	All employees, except messengers ³	Clerical employees, nonsupervisory	Experienced telegraph operators (except Morse)		Laborers	Linemen and cablemen	Morse operators	Subscribers' equipment maintainers	Telephone operators	Messengers, foot and bicycle	Messengers, motor
			Commercial department	Traffic department							
\$1.25 and under \$1.30.....										95.6	
\$1.30 and under \$1.50.....										4.4	9.0
\$1.50 and under \$1.70.....	0.4	0.1									1.0
\$1.70 and under \$1.90.....	3.7	4.8	15.1	3.9	4.0			8.0			18.7
\$1.90 and under \$2.10.....	8.1	9.5	27.5	8.7	15.8			7.0			56.6
\$2.10 and under \$2.30.....	10.8	19.0	22.3	6.1	21.8	2.8	6.6	0.6	14.3		14.0
\$2.30 and under \$2.50.....	26.2	31.8	34.7	78.4	2.0	10.4	67.1	1.1	70.7		.7
\$2.50 and under \$2.70.....	13.4	14.5	.3	2.9	4.0	25.7	26.3	13.0			
\$2.70 and under \$2.90.....	8.1	7.2	.1		19.8	17.4		7.0			
\$2.90 and under \$3.10.....	5.5	4.5			28.7	18.8		12.7			
\$3.10 and under \$3.30.....	11.0	4.4			4.0	23.1		62.0			
\$3.30 and under \$3.50.....	3.1	1.8				1.7		3.6			
\$3.50 and under \$3.70.....	1.4	.7									
\$3.70 and over.....	8.2	1.8									
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers.....	23,259	5,133	2,058	1,779	101	642	213	1,405	1,381	3,016	1,431
Average hourly rates ²	\$2.71	\$2.45	\$2.14	\$2.29	\$2.59	\$2.83	\$2.44	\$3.07	\$2.26	\$1.26	\$2.00

¹ Includes employees working in the 48 States and the District of Columbia; the company does not operate in Alaska or Hawaii.

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

³ Excludes officials and managerial assistants.

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

TABLE 3. INTERNATIONAL TELEGRAPH CARRIERS:¹ PERCENTAGE DISTRIBUTION OF EMPLOYEES, BY AVERAGE HOURLY RATES,² IN SELECTED OCCUPATIONS, OCTOBER 1963

Average hourly rates of pay ²	All employees, except officials and managerial assistants ³	Cable operators	Clerical employees, nonsupervisory	Marine coastal station operators	Mechanics and maintenance technicians	Messengers, foot and bicycle	Radio operating technicians	Radio operators	Teletype-multiplex operators
\$1.25 and under \$1.30.....	7.0					67.9			
\$1.30 and under \$1.50.....	2.0		0.6			17.9			
\$1.50 and under \$1.70.....	1.5		1.0			10.9			0.4
\$1.70 and under \$1.90.....	2.8		8.4			3.1	0.5		.4
\$1.90 and under \$2.10.....	2.8		7.7		0.2	.2	.5		2.3
\$2.10 and under \$2.30.....	4.7		9.3				.5		16.0
\$2.30 and under \$2.50.....	4.1		7.9	1.3	2.1		.5	0.7	6.5
\$2.50 and under \$2.70.....	6.7	24.7	10.1	3.8	5.8		4.7	2.2	13.1
\$2.70 and under \$2.90.....	6.5	19.0	9.6	2.5	6.6		8.9	1.5	11.0
\$2.90 and under \$3.10.....	8.5	19.0	10.6	13.4	8.1		5.7	2.2	13.3
\$3.10 and under \$3.30.....	9.9	8.0	15.5	21.7	9.5		8.9	2.2	9.6
\$3.30 and under \$3.50.....	5.8	12.6	9.1	14.6	5.2		6.8	3.7	4.6
\$3.50 and under \$3.70.....	11.4	16.7	3.5	28.0	9.5		15.1	70.1	22.9
\$3.70 and over.....	26.4		6.7	14.6	53.0		47.9	17.2	
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers.....	5,115	174	1,410	157	483	524	192	134	520
Average hourly rates ²	\$3.22	\$3.03	\$2.79	\$3.40	\$3.55	\$1.39	\$3.56	\$3.60	\$2.88

¹ Covers international telegraph carriers with annual operating revenues exceeding \$50,000.

² See footnote 2, table 1.

³ Excludes employees of international telegraph carriers outside the 48 States and the District of Columbia.

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

Among the nonmessenger employees, men and women (12,938 and 10,321, respectively) tended to be concentrated in different occupational groups. Average straight-time hourly rates of pay in October 1963 for numerically important occupational categories in which women predominated were \$2.45 for nonsupervisory clerical employees, \$2.29 for experienced telegraph operators (except Morse operators) in the traffic department and \$2.14 for those in the commercial department, and \$2.26 for telephone operators. Among the jobs predominantly held by men, average straight-time hourly rates of pay were \$3.11 for traffic testing and regulating employees, \$3.07 for subscribers' equipment maintainers, and \$2.83 for linemen and cablemen.

Rates of pay of individual workers varied greatly in many of the specific job categories studied. In many of the nonmessenger jobs, the hourly rates of the highest paid workers exceeded those of the lowest paid by more than \$1 an hour. In some jobs, however, individual rates were closely grouped. For example, for two-thirds or more of the Morse operators, telephone operators, and experienced telegraph operators (except Morse operators) in the traffic department, the hourly rates were between \$2.30 and \$2.50.

Wage rates for employees of Western Union are determined by labor-management agreements with the Commercial Telegraphers' Union (AFL-CIO) in all cities except the New York metropolitan area, where contractual agreements are with the

American Communications Association (Ind.). Wage provisions in agreements with both the CTU and ACA include established rate ranges for all occupations, with differences between the starting and maximum rates amounting to more than 60 cents an hour for some classifications. Advancement from the starting rate through the various steps to the maximum rate is automatic after specified periods of service for employees meeting the requirements of the job.

Messengers, all but a few of whom were males, comprised about 16 percent of the company's wire-telegraph work force. Seven-tenths were full-time employees who averaged \$1.58 an hour in October 1963, compared with \$1.28 for the part-time employees. Foot and bicycle messengers (both full-time and part-time employees) averaged \$1.26 an hour at the time of the study—8 cents an hour more than a year earlier. Straight-time rates of pay for all but a very few of these employees were \$1.25. Motor messengers averaged \$2 an hour in October 1963, compared with \$1.93 in October 1962. Rates of pay for more than half of these workers were between \$1.90 and \$2.10.

Total employment of Western Union's wire-telegraph operations in October 1963 was nearly 7 percent below October 1962, and about one-half of the employment level of October 1947 (the date of the Bureau's initial study). The occupational composition of the work force has changed considerably in the last 16 years. For example, the

proportion of workers classified as telegraph operators declined from 34 percent in 1947 to 25 percent in 1963; the proportion of the work force classified as foot and bicycle messengers declined from 18 to 11 percent. On the other hand, the proportions of construction, installation, and maintenance workers and nonsupervisory clerical employees have increased during this period. These changes in the occupational composition of the nonmessenger work force accounted for 18 cents of the \$1.66 increase in average hourly rates of pay between 1947 and 1963.⁶

International Telegraph Carriers

Rates of pay of the 5,115 employees of international telegraph carriers (three ocean-cable and five radio-telegraph carriers) averaged \$3.22 an hour in October 1963 (table 3). The hourly average for the 4,581 nonmessenger employees was \$3.38; the 534 messengers, nearly all foot and bicycle messengers, averaged \$1.41. Men, accounting for nearly seven-eighths of the total work force (including messengers), were predominant in nearly all of the occupational categories studied separately.

Average hourly rates of pay for numerically important occupational categories were \$3.56 for radio operating technicians, \$3.55 for mechanics and maintenance technicians, \$2.88 for teletype-multiplex operators, \$2.79 for nonsupervisory clerical workers, and \$1.39 for foot and bicycle messengers.

Reflecting a wide diversity of occupational duties and responsibilities, rates of pay for international telegraph carrier employees were widely dispersed. Nearly a tenth of the workers (mostly foot and bicycle messengers) had rates of less than \$1.50 an hour and fully a fourth had rates of \$3.70 or more. For some of the occupational groups, however, individual rates of pay were concentrated within comparatively narrow limits. For example, seven-tenths of the radio operators had rates between \$3.50 and \$3.70 an hour, and two-thirds of the foot and bicycle messengers had rates between \$1.25 and \$1.30.

—JOSEPH C. BUSH
Division of Occupational Pay

⁶ Weighting current occupational averages by occupational employment for October 1947 results in an average of \$2.53 instead of \$2.71 for non-messenger employees.

Wages in Pressed or Blown Glassware Plants, May 1964

STRAIGHT-TIME EARNINGS of production and related workers in the pressed or blown glass and glassware industries in May 1964 averaged \$2.31 an hour—a figure almost identical with those for the Middle Atlantic and Great Lakes regions, where about two-thirds of the workers covered by a Bureau of Labor Statistics survey¹ were employed. Average earnings in the glass containers industry were 5 cents below the hourly average of \$2.34 in other pressed or blown glass and glassware.²

Supplementary wage benefits, including paid holidays, paid vacations, and various types of health, insurance, and pension benefits were tabulated separately for glass containers and for other pressed or blown glass and glassware.

Average Hourly Earnings

Men, comprising about two-thirds of the 81,748 production and related workers covered by the study, averaged \$2.46 an hour, compared with \$1.99 for women. In the glass containers industry (51,848 workers), the corresponding hourly averages were \$2.45 and \$1.98 and in the other glass and glassware industry (29,900 workers), \$2.48 and \$2.02, respectively. (See tables.) Among the regions, men's average hourly earnings also were higher, by amounts ranging from 31 to 61 cents.

Differences in average pay levels for men and women may be due to several factors, including variations in the distribution of the sexes among

¹ A more comprehensive account of the study is presented in BLS Bulletin 1423.

The survey included establishments with 20 workers or more, primarily engaged in manufacturing (1) glass containers for commercial packing and bottling and for home canning, and (2) other glass and glassware, pressed, blown, or shaped from glass produced in the same establishment. (The industries involved are 3221 and 3229, except textile glass fibers, as defined in the 1957 edition of the *Standard Industrial Classification Manual* prepared by the U.S. Bureau of the Budget.)

The straight-time average hourly earnings presented in this article differ in concept from the Bureau's monthly hours and earnings series in that they exclude premium pay for overtime and for work on weekends, holidays, and late shifts; they were calculated by summing individual hourly earnings and dividing by the number of individuals. In the monthly series, the sum of the man-hour totals reported by the establishments in the industry was divided into the reported payroll totals.

For definition of the regions, see footnote 2, table 1.

² At the time of the Bureau's previous study in May 1960, average hourly earnings in these industries were \$2.11 and \$2.12, respectively. (See *Monthly Labor Review*, February 1961, pp. 156-162.)

jobs and among establishments with different pay levels.

Two percent of all production workers within the scope of the survey received less than \$1.50 and a slightly larger proportion earned \$3.50 or more. The distribution of workers by earnings classes differed among regions, as indicated below:

	Percent of production workers with specified straight-time hourly earnings ¹ in—				
	United States ²	Middle Atlantic	Border States	Great Lakes	Pacific
Total.....	100.0	100.0	100.0	100.0	100.0
Under \$1.50.....	2.1	0.8	7.6	0.4	-----
\$1.50 and under \$2.00....	27.1	23.8	29.1	28.2	3.4
\$2.00 and under \$2.50....	42.3	49.0	35.3	42.4	50.8
\$2.50 and under \$3.00....	16.8	16.2	16.6	17.0	23.5
\$3.00 and under \$3.50....	9.2	8.7	9.3	10.1	12.5
\$3.50 and over.....	2.5	1.7	2.2	1.9	9.6
Number of workers....	81,748	27,375	12,268	26,390	7,318
Average straight-time hourly earnings ¹ ..	\$2.31	\$2.31	\$2.25	\$2.32	\$2.62

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

² Includes data for regions in addition to those shown separately. The bulletin also provides separate data for the Southeast and Southwest regions

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

Earnings of individual workers in both the glass containers and other pressed or blown glass and glassware industries ranged from less than \$1.30 to \$3.50 or more. The range of hourly earnings of the middle half of the workers varied among the regions, as indicated below:

Region	Range of earnings of the middle half of production workers in—	
	Glass containers	Other pressed or blown glass and glassware
United States.....	\$1.92-\$2.58	\$2.01-\$2.59
Middle Atlantic.....	1.96- 2.47	2.09- 2.63
Border States.....	1.95- 2.72	1.82- 2.41
Great Lakes.....	1.89- 2.52	2.07- 2.70
Pacific.....	2.22- 2.90	-----

Factors contributing to this fairly wide dispersion of individual earnings include the use of incentive wage systems (approximately three-eighths of the production workers in each industry were paid on an incentive basis), the variety of skills required, and differences in pay levels among establishments.

Men's earnings were more widely dispersed than women's. For example, in the glass containers industry, the middle half of the men's earnings ranged from \$2.04 to \$2.81, compared with \$1.83 to \$2.15 for women. This is due, at least in part, to the greater concentration of women in similar jobs (e.g., in glass containers plants, seven-tenths

of the women were employed as selectors, whereas the five occupations studied in which the greatest number of men were employed accounted for only one-third of all men plant workers).

Metropolitan area³ workers in the glass containers industry averaged 5 cents an hour more than workers in this industry in nonmetropolitan areas; in the other industry, the difference was 3 cents an hour. In the Great Lakes region, workers in glass containers plants in nonmetropolitan areas averaged 4 cents an hour more than workers in metropolitan areas (\$2.25 compared with \$2.21); in the other industry, however, metropolitan area workers averaged 12 cents an hour more than workers in nonmetropolitan areas (\$2.50 and \$2.38).

Data could not be presented separately for union and nonunion establishments. Labor-management contracts covering a majority of production workers were reported in all glass containers plants included in the Bureau's sample and in plants employing more than nine-tenths of the workers in the other pressed or blown glass and glassware industry.

Production workers in establishments with 500 employees or more averaged 14 cents an hour more than workers in smaller establishments in the glass containers industry (\$2.33 compared with \$2.19) and 18 cents higher in the other glassware industry (\$2.40 and \$2.22). Regional data could be presented for both establishment size groups only for the latter industry in the Great Lakes region, where workers in the smaller establishment group averaged \$2.47 an hour, 4 cents more than those in larger plants.

It is not possible in a study such as this to isolate the influence on wage levels of any one of the characteristics already discussed. To illustrate their interrelationship, in the pressed or blown glass and glassware, except containers, industry in the Great Lakes region, slightly more than seven-tenths of the workers in the smaller establishment size group (20-499 employees) were in metropolitan areas, compared with approximately four-tenths of the workers in larger establishments. In the glass containers industry in this region, the corresponding proportions were about one-tenth and nearly five-tenths.

Data were also tabulated separately for representative occupations, nine of which are shown in

³ Standard Metropolitan Statistical Areas, as defined by the U.S. Bureau of the Budget in 1961.

each of the accompanying tables.⁴ Selectors, the numerically most important occupation studied, averaged \$2 an hour in the glass containers industry and \$2.01 in the other glassware industry. Forming-machine upkeep men and metal mold makers were the highest paid occupations studied in the former industry, each averaging \$3.18 an hour. In the other glassware industry, blowers (\$3.35) and hand glassware pressers (\$3.42) had the highest average hourly earnings. Average earnings below \$2 an hour were recorded for guards, janitors, and watchmen in the glass containers industry and for silk screen decorators, watchmen, and wrappers in the other glassware industry.

Establishment Practices⁵

A cyclical work schedule of three 40-hour weeks followed by one 48-hour week was reported in glass containers plants with a total of almost four-fifths of the industry's production workers in May 1964. This cyclical work schedule was also in effect in

establishments employing approximately one-fifth of the production workers in the other glassware industry; nearly three-fifths of the workers in that industry were in establishments reporting a regular 40-hour weekly schedule. One-half of the workers in the containers industry and about one-third in the other industry were employed on late shifts and nearly all received extra pay above day-shift rates.

Paid holidays—typically 7 days a year—were provided in all glass containers plants in the Bureau's sample. In the other glassware industry, almost all workers were in establishments providing paid holidays, usually 7 days a year; one-sixth of the production workers were in plants providing more than 7 holidays.

Paid vacations were provided in virtually all establishments studied. In both industries, most

⁴ These and the additional occupations for which data are presented in the bulletin accounted for three-fifths of the production workers within the scope of the survey.

⁵ Establishment practices for production and related workers are briefly summarized in this article. The bulletin provides additional details for these workers and information for office workers.

TABLE 1. NUMBER AND AVERAGE STRAIGHT-TIME HOURLY EARNINGS¹ OF PRODUCTION WORKERS IN GLASS CONTAINERS MANUFACTURING, BY SELECTED CHARACTERISTICS, UNITED STATES AND SELECTED REGIONS,² MAY 1964

Characteristic	United States ³		Middle Atlantic		Border States		Southeast		Southwest		Great Lakes		Pacific	
	Number	Earnings ¹	Number	Earnings ¹	Number	Earnings ¹	Number	Earnings ¹	Number	Earnings ¹	Number	Earnings ¹	Number	Earnings ¹
ALL PRODUCTION WORKERS														
Total.....	51,848	\$2.29	16,689	\$2.25	5,110	\$2.37	4,050	\$2.08	3,280	\$2.11	15,382	\$2.24	7,158	\$2.61
Men.....	33,608	\$2.45	11,440	\$2.39	3,022	\$2.62	2,951	\$2.16	1,972	\$2.25	9,497	\$2.43	4,595	\$2.83
Women.....	18,240	1.98	5,249	1.96	2,088	2.02	1,099	1.85	1,308	1.89	5,885	1.92	2,563	2.22
COMMUNITY SIZE														
Metropolitan areas ⁴	26,611	\$2.31	5,585	\$2.26	3,238	\$2.26	3,201	\$2.12			5,907	\$2.21	6,578	\$2.61
Nonmetropolitan areas.....	25,237	2.26	11,104	2.25							9,475	2.25		
ESTABLISHMENT SIZE⁵														
500 workers or more.....	36,054	2.33	13,098	2.29	4,032	2.40					12,328	2.27		
SELECTED OCCUPATIONS⁶														
Assemblers, carton.....	3,287	2.02	1,130	2.04	187	2.11	265	1.85	235	\$1.85	1,024	1.96	434	2.29
Batch mixers.....	435	2.16	126	2.17	53	2.34	56	1.87	73	1.88	73	2.29	52	2.52
Forming-machine operators.....	3,682	2.89	1,251	2.83	366	2.96	299	2.64	233	2.79	1,014	2.91	500	3.20
Forming-machine upkeep men.....	1,312	3.18	457	3.13	137	3.23	98	2.82	92	3.14	346	3.17	172	3.55
Inspectors, final.....	1,608	2.22	515	2.19	195	2.39	212	1.92	125	1.91	362	2.23	193	2.62
Laborers, material handling.....	2,035	2.05	705	2.06	192	2.17	221	1.80	195	1.85	532	2.06	184	2.35
Mold makers, metal.....	1,696	3.18	694	3.10	169	3.11	77	3.04	59	3.18	430	3.12	262	3.55
Selectors.....	14,934	2.00	4,830	1.98	1,726	1.98	917	1.91	1,002	1.88	4,311	1.94	2,148	2.25
Truckers, power (forklift).....	1,593	2.27	461	2.26	116	2.24	109	2.03	97	1.98	519	2.21	283	2.62

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

² The regions for which separate data are shown include: *Middle Atlantic*—New Jersey, New York, and Pennsylvania; *Border States*—Delaware, District of Columbia, Kentucky, Maryland, Virginia, and West Virginia; *Southeast*—Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, and Tennessee; *Southwest*—Arkansas, Louisiana, Oklahoma, and Texas; *Great Lakes*—Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin; and *Pacific*—California, Nevada, Oregon, and Washington.

³ Includes data for regions in addition to those shown separately. Alaska and Hawaii were not included in the study.

⁴ Standard Metropolitan Statistical Areas, as defined by the U.S. Bureau of the Budget in 1961.

⁵ The 15,794 workers in establishments with 20-499 workers averaged \$2.19 an hour. Regional data did not meet publication criteria.

⁶ Carton assemblers and selectors were predominantly women; the other occupations shown were all or predominantly men. Data in the bulletin are also presented separately for men and women in selected occupations.

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

TABLE 2. NUMBER AND AVERAGE STRAIGHT-TIME HOURLY EARNINGS¹ OF PRODUCTION WORKERS IN PRESSED OR BLOWN GLASS AND GLASSWARE (EXCEPT CONTAINERS) MANUFACTURING, BY SELECTED CHARACTERISTICS, UNITED STATES AND SELECTED REGIONS,² MAY 1964

Characteristic	United States ³		Middle Atlantic		Border States		Great Lakes	
	Number	Earnings ¹	Number	Earnings ¹	Number	Earnings ¹	Number	Earnings ¹
ALL PRODUCTION WORKERS								
Total ⁴	29,900	\$2.34	10,686	\$2.40	7,158	\$2.17	11,008	\$2.44
Men.....	21,021	\$2.48	8,096	\$2.50	4,756	\$2.33	7,354	\$2.60
Women.....	8,879	2.02	2,590	2.07	2,402	1.85	3,654	2.13
COMMUNITY SIZE								
Metropolitan areas ⁵	12,390	\$2.36					5,481	\$2.50
Nonmetropolitan areas.....	17,510	2.33			5,848	\$2.12	5,527	2.38
ESTABLISHMENT SIZE								
20-499 workers.....	10,092	2.22			3,481	2.05	2,885	2.47
500 workers or more.....	19,808	2.40					8,123	2.43
TYPE OF PRODUCT AND METHOD OF MANUFACTURE								
Tableware, artware, and industrial, and illuminating glassware.....	23,923	2.32			6,456	2.16	8,046	2.45
Hand.....	6,749	2.22			4,039	2.13		
Machine.....	17,174	2.36					7,131	2.47
SELECTED OCCUPATIONS⁶								
Blowers.....	434	3.35	107	\$3.23	254	3.26	39	3.42
Carry-in boys.....	714	2.04	244	2.37	355	1.81	108	2.06
Forming-machine operators.....	855	3.03	165	3.04	150	2.72	470	3.25
Forming-machine upkeep men.....	252	3.04	72	3.14	43	2.55	104	3.28
Gatherers, blowpipe.....	527	2.77	205	2.53	256	2.82	44	2.97
Grinders, glassware.....	435	2.01	152	2.21	196	1.82	82	2.11
Pressers, glassware, hand.....	255	3.42	106	3.57	63	3.28	86	3.35
Selectors.....	4,008	2.01	648	2.04	935	1.96	2,048	2.10
Tankmen.....	342	2.34	93	2.47	107	2.12	117	2.57

¹ See footnote 1, table 1.² See footnote 2, table 1.³ See footnote 3, table 1.⁴ Includes workers in establishments producing other types of products in addition to those shown separately.⁵ See footnote 4, table 1.⁶ Glassware grinders and selectors were predominantly women; the other occupations shown were all or predominantly men. The bulletin also contains separate data for men and women in selected occupations.

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

production workers were in plants providing at least 1 week after 1 year, 2 weeks or more after 5 years, and 3 weeks or more after 10 years of service. Two-fifths of the production workers in the pressed or blown glassware (except containers) industry and a small proportion in the containers industry were in establishments providing 4 weeks or more after 25 years of service.

Life, hospitalization, and surgical insurance, for which employers paid at least part of the cost, were available to nearly all production workers in the glass containers industry and to nine-tenths

or more in the other glassware industry. Sickness and accident insurance and medical insurance were also commonly provided.

Retirement pension benefits (other than those available under Federal old-age, survivors, and disability insurance) were provided by establishments employing approximately nine-tenths of the production workers in both the glass containers and other pressed or blown glass and glassware industries.

—FRED W. MOHR
Division of Occupational Pay

Wage Chronology: A.T. & T. Long Lines Department

Supplement No. 1—1953-64¹

NEGOTIATIONS between American Telephone & Telegraph Co.'s Long Lines Department and the Communications Workers of America over the 12 years, 1953 through 1964, resulted in gradually lengthening contract periods, substantial wage increases, and improvements in and additions to the fringe benefits provided employees.² Since the agreement effective in July 1952 and summarized in this Long Lines wage chronology, 10 additional agreements have governed relations between the parties. Those negotiated between 1953 and 1956 each ran for a 1-year term; the 1958 agreement remained in effect for 17 months and the 1959 agreement for 16 months. In 1960, the company and the union signed a contract which ran for 3 years, with two wage reopenings, and in 1963 a minimum 38-month agreement, also with two wage reopenings.

During each negotiation, the union proposed a general wage increase and reclassification of some towns into higher rated zones. Frequently, it also proposed reductions in the time required to progress from the minimum to the maximum job rate and the elimination of area differentials. It also asked for various changes in supplementary benefits. Liberalized vacations, for example, were an issue in 1953, 1956, 1958, and 1960. Reductions in the workweek, in some cases to 35 hours, were also proposed a number of times. A company-paid health and welfare plan was demanded in each negotiation from 1953 until a plan was established by the 1963 contract.

Of the 10 settlements, 2 were wage reopeners and therefore covered only wage items, and 8 changed both wages and supplementary benefits. In addition to wage increases, most of the settlements classified some towns into higher rated zones and two reduced the length of time required for employees in specified classifications to progress from the minimum to the maximum rate for their job.

Over the period from 1952 through the 1963 settlement, the basic maximum rates of pay for long distance operators increased an average of 45 percent or about \$26 a week.

In 1953, negotiations were opened in May, about 2 months before the scheduled termination date of the existing agreement. The 1-year settlement reached on September 2, 1953, increased wages by amounts ranging up to \$8 a week, including increases resulting from shortening all 6½-year progression schedules to 6 years. The waiting period for payment for absence because of illness was reduced.

In 1954, bargaining began in mid-August and on October 9, following 9 weeks of negotiations, the parties announced agreement on a contract to remain in effect for 1 year from October 24. It provided wage advances effective October 9 (including those resulting from reclassification of several towns) of up to \$5.50 a week for employees with at least 1 year of service. Wage rates of employees with shorter service were not changed.

The 1955 negotiations started on September 22 and continued after termination of the contract on October 28, with agreement being consummated on November 14 and effective on November 28. Weekly wage rates, including increases resulting from the reclassification of some towns, were increased \$1 to \$10, effective November 14. The agreement added Veterans Day as a paid holiday in nine States where it had not previously been recognized.

In 1956, the union opened negotiations on October 15 and, when the existing contract expired on November 28, the parties agreed to continue negotiations. The contract agreed to on December 5 raised pay \$1 to \$11.50 a week, effective immediately. The plant night-shift differential was increased for some employees, health benefits were liberalized, and sickness and disability benefits were extended to workers with 1 but less than 3 years of service. The contract was to run from December 19, 1956, through January 3, 1958.

Contract renewal talks were again opened on November 15, 1957, and were concluded on January 11, 1958, with a 16-month agreement effective February 10. Wage increases of \$1 to \$9.50 were effective January 11, including increases resulting from reclassification of seven towns. Although the union membership authorized a strike, no date

¹ For basic chronology, see *Monthly Labor Review*, August 1953, pp. 851-862.

² Each of the contracts was for a specified minimum period, and could be terminated at the end of the period by either party on 60 days' prior written notice.

was set for a walkout. Maximum carfare allowances for operators on double tours of duty were increased, and negotiations were continued on group life insurance and amendments to the pension plan. On May 12, the company agreed to a contributory life insurance plan for regular employees with 6 months or more of service. Benefits were to approximate annual basic wages with a minimum of \$2,000. Accord on an amended pension plan was reached in January 1959.

Negotiations for revisions in the 1958 contract began on May 1, 1959, and were concluded on June 10, with agreement on weekly wage advances ranging up to \$12 including increases resulting from reclassification of 20 towns. A fourth week of vacation was added for employees with at least 30 years' service, the differential paid to employees assigned "in-charge" responsibilities was increased, and carfare allowances were raised.

Negotiations that began early in September 1960 resulted in agreement on a 3-year contract, after extended negotiations and a vote authorizing the leadership to call a strike. The economic changes agreed to in the contract of November 9 provided wage advances of \$1 to \$10 including increases resulting from the upgrading of 15 towns, in addition to liberalized provisions for vacations, life insurance, and pensions, and establishment of a com-

pany-financed major medical (Extraordinary Medical Expense) plan. The agreement provided for two annual reopenings.

Under the first wage reopening, weekly wages were increased \$1 to \$9, including the effects of upgrading 15 towns. In addition, the progression schedule for operators was reduced from 6 to 5½ years, effective November 9, 1961. A year later, under the second wage reopening, company and union negotiators agreed to wage increases of \$1.50 to \$10.50 a week, including increases resulting from the upgrading of 56 towns. The agreement covered 23,000 workers in 42 States and the District of Columbia.

The 1963 negotiations started on September 20 and were concluded with a 38-month agreement on November 11, 1963. Weekly wage rates, including increases resulting from the reclassification of 42 towns, were raised from \$1 to \$12. Pension and other welfare benefits were also improved. A separate agreement was reached on a basic contributory hospital-surgical-medical plan. The agreement, which covered 22,600 employees in 42 States and the District of Columbia, also provided for wage reopeners in 1965 and 1966.

The following tables summarize the details of agreements negotiated by the Long Lines Department with the CWA during the years 1953-63.

A—General Wage Changes ¹

Occupational group	Increases effective ²									
	Sept. 2, 1953	Oct. 9, 1954 (Oct. 24)	Nov. 14, 1955 (Nov. 28)	Dec. 5, 1956 (Dec. 19)	Jan. 11, 1958 (Feb. 10)	June 10, 1959 (July 10)	Oct. 10, 1960 (Nov. 9)	Nov. 9, 1961	Nov. 9, 1962	Nov. 10, 1963
Number of towns reclassified...	29	11	10	17	7	20	15	15	56	42
Number of years' service required to reach maximum rates:										
Central office craftsmen	6 ³	6	6	6	6	6	6	6	6	6
Traffic operators	6 ³	6	6	6	6	6	6	5½	5½	5½
Plant central office craftsmen:										
Minimum rate	\$0 to \$4	\$0 to \$2	\$2 to \$5½	\$2 to \$5½	\$1 to \$5	\$1 to \$5½	\$1 to \$8½	\$1½ to \$5½	\$1½ to \$8	\$1½ to \$8½
Maximum rate	0 to 5½	1 to 5½	3½ to 9½	3½ to 9½	2½ to 6	2 to 11	3½ to 10	3 to 9	4 to 10½	3½ to 11
Traffic operators:										
Minimum rate	1 to 3	0 to 2	2 to 2½	2 to 4	2 to 4	1 to 3	1½ to 7	1½ to 3	2 to 3½	2 to 3½
Maximum rate	1½ to 2½	1½ to 2½	2 to 3	2½ to 3	2½ to 3½	3 to 4	2½ to 3	2 ⁴	2½ to 4½	2½ to 4 ⁵
Plant construction forces:										
Minimum rate	1 to 2	0	2½	2½	2	1½	2½	3	2	2
Maximum rate	1½ to 3	1 to 2	3 to 4	3 to 4	2½ to 3½	3 to 4	4½ to 6	2 to 3	2 to 4½	2 to 5
Outside maintenance forces:										
Minimum rate	0 to 5	0 to 2	2 to 5½	2 to 11½	1 to 4	0 to 5½	1 to 5½	1½ to 5½	1½ to 7	1½ to 9
Maximum rate	1 to 8	1 to 5½	3 to 10	3 to 11½	2½ to 9½	3 to 12	3 to 10	2½ to 8	3½ to 10½	3½ to 12

See footnote at end of table.

A—General Wage Changes¹—Continued

Occupational group	Increases effective ²									
	Sept. 2, 1953	Oct. 9, 1954 1954 (Oct. 24)	Nov. 14, 1955 (Nov. 28)	Dec. 5, 1956 (Dec. 19)	Jan. 11, 1958 (Feb. 10)	June 10, 1959 (July 10)	Oct. 10, 1960 (Nov. 9)	Nov. 9, 1961	Nov. 9, 1962	Nov. 10, 1963
Clerical forces:										
Minimum rate.....	½ to 3½	0 to 2.....	1 to 3.....	1 to 5.....	1½ to 4.....	0 to 4½.....	1 to 7.....	1 to 5½.....	1 to 5.....	1 to 5½
Maximum rate.....	1 to 4½	0 to 4.....	1 to 6.....	1½ to 5.....	1½ to 5½	0 to 8.....	1½ to 7½	1 to 6.....	1½ to 6½	1½ to 6 ³

¹ A range is shown since individual increases were governed by location, position on the salary schedule, and job.

² When they differ, the date of the contract is shown in parenthesis below the effective date of the general wage increase. The 1961 and 1962 increases were the result of wage reopenings provided in the 1960 agreement.

³ Reduced from 6½ years.

⁴ Effective May 6, 1952, rates were increased \$1.

⁵ Effective Feb. 9, 1964, maximum rates for traffic operators were increased \$1 and those for clerical forces, 50 cents.

B—Related Wage Practices

I—TRAFFIC AND PLANT EMPLOYEES

Effective date	Provision	Applications, exceptions, and other related matters
<i>Night Premium Pay</i>		
Sept. 2, 1953 (agreement of same date).	<i>Added: Plant central office craftsmen:</i> Differential of \$10 a week paid eligible employees with basic weekly rates of \$100 or more.	<i>Changed: Traffic—Group A, Cleveland and Detroit—</i> night tour reduced from 8 to 7 hours without change in differential.
Dec. 5, 1956 (agreement dated Dec. 19, 1956).	<i>Added: Plant central office craftsmen:</i> Differential of \$11 a week paid employees with basic weekly rates of \$115 or more.	
Oct. 10, 1960 (agreement dated Nov. 9, 1960).	<i>Added: Plant central office craftsmen:</i> Differential of \$12 a week paid employees with basic weekly rate of \$130 or more.	<i>Added: Traffic—Group A, Boston—</i> \$3.50 for 7-hour night tour; <i>New York and White Plains—</i> \$4 for 7-hour night tour; <i>Chicago—</i> \$4.50 for 8-hour night tour; <i>Cincinnati, Pittsburgh, and Wayne—</i> \$5 for 8-hour night tour.
<i>Holiday Pay</i>		
Nov. 28, 1955 (agreement of same date).	-----	<i>Added: Veterans Day, Nov. 11, as holiday in Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee.</i>
Nov. 10, 1963 (agreement of same date).	-----	<i>Added: Inauguration Day, Jan. 20, inauguration year in Arlington, Va., and Silver Spring and Greenbelt, Md.</i> <i>Memorial Day, May 30, and Alaska Day, March 30, in Alaska.</i>
<i>Vacation Pay</i>		
Jan. 1, 1954 (agreement dated Sept. 2, 1953).	<i>Changed to:</i> 1 week after 6 months' service, if hired before April 1 of current year; 2 weeks after 1 year, if hired before October of preceding calendar year.	<i>Continued:</i> Pay for unused vacation to laid-off employees, temporary employees whose work was completed, and employees resigning or dismissed.
1959 (agreement dated July 10, 1959).	<i>Added:</i> 4 weeks, paid vacation after 30 years' service.	<i>Changed:</i> Paid days in vacation week to be number in established work week during the first 17 of 20 (was 18) weeks preceding vacation in office to which employee was assigned. <i>Traffic—Groups A and B—</i> Vacation pay to include average of night differentials for tours scheduled during first 4 of 7 (was 5) weeks preceding vacation. <i>Continued: Plant Groups A—</i> Inclusion in vacation pay of night differential received in weeks preceding vacation. <i>Traffic and Plant Groups—</i> Provision of additional vacation days if employee worked in excess of scheduled workweek, as follows: (1) If employee worked 6 but less than 12 additional normal tours during contract period—½ day per week of vacation; if 12 or more normal tours—1 day per week of vacation.
Jan. 1, 1961 (agreement dated Nov. 9, 1960).	<i>Changed:</i> 4 weeks' paid vacation after 25 years.	
Jan. 1, 1964 (agreement dated Nov. 10, 1963).	<i>Changed:</i> 3 weeks' paid vacation after 10 years.....	<i>Changed:</i> Paid days in vacation week; for full-time employee, to 5 days; for part-time employee, to average weekdays in scheduled workweek during first 10 of 13 weeks preceding vacation.

See footnotes at end of table.

B—Related Wage Practices—Continued

I—TRAFFIC AND PLANT EMPLOYEES—Continued

Effective date	Provision	Applications, exceptions, and other related matters
<i>In-Charge Pay</i>		
July 10, 1959 (agreement of same date).	<i>Increased: Traffic Group A and Plant Central Office Group A—to \$1.50 for any day assigned duties of absent supervisor or in-charge responsibility for 4 hours or more.</i>	

Health and Welfare Benefits (Revised)¹

1940.....	<p>In effect:</p> <p><i>Accident benefits:</i> Employees physically disabled by reason of accidental occupational injury to receive for (1) total disability—full pay for 13 weeks, half pay for the remainder of the disability, but not more than \$20 a week after 6 years; (2) partial disability—100 percent of loss in earning capacity for 13 weeks, 50 percent for remainder of disability up to 6 years. Employees with 15 years' service or more to receive full pay for periods specified under sickness benefits for this length of service.</p> <p><i>Sickness benefits:</i> Employees disabled because of sickness, including injuries not arising in the course of employment, to receive:</p> <table border="1"> <thead> <tr> <th><i>Years of service</i></th> <th><i>Full pay for</i></th> <th><i>Half pay for</i></th> </tr> </thead> <tbody> <tr> <td>2 and under 5.....</td> <td>4 weeks..</td> <td>9 weeks.</td> </tr> <tr> <td>5 and under 10.....</td> <td>13 weeks..</td> <td>13 weeks.</td> </tr> <tr> <td>10 and under 15.....</td> <td>13 weeks..</td> <td>39 weeks.</td> </tr> <tr> <td>15 and under 20.....</td> <td>26 weeks..</td> <td>26 weeks.</td> </tr> <tr> <td>20 and under 25.....</td> <td>39 weeks..</td> <td>13 weeks.</td> </tr> <tr> <td>25 or more.....</td> <td>52 weeks..</td> <td></td> </tr> </tbody> </table> <p><i>Death benefits:</i> In event of death from (1) work-connected accident—benefits to equal 3 years' wages, but not more than \$5,000; (2) nonoccupational sickness—4 months' pay for employees with 2 but less than 3 years' service and an additional month's pay for each added year of service up to 10 (maximum 12 months); minimum benefit \$250.</p> <p><i>Benefits in case of death of pensioner:</i> Not to exceed payments under sickness-death benefits.</p> <p><i>Funeral benefits:</i> Up to \$250 for necessary expenses.</p>	<i>Years of service</i>	<i>Full pay for</i>	<i>Half pay for</i>	2 and under 5.....	4 weeks..	9 weeks.	5 and under 10.....	13 weeks..	13 weeks.	10 and under 15.....	13 weeks..	39 weeks.	15 and under 20.....	26 weeks..	26 weeks.	20 and under 25.....	39 weeks..	13 weeks.	25 or more.....	52 weeks..		<p>Noncontributory accident, sickness and death benefits plan was established in 1913. Not covered by union agreement. Benefits to begin on first day on which a full day's wage was not paid.</p> <p>Amount of payment could be changed if disability changed from total to partial or from partial to total. No payments for partial disability to be made after 6 years of disability payments.</p> <p>In case of accidental injury resulting in permanent loss of a body member or its use, special benefits not exceeding amount payable for accidental death could be awarded in lieu of all other benefits.</p> <p>Committee administering plan could also approve necessary expenses for first aid treatment or surgery.</p> <p>Benefits to begin on 8th calendar day of absence or, if employee had been receiving benefits and was again absent within 2 weeks, on 1st day.</p> <p>All benefit payments to be reduced by the amount of related benefits required by State or Federal Law.</p> <p>Payments to employees with less than 2 years' service to be governed by company practice.</p>
<i>Years of service</i>	<i>Full pay for</i>	<i>Half pay for</i>																					
2 and under 5.....	4 weeks..	9 weeks.																					
5 and under 10.....	13 weeks..	13 weeks.																					
10 and under 15.....	13 weeks..	39 weeks.																					
15 and under 20.....	26 weeks..	26 weeks.																					
20 and under 25.....	39 weeks..	13 weeks.																					
25 or more.....	52 weeks..																						
Jan. 1, 1946.....	<p>Increase:</p> <p><i>Accident Benefits:</i> For total occupational disability, half pay to continue for duration of disability.</p> <p><i>Death Benefits:</i> Maximum to \$10,000 for death resulting from occupational injury.</p> <p><i>Changed to:</i></p> <p><i>Benefits in case of death of pensioner:</i> Mandatory payments to qualified beneficiaries (1) if death occurred within 1 year after retirement—maximum sickness-death benefit payable as if pensioner had died on last day of active service; (2) if death occurred more than 1 year after retirement—not less than maximum sickness-death benefits reduced by 10 percent for each full year since retirement, or amount of annual pension, whichever was greater. Could be supplemented at company discretion with amount not to exceed payments under (1) if no qualified beneficiaries; payments at company discretion to extent necessary for \$250 burial expense plus cost of last illness.</p>	<p>Payments made at discretion of company.</p> <p>In addition to death benefit.</p>																					
May 9, 1947.....		<p>Agreement that company would not reduce or diminish benefits or privileges without consent of the union.</p>																					

See footnote at end of table.

B—Related Wage Practices—Continued

I—TRAFFIC AND PLANT EMPLOYEES—Continued

Effective date	Provision	Applications, exceptions, and other related matters
<i>Health and Welfare Benefits (Revised)¹—Continued</i>		
Dec. 19, 1956 (agreement of same date).	<p><i>Increased:</i> <i>Death benefits</i>—In the event of death from (1) accident—maximum to \$30,000, (2) sickness—minimum to \$500. <i>Funeral benefits</i>—\$500.</p>	<p><i>Added:</i> Agreement that company would not change benefits without 60 days' notice to union.</p>
April 1, 1957.....	<p><i>Increased:</i> <i>Sickness benefits</i>—Employees with 1 but less than 2 years' service, to half pay for 9 weeks.</p>	
Mar. 1, 1958.....	<p><i>Changed to:</i> <i>Death benefits</i>—Sickness—4 months' pay for employees with 6 months but under 2 years' service, and an additional 2 months' pay for each added year of service up to 5 (maximum 12 months). No change in minimum benefits.</p>	
May 18, 1958 (by agreement dated May 12, 1958).	<p><i>Established:</i> Contributory life insurance plan for regular employees with 6 months or more of service, providing benefits equal to employee's annual basic pay adjusted to the next higher \$1,000, with \$2,000 minimum, plus equal amount for accidental death or dismemberment.²</p>	<p>Employees to contribute \$0.50 monthly for each \$1,000 above first \$1,000 of life insurance until retirement. Company to pay any additional amount required.</p> <p>Retired employee, continuously insured while eligible after age 45, to be covered without cost by life insurance in amount in effect at retirement reduced by 10 percent after 1 year and by the same dollar amount on each of 4 succeeding retirement anniversary dates, with a minimum of \$1,500. Accidental death and dismemberment insurance discontinued on retirement.</p> <p>For employee totally disabled and not eligible for pension or disability benefits, insurance to be continued with cost to employee during term of disability. After expiration of disability benefits, insurance continued without cost to employee as follows: 1 year for employees with less than 5 years' credited service; 2 years for 5 but less than 10 years' service; and 3 years for 10 but less than 15 years' service. Employees with 15 or more years' service to receive same benefit as retired employee. Accidental death and dismemberment insurance discontinued on expiration of disability benefits.</p> <p>Employees could continue insurance during layoff up to 6 months on payment of contribution.</p> <p><i>Changed:</i> Employee to contribute \$0.50 monthly for each \$1,000 above first \$2,000 life insurance.</p>
Dec. 1, 1960 (agreement dated Oct. 10, 1960).	<p><i>Increased:</i> Life insurance—Minimum face amount to \$3,000.³</p>	
Dec. 15, 1960 (agreement dated Nov. 9, 1960).	<p><i>Established:</i> Noncontributory major medical benefits plan for regular employees with 6 or more months' service, retirees, and their dependents.</p> <p><i>Benefits:</i> 80 percent of the amount by which medical expenses exceeded sum of (1) amount payable by specified local plans⁴ providing basic benefits, whether or not employee was covered by such plan, plus (2) 4 percent of annual basic pay of regular employee with minimum of \$100 and maximum of \$500. Lifetime maximum for regular employees and their dependents under 65 years of age—\$15,000; for retired employees and their dependents, and regular employee's dependents over 65—\$2,500.</p> <p><i>Covered expenses:</i> Hospital room plus related hospital services, and services of doctors and registered nurses; professional ambulance services to first hospital; physiotherapy prescribed by attending physician, when performed by qualified physiotherapist; drugs and medicines; diagnostic X-ray and laboratory examinations; X-ray, radium and radioactive isotope therapy; anesthesia and oxygen and the administration thereof; blood and blood plasma to the extent not donated or otherwise replaced; rental of iron lung and other durable medical or surgical equipment; artificial limbs and eyes, except replacements.</p>	<p>Benefits limited to 50 percent for mental care outside hospital or mental institution, except for regular employees absent from work because of disability.</p> <p>Maximum benefit could be restored on submission of evidence of insurability, at any time after receipt of \$1,000 in benefits.</p> <p>4-percent deductible could be applied 3 times in any 12 months, but only once for an accident injuring 2 or more beneficiaries.</p> <p>Benefits available in or outside hospital.</p> <p>Not applicable to services of registered nurse ordinarily residing with or a member of beneficiary's immediate family; care in nursing or convalescent homes or places for the aged; expenses covered under laws or regulations of any government; occupational disability; treatment, services, or supplies not certified by doctor; charges in excess of either the regular and customary charges for or the fair and reasonable value of the service; expenses paid under any other plan to which employer contributed or made payroll deductions, to the extent such expense exceeds the "deductible"; dental work or treatment and cosmetic surgery or treatment, except in case of accident; medical observation or diagnostic study when no disease or injury was revealed, except under certain conditions; personal services; pregnancy or childbirth, except severe complications; eyeglasses and hearing aids, or examinations for the prescription or fitting thereof.</p>

See footnotes at end of table.

B—Related Wage Practices—Continued

I—TRAFFIC AND PLANT EMPLOYEES—Continued

Effective date	Provision	Applications, exceptions, and other related matters
<i>Health and Welfare Benefits (Revised)¹—Continued</i>		
Nov. 1, 1963 (agreement dated Oct. 25, 1963).	<p><i>Changed to:</i> <i>Benefits in case of death of Pensioner:</i> Mandatory payments to qualified beneficiaries if retirement occurred on or after Oct. 31, 1963—maximum sickness death benefits payable as if pensioner had died on last day of active service. Could be supplemented at company discretion with amount not to exceed maximum sickness death benefits if no qualified beneficiaries.</p>	<p>By resolution of the Benefit Committee, the company also provided mandatory payments to qualified beneficiaries if retirement occurred prior to Oct. 31, 1963—not less than maximum sickness death benefits reduced by 10 percent for each full year since retirement and up to Oct. 31, 1963, or amount of annual pension, whichever amount was greater. Could be supplemented at company discretion with amount not to exceed maximum sickness death benefits if no qualified beneficiaries.</p>
Dec. 1, 1963 (agreement dated Nov. 10, 1963).	<p><i>Changed to Major Medical Benefits:</i> Lifetime maximum for regular employees and their dependents under 65 years of age—\$20,000; for retired employees and their dependents, and regular employees' dependents over 65—\$5,000.</p>	<p><i>Changed:</i> Employee to contribute \$0.40 monthly for each \$1,000 above first \$2,000 life insurance.⁵</p>
Jan. 1, 1964 (agreement dated Nov. 10, 1963).	<p><i>Established:</i> Contributory hospital-surgical-medical plan for regular employees, retirees, and their dependents.</p> <p>New York—(Blue Cross and Blue Shield) ⁶.....</p> <p><i>Hospital benefits</i> (room and board)—In member hospital, full coverage for semiprivate room or ward up to 120 days per admission. In nonmember hospital, 80 percent of charges for semiprivate room or ward up to 120 days per admission.</p> <p><i>Special hospital expenses</i> (other than for room and board): Full coverage up to 120 days for meals and special diets; general nursing care; use of operating and other surgical treatment rooms; anesthesia and the administration thereof; all laboratory tests; physical therapy treatments; oxygen and oxygen therapy; all recognized drugs and medicines for use in hospital; dressings, ordinary splints, and plaster casts, X-ray examinations, X-ray therapy, radiation therapy and treatment; electrocardiograms, electroencephalograms, and basal metabolism tests; and administration of blood and blood plasma.</p> <p><i>Outpatient benefits:</i> Full coverage provided for care rendered in hospital within 48 hours after accidental injury, for serious illness, or when minor surgery was required.</p> <p><i>Maternity benefits:</i> All services provided for regular hospitalization up to 120 days, plus use of delivery room, infant feeding, and other routine care of the newborn child.</p> <p><i>Premature Infants benefits:</i> Same as Hospital Benefits.</p> <p><i>Surgical-medical benefits:</i> 1. Plan to pay full amount of scheduled fee for single employes earning \$4,000 or less and married employes earning \$6,000 or less annually for: <i>Surgical services</i>—all accepted operative and cutting procedures for diagnosis and treatment of diseases, injuries, fractures, and dislocations, and postoperative care paid in accordance with a schedule.</p>	<p>Company to contribute ¼ of initial cost of plan. Dollar contribution to be doubled in 1966. Dependents defined as wife or husband and unmarried children (including stepchildren and adopted children residing with employee) under age 19.</p> <p>In New York, company contributed \$1.70 a month for single employees, \$4.79 for a 2-person family, and \$4.95 for larger families.</p> <p>Employee using private room to pay difference between that charge and cost of semiprivate accommodations. Benefits reinstated 90 days after last day of hospitalization.</p> <p>Benefits not available for institutions for convalescence, nursing, or rest care; for service of physicians, surgeons, and technicians not employed by hospital; for dental care, except in case of accident or removal of impacted teeth; hospitalization primarily for diagnostic study, physical therapy, X-ray and laboratory examinations, basal metabolism tests, electrocardiograms, and electroencephalograms; for care under the laws of the United States, or any State or Government (except covered services for which employee paid); for care for occupational disabilities provided in accordance with law; for care provided by any other employer-financed or contributory plan.</p> <p>Benefits limited to 30 days for each confinement for tuberculosis, nervous and mental conditions, alcoholism, or drug addiction. Benefits reinstated 180 days after last day of hospitalization. Excludes ambulance service and services or supplies not certified by doctor</p> <p>Available after 270 consecutive days in plan.</p> <p>Applicable only to infants weighing less than 5½ pounds. Participating doctors agreed to accept plan schedule as payment in full.</p>

See footnotes at end of table.

B—Related Wage Practices—Continued

I—TRAFFIC AND PLANT EMPLOYEES—Continued

Effective date	Provision	Applications, exceptions, and other related matters
<i>Health and Welfare Benefits (Revised)¹—Continued</i>		
Jan. 1 1964 (agreement dated Nov. 10, 1963)—Continued	<p><i>Medical care</i>—up to 120 days' care in hospital when surgery was not required; doctors' fees limited to \$571 for routine care, \$637 for intensive care.⁷ Up to 30 days' care for tuberculosis, nervous and mental conditions, drug addiction, or alcoholism; doctors' fees limited to \$171.⁸</p> <p><i>Premature infants benefits:</i> Up to \$100 provided for in-hospital medical care.</p> <p><i>Anesthesia</i>—20 percent of surgical and maternity care allowance; minimum \$20.</p> <p><i>Radiation Therapy</i>—Up to \$250 for each contract year for proven malignancy and \$200 for benign conditions.</p> <p>2. Plan to pay scheduled fee for:</p> <p><i>Obstetrical benefits</i>—Up to \$75 for normal delivery, \$75 to \$175 for other procedures.</p> <p><i>Diagnostic X-ray and laboratory examinations</i>—up to \$75 per person per contract year for any one accident or illness in doctor's office or hospital outpatient department.</p> <p><i>Consultation services</i>—up to \$20 for one in-hospital specialist consultation per continuous period of hospitalization.</p> <p><i>Electro-shock therapy</i>—up to \$15 for each treatment, in or out of hospital, to maximum of \$150 per contract year.</p>	<p>Full benefits reinstated 3 months after release from hospital; after 6 months for tuberculosis, nervous and mental conditions, drug addiction, or alcoholism.</p> <p>Applicable only to infants weighing 5 pounds or less.</p> <p>Includes X-ray, radium, and other forms of radiation therapy used in the treatment of proved cases of malignancy only.</p> <p>Benefits not available for maternity services.</p>

Pension Plan (Revised)^{4 9}

1940 (plan established Jan. 1, 1913).	<p>Noncontributory plan providing the following benefits:</p> <p><i>Normal benefits:</i> <i>Eligibility:</i> (1) men at age 60 or older and women at 55 or older, with at least 20 years' service, (2) men at age 55 or older and women at age 50 or older, with 25 or more years of service, or (3) any employee with 30 or more years of service.</p> <p><i>Monthly annuities:</i> $\frac{1}{2}$ of 1 percent of average annual pay during 10 years preceding retirement, or—at company's discretion—the 10 consecutive years during which employee received highest wages, times years of service.</p> <p>Benefits to be reduced by one-half of social security benefits.</p> <p><i>Minimum monthly pension:</i> \$30, except for disabled employees with less than 20 years' service or part-time employees.</p> <p><i>Disability benefits:</i> Pension of employee with 15 or more years' service, totally disabled as a result of a non-occupational sickness or injury, to be computed like normal benefits.</p>	<p>Not covered by union agreements. Retirement automatic at age 65; however, company could delay retirement if continuation of employment was in its best interest.</p> <p>Retirement (except for men at age 60 and over and women at age 55 and over, with 20 years' service) to be at the discretion of the committee administering the plan.</p> <p>Continuity of service not to be broken for leaves of absence of less than 6 months or periods of disability or temporary layoff.</p> <p>Deduction to be increased as social security benefits were raised by legislation.</p> <p>Company not to reduce benefits or privileges without union's consent.</p>
Jan. 1, 1946	<p><i>Increased:</i> <i>Minimum pensions,</i> to \$50.</p>	
May 9, 1947		
Nov. 16, 1949	<p><i>Increased:</i> <i>Minimum pensions,</i> including total primary social security benefits, to \$100 a month at age 65 or over and \$75 a month below that age.</p>	
Sept. 1, 1952	<p><i>Changed:</i> <i>Minimum pensions,</i> to include one-half primary social security benefits.</p>	

See footnotes at end of the table.

B—Related Wage Practices—Continued

I—TRAFFIC AND PLANT EMPLOYEES—Continued

Effective date	Provision	Applications, exceptions, and other related matters
<i>Pension Plan (Revised)—Continued</i>		
Dec. 31, 1952.....	<i>Changed:</i> Service pension to be reduced by one-half Federal social security benefits (1) for employees retired before Sept. 1, 1952—by benefits provided by act as amended 1950; (2) for employees retired after Aug. 31, 1952—by benefits in effect on date of retirement.	
Feb. 28, 1959.....	<i>Increased:</i> Minimum pensions, to \$115 a month at age 65 and over and \$85 a month below that age. <i>Changed:</i> Pensions to be based on greater of 1 percent of the average annual pay during the last or highest 5 years.	
Jan. 1, 1961.....	<i>Changed:</i> <i>Minimum pensions</i> , for employees age 65 and over, to (1) \$115 a month for 20 but less than 30 years of service, (2) \$120 for 30 but less than 40 years, and (3) \$125 for 40 years or more.	
Nov. 1, 1963 (agreement dated Oct. 25, 1963).	<i>Added:</i> <i>Eligibility:</i> Any employee age 65 with 15 or more years' service. <i>Added:</i> <i>Minimum pensions:</i> For employees age 65 with less than 20 years' service—to be reduced proportionately. <i>Changed:</i> <i>Service and Disability pensions:</i> Benefits to be reduced by one-third of social security benefits. <i>Added:</i> <i>Survivors' Option:</i> Employee eligible for Class A pension ⁹ could elect actuarially reduced pension and benefit to spouse or parent, at age 55, of one-third of reduced pension after employee's death.	Disability pension to be reduced by one-third disability insurance benefits (1) for employees retired before Nov. 2, 1963—by benefits provided by act in effect on Nov. 1, 1963; (2) for employees retired after Nov. 1, 1963—by benefits in effect on date of retirement. Widow of employee eligible for Class A pension who died before retirement to receive annuitant's pension at age 55.

Sick leave

Oct. 5, 1953 (agreement dated Sept. 2, 1953).	<i>Changed to:</i> Pay for scheduled sessions ¹⁰ during first 7 calendar days of absence because of illness or quarantine.	<i>Changed to:</i> <i>Group A:</i> Employees with (1) 2 but less than 5 years' service—pay for all except 1st 4 scheduled sessions, (2) 5 but less than 10 years' service—pay for all except 1st 2 scheduled sessions. <i>Eliminated:</i> Exceptions in Cleveland.
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¹ Formerly reported as Accident, Sickness, and Death Benefits.

² Benefits provided as follows:

Annual basic pay		Amount of insurance			Employee contribution
At least	But less than	Life	Accidental death or disability	Total	
-----	\$2,000	\$2,000	\$2,000	\$4,000	\$0.50
\$2,000	3,000	3,000	3,000	6,000	1.00
3,000	4,000	4,000	4,000	8,000	1.60
\$1,000 steps		and so forth, by— \$1,000 steps		\$2,000 steps	\$0.50 steps

³ Benefits provided as follows:

Annual basic pay		Amount of insurance			Employee contribution
At least	But less than	Life	Accidental death or disability	Total	
-----	\$3,000	\$3,000	\$3,000	\$6,000	\$0.50
\$3,000	4,000	4,000	4,000	8,000	1.00
4,000	5,000	5,000	5,000	10,000	1.50
\$1,000 steps		and so forth, by— \$1,000 steps		\$2,000 steps	\$0.50 steps

⁴ Under the terms of this plan, dependents were separated into 2 classes: Class 1 included the spouse of a regular or retired employee and children under 19 or, if attending school full time, under 23; Class 2 included unmarried children over 19 (or over 23 if at school) and grandchildren, brothers, sisters, parents, grandparents, and parents and grandparents of spouse who were dependent upon participant for support, had resided in participant's house-

hold for at least 6 consecutive months, and had incomes of less than \$1,200 from any source other than participant.

⁵ Benefits provided as follows:

Annual basic pay		Amount of insurance			Employee contribution
At least	But less than	Life	Accidental death or disability	Total	
-----	\$3,000	\$3,000	\$3,000	\$6,000	\$0.40
\$3,000	4,000	4,000	4,000	8,000	.80
4,000	5,000	5,000	5,000	10,000	1.20
\$1,000 steps		and so forth, by— \$1,000 steps		\$2,000 steps	\$0.40 steps

⁶ Blue Shield benefits vary according to States, but for the most part are similar to benefits provided in the New York Plan.

⁷ Fee per day of routine care:
1st through 7th day—\$7
8th through 14th day—\$6
15th through 70th day—\$5
71st through 120th day—\$4
Fee per day of intensive care (provided in lieu of routine care allowance if serious illness occurred):
1st and 2d day—\$20
3d through 21st day—\$8
22d through 70th day—\$5
71st through 120th day—\$4

⁸ Fee per day for treatment of tuberculosis, nervous and mental conditions, etc.:
1st through 7th day—\$7
8th through 14th day—\$6
15th through 30th day—\$5

⁹ Class A pension applied to employees age 60 or more (females 55 or more) with 20 years or more of service.
¹⁰ Two sessions constitute a tour (or day) of duty.

C—Weekly Salary Rates for Plant Central Office Craftsmen, Selected Cities,¹ 1952–63

City	July 1952		September 1953		October 1954		November 1955		December 1956		January 1958	
	Mini- mum	Maxi- mum ²	Mini- mum	Maxi- mum ²	Mini- mum	Maxi- mum ²	Mini- mum	Maxi- mum ²	Mini- mum	Maxi- mum ²	Mini- mum	Maxi- mum ²
Atlanta	\$40.00	\$89.50	\$42.00	\$92.50	\$42.00	\$95.00	\$44.00	\$99.00	\$46.00	\$103.50	\$48.00	\$107.50
Baltimore	42.00	97.50	45.00	100.00	45.00	102.50	47.50	107.00	53.00	112.00	55.50	117.00
Birmingham	40.00	89.50	42.00	92.50	42.00	95.00	44.00	99.00	46.00	103.50	48.00	107.50
Boston	42.00	99.50	43.00	102.00	45.00	106.00	47.00	110.00	50.00	115.00	51.00	118.00
Buffalo	44.00	96.00	45.00	98.50	45.00	100.50	47.00	105.00	51.00	110.00	53.00	113.50
Charleston, W. Va.	43.00	93.00	44.50	96.00	45.00	98.50	47.50	103.50	53.00	109.00	55.50	114.00
Charlotte	40.00	89.50	42.00	92.50	42.00	95.00	44.00	99.00	46.00	103.50	48.00	107.50
Chattanooga	40.00	89.50	42.00	92.50	42.00	95.00	44.00	99.00	46.00	103.50	48.00	107.50
Chicago	43.50	100.00	45.00	103.00	46.00	105.50	48.00	110.50	51.00	115.50	54.00	119.50
Cincinnati	44.00	93.00	46.00	97.50	46.00	100.50	48.50	105.50	52.50	110.50	55.00	115.50
Cleveland	45.00	96.00	47.00	98.50	47.00	100.50	49.50	105.50	53.50	110.50	56.50	115.50
Dallas	44.00	95.00	46.00	98.00	46.00	100.50	50.00	105.50	55.00	110.50	58.00	115.50
Denver	41.50	87.50	44.00	91.00	44.00	93.50	46.50	98.00	50.00	103.00	53.00	108.50
Des Moines	43.00	91.00	45.50	94.50	45.50	97.00	48.00	101.50	51.50	106.50	54.50	111.50
Detroit	44.00	99.00	46.00	101.50	46.00	103.50	48.50	108.50	51.50	113.50	55.50	118.50
Duluth ³												
El Paso	41.50	86.50	43.50	89.00	43.50	91.50	46.00	95.50	50.00	100.00	53.00	105.00
Harrisburg	39.50	94.50	42.00	97.00	42.00	99.50	45.00	106.50	48.00	111.00	51.00	114.50
Hartford	40.00	99.50	41.00	102.00	41.00	104.50	43.00	109.00	46.00	112.50	47.00	117.50
Indianapolis	45.00	92.00	47.50	95.00	47.50	97.50	50.50	102.50	53.50	107.50	56.00	112.00
Kansas City	44.00	95.00	46.00	98.00	46.00	100.50	50.00	105.50	55.00	110.50	58.00	115.50
Knoxville	40.00	89.50	42.00	92.50	42.00	95.00	44.00	99.00	46.00	103.50	48.00	107.50
Little Rock	43.00	86.50	45.00	89.50	45.00	92.00	49.00	96.50	53.00	101.50	56.00	106.50
Louisville	40.00	89.50	42.00	92.50	42.00	95.00	44.00	99.00	46.00	103.50	48.00	107.50
Memphis	40.00	89.50	42.00	92.50	42.00	95.00	44.00	99.00	46.00	103.50	48.00	107.50
Miami	40.00	89.50	42.00	92.50	42.00	95.00	44.00	99.00	46.00	103.50	48.00	107.50
Milwaukee	43.50	92.50	45.50	96.50	45.50	99.50	48.00	104.50	51.00	109.50	54.00	114.50
Minneapolis	43.00	93.50	45.50	96.50	45.50	99.00	48.00	103.50	51.00	108.50	54.50	113.50
Montgomery	38.50	87.50	40.50	90.50	40.50	93.00	42.50	97.00	44.50	101.50	46.50	105.00
Nashville	40.00	89.50	42.00	92.50	42.00	95.00	44.00	99.00	46.00	103.50	48.00	107.50
New Orleans	40.00	89.50	42.00	92.50	42.00	95.00	44.00	99.00	46.00	103.50	48.00	107.50
New York	44.00	104.00	45.00	106.50	45.00	109.00	47.00	114.00	52.00	119.00	54.00	123.00
Newark	44.00	102.00	46.00	104.00	46.00	105.50	48.00	110.00	52.00	114.50	54.00	118.50
Omaha	43.00	91.00	45.50	94.50	45.50	97.00	48.00	101.50	51.50	106.50	54.50	111.50
Philadelphia	41.00	98.50	43.00	101.00	43.00	103.50	46.00	109.50	50.00	114.50	52.00	118.50
Pittsburgh	41.00	98.50	43.00	101.00	43.00	103.50	46.00	109.50	50.00	114.50	52.00	118.50
Reading	39.50	94.50	42.00	97.00	42.00	99.50	45.00	106.50	48.00	111.00	51.00	114.50
Richmond	40.00	92.00	42.00	94.50	42.00	97.00	44.50	101.50	49.50	106.50	53.00	111.50
Salt Lake City	41.50	87.50	43.50	90.00	43.50	92.50	46.00	97.00	50.00	102.00	53.00	107.00
Scranton	39.50	94.50	42.00	97.00	42.00	99.50	45.00	106.50	48.00	111.00	51.00	114.50
St. Louis	44.00	95.00	46.00	98.00	46.00	100.50	50.00	105.50	55.00	110.50	58.00	115.50
Washington, D.C.	45.50	100.00	47.00	102.50	47.00	105.00	49.50	109.50	55.00	114.50	57.50	119.50
Wayne, Pa. ⁴												
White Plains, N.Y. ⁵			45.00	106.50	45.00	109.00	47.00	114.00	52.00	119.00	54.00	123.00

City	June 1959		October 1960		November 1961		November 1962		November 1963	
	Mini- mum	Maxi- mum ²	Mini- mum	Maxi- mum ²	Mini- mum	Maxi- mum ²	Mini- mum	Maxi- mum ²	Mini- mum	Maxi- mum ²
Atlanta	\$51.00	\$112.50	\$53.00	\$117.00	\$57.00	\$120.00	\$59.00	\$124.50	\$61.00	\$129.00
Baltimore	57.50	122.00	59.50	126.50	62.00	129.50	64.00	134.00	66.50	138.50
Birmingham	51.00	112.50	53.00	117.00	57.00	120.00	59.00	124.50	61.00	129.00
Boston	52.50	124.00	54.50	128.50	56.50	131.50	58.50	136.50	60.50	141.50
Buffalo	54.50	118.50	59.00	123.00	63.00	127.00	66.00	132.00	68.00	139.00
Charleston, W. Va.	57.50	119.00	60.00	123.50	63.00	126.50	65.00	131.50	72.00	136.50
Charlotte	51.00	112.50	53.00	117.00	57.00	120.00	59.00	124.50	61.00	129.00
Chattanooga	51.00	112.50	53.00	117.00	57.00	120.00	59.00	124.50	61.00	129.00
Chicago	58.00	125.50	62.50	131.00	65.50	135.00	68.00	140.00	70.50	145.00
Cincinnati	56.50	120.50	58.00	125.00	61.00	128.00	64.00	133.00	66.00	138.00
Cleveland	57.50	120.50	59.50	125.00	61.50	128.00	63.50	133.00	66.00	138.00
Dallas	60.00	120.50	61.50	125.00	63.50	128.00	66.50	133.00	68.50	138.00
Denver	55.00	113.50	57.50	118.00	61.00	121.00	64.00	126.00	67.00	131.00
Des Moines	56.00	116.00	59.50	120.00	62.00	123.00	64.50	127.50	68.00	132.00
Detroit	58.50	123.50	60.50	128.00	63.00	131.00	65.00	136.00	67.50	141.00
Duluth ³	56.00	116.00	59.50	120.00	62.00	123.00	64.50	127.50	68.00	132.00
El Paso	54.50	109.00	57.00	113.00	60.00	116.00	62.50	120.50	65.50	125.00
Harrisburg	53.00	119.50	56.00	124.00	59.00	127.00	63.00	131.50	67.00	136.50
Hartford	48.50	122.50	50.00	127.50	55.50	130.50	57.00	135.50	58.50	140.50
Indianapolis	57.50	117.00	60.00	122.00	62.00	125.00	64.00	130.00	66.00	134.50
Kansas City	60.00	120.50	61.50	125.00	63.50	128.00	66.50	133.00	68.50	138.00
Knoxville	51.00	112.50	53.00	117.00	57.00	120.00	59.00	124.50	61.00	129.00
Little Rock	58.00	110.50	61.50	120.50	63.50	123.50	65.50	128.00	67.50	132.50
Louisville	51.00	112.50	53.00	117.00	57.00	120.00	59.00	124.50	61.00	129.00
Memphis	51.00	112.50	53.00	117.00	57.00	120.00	59.00	124.50	61.00	129.00
Miami	51.00	112.50	53.00	117.00	57.00	120.00	59.00	124.50	61.00	129.00
Milwaukee	56.00	119.50	61.00	124.00	63.00	127.00	65.00	132.00	67.00	137.00
Minneapolis	56.00	118.50	59.50	143.00	63.00	126.00	66.50	131.00	70.00	136.00
Montgomery	49.50	110.00	51.50	114.00	55.50	117.00	57.50	121.50	59.50	125.50
Nashville	51.00	112.50	53.00	117.00	57.00	120.00	59.00	124.50	61.00	129.00
New Orleans	51.00	112.50	53.00	117.00	57.00	120.00	59.00	124.50	61.00	129.00
New York	55.50	128.00	60.50	132.50	64.00	135.50	66.00	140.50	68.00	147.50
Newark	55.50	123.50	58.00	129.00	60.00	132.00	65.00	137.00	67.50	142.00
Omaha	56.00	116.00	59.50	120.00	62.00	123.00	64.50	127.50	68.00	132.00
Philadelphia	54.00	123.00	57.00	127.50	60.00	130.50	65.00	135.50	70.00	140.50

See footnotes at end of table.

C—Weekly Salary Rates for Plant Central Office Craftsmen, Selected Cities,¹ 1953-63—Continued

City	June 1959		October 1960		November 1961		November 1962		November 1963	
	Mini- mum	Maxi- mum ²	Mini- mum	Maxi- mum ²	Mini- mum	Maxi- mum ²	Mini- mum	Maxi- mum ²	Mini- mum	Maxi- mum ²
Pittsburgh.....	\$54.00	\$123.00	\$57.00	\$127.50	\$60.00	\$130.50	\$65.00	\$135.50	\$70.00	\$140.50
Reading.....	53.00	119.50	65.00	124.00	59.00	127.00	63.00	131.50	67.00	136.50
Richmond.....	55.00	116.50	57.00	121.00	60.00	124.00	62.00	128.50	65.00	133.00
Salt Lake City.....	54.50	111.50	57.00	115.50	60.50	118.50	63.00	123.00	66.00	127.50
Seranton.....	53.00	119.50	56.00	124.00	59.00	127.00	63.00	131.50	67.00	136.50
St. Louis.....	60.00	120.50	61.50	125.00	63.50	128.00	66.50	133.00	⁶ 68.50	⁷ 138.00
Washington, D.C.....	59.50	124.50	61.50	129.00	64.50	132.00	66.50	137.00	72.00	142.00
Wayne, Pa. ⁴	54.00	123.00	57.00	127.50	60.00	130.50	65.00	135.50	70.00	140.50
White Plains, N.Y. ⁵	55.50	128.00	60.50	132.50	64.00	135.50	66.00	140.50	68.00	147.50

¹ Cities with populations of 200,000 or more with plant central office craftsmen.

² Time required to reach maximum rate for plant central office craftsmen reduced from 6½ years to 6 years effective Sept. 2, 1953.

³ Plant central office craftsmen were first employed in Duluth in 1958.

⁴ Plant central office craftsmen were first employed in Wayne, Pa., in 1956.

⁵ Plant central office craftsmen were first employed in White Plains, N.Y., in 1953.

⁶ Rate increased an additional \$1 effective Feb. 9, 1964.

⁷ Rate increased an additional \$3 effective Feb. 9, 1964.

D—Weekly Salary Rates for Traffic Central Office Employees, Selected Cities, 1952-63

City	Operator											
	July 1952		Sept. 1953		Oct. 1954		Nov. 1955		Dec. 1956		Jan. 1958	
	Mini- mum	Maxi- mum ¹	Mini- mum	Maxi- mum ¹	Mini- mum	Maxi- mum ¹	Mini- mum	Maxi- mum ¹	Mini- mum	Maxi- mum ¹	Mini- mum	Maxi- mum ¹
Boston.....	\$37.50	\$57.50	\$39.00	\$59.00	\$39.00	\$61.50	\$41.00	\$64.00	\$44.00	\$66.50	\$46.00	\$69.00
Buffalo.....	41.00	58.50	42.00	60.00	42.00	61.50	44.00	63.50	(?)			
Chicago.....	42.00	60.00	44.00	62.00	46.00	64.00	48.00	66.50	51.50	69.50	54.00	72.50
Cincinnati.....	39.00	58.00	42.00	60.50	42.00	62.50	44.50	65.00	48.50	68.00	51.00	71.00
Cleveland.....	43.00	58.50	45.00	60.50	45.00	62.00	47.00	64.50	51.50	67.50	54.50	70.50
Detroit.....	44.00	61.50	46.00	63.00	46.00	64.50	48.50	67.50	51.50	70.50	55.50	73.50
Hillsboro, Mo. ³												
Kansas City.....	40.00	56.50	42.00	58.50	42.00	60.00	44.50	63.00	47.50	66.00	50.50	69.00
Louisville.....	36.50	55.00	38.00	57.00	38.00	58.50	40.00	61.00	43.00	63.50	45.00	66.00
Memphis.....	36.50	55.00	38.00	57.00	38.00	58.50	40.00	61.00	43.00	63.50	45.00	66.00
Minneapolis.....	39.00	56.50	41.00	58.50	41.00	60.00	43.00	62.50	46.00	65.50	49.00	68.50
Monrovia, Calif. ³												
New York.....	42.00	60.50	43.00	62.50	43.00	64.00	45.00	66.50	48.00	69.50	51.00	72.00
Philadelphia.....	40.00	57.00	42.00	59.00	42.00	60.50	44.00	63.00	46.00	66.00	50.00	68.50
Pittsburgh.....	40.00	57.00	42.00	59.00	42.00	60.50	44.00	63.00	46.00	66.00	50.00	68.50
Rockdale, Ga. ³												
St. Louis.....	40.00	56.50	42.00	59.00	42.00	60.50	44.50	63.50	47.50	66.50	50.50	69.50
Wayne, Pa. ⁵									46.00	66.00	50.00	68.50
White Plains, N.Y. ⁵			43.00	62.50	43.00	64.00	45.00	66.50	48.00	69.50	51.00	72.00

Operator—Continued

	June 1959		Oct. 1960		Nov. 1961		Nov. 1962		Nov. 1963	
	Mini- mum	Maxi- mum ¹	Mini- mum	Maxi- mum ¹	Mini- mum	Maxi- mum ¹	Mini- mum	Maxi- mum ¹	Mini- mum	Maxi- mum ¹
Boston.....	\$49.00	\$72.50	\$51.00	\$75.00	\$54.00	\$77.00	\$56.00	\$80.00	\$58.00	\$83.00
Buffalo.....										
Chicago.....	55.50	76.50	57.00	79.00	59.50	81.00	61.50	84.00	64.00	87.00
Cincinnati.....	52.50	74.00	54.00	76.50	57.00	78.50	59.00	81.50	61.00	84.50
Cleveland.....	55.50	73.50	57.50	76.00	60.50	78.00	62.50	81.00	65.00	84.50
Detroit.....	58.50	76.50	60.50	79.00	63.00	81.00	65.00	84.00	67.50	87.00
Hillsboro, Mo. ³							56.00	75.00	59.50	79.00
Kansas City.....	52.50	72.00	54.00	74.50	55.50	76.50	57.50	79.50	59.50	82.50
Louisville.....	46.50	70.00	48.50	72.50	51.00	74.50	53.00	77.00	55.00	79.50
Memphis.....	46.50	70.00	48.50	72.50	51.00	74.50	53.00	77.00	55.00	79.50
Minneapolis.....	50.00	71.50	52.00	74.00	54.50	76.00	56.50	79.00	(?)	(?)
Monrovia, Calif. ³							53.50	70.00	55.50	72.50
New York.....	52.00	75.00	57.00	78.00	60.00	⁴ 80.00	63.00	84.00	65.00	88.00
Philadelphia.....	52.00	71.50	59.00	74.50	61.00	⁴ 76.50	63.00	80.50	65.00	83.50
Pittsburgh.....	52.00	71.50	59.00	74.50	61.00	⁴ 76.50	63.00	80.50	65.00	83.50
Rockdale, Ga. ³							51.00	73.50	53.00	76.00
St. Louis.....	52.50	72.50	54.00	75.00	55.50	77.00	57.50	80.00	⁸ 59.50	⁹ 83.00
Wayne, Pa. ⁵	52.00	71.50	59.00	74.50	61.00	⁴ 76.50				
White Plains, N.Y. ⁵	52.00	75.00	57.00	78.00	60.00	⁴ 80.00	63.00	84.00	65.00	88.00

See footnotes at end of table.

D—Weekly Salary Rates for Traffic Central Office Employees, Selected Cities, 1952-63—Continued

City	Junior service assistant										
	July 1952	Sept. 1953	Oct. 1954	Nov. 1955	Dec. 1956	Jan. 1958	June 1959	Oct. 1960	Nov. 1961	Nov. 1962	Nov. 1963
	Maximum										
Boston	\$59.50	\$61.00	\$63.50	\$66.00	\$68.50	\$71.00	\$74.50	\$77.00	\$79.00	\$82.00	\$85.00
Buffalo	60.50	62.00	63.50	65.50							
Chicago	62.00	64.00	66.00	68.50	71.50	74.50	78.50	81.00	83.00	86.00	89.00
Cincinnati	60.00	62.50	64.50	67.00	70.00	73.00	76.00	78.50	80.50	83.50	86.50
Cleveland	60.50	62.50	64.00	66.50	69.50	72.50	75.50	78.00	80.00	83.00	86.50
Detroit	63.50	65.00	66.50	69.50	72.50	75.50	78.50	81.00	83.00	86.00	89.00
Hillsboro, Mo. ¹											
Kansas City	58.50	60.50	62.00	65.00	68.00	71.00	74.00	76.50	78.50	81.50	84.50
Louisville	57.00	59.00	60.50	63.00	65.50	68.00	72.00	74.50	76.50	79.00	81.50
Memphis	57.00	59.00	60.50	63.00	65.50	68.00	72.00	74.50	76.50	79.00	81.50
Minneapolis	58.50	60.50	62.00	64.50	67.50	70.50	73.50	76.00	78.00	81.00	
Monrovia, Calif. ²											
New York	62.50	64.50	66.00	68.50	71.50	74.00	77.00	80.00	⁴ 82.00	86.00	90.00
Philadelphia	59.00	61.00	62.50	65.00	68.00	70.50	73.50	76.50	⁴ 78.50	82.50	85.50
Pittsburgh	59.00	61.00	62.50	65.00	68.00	70.50	73.50	76.50	⁴ 78.50	82.50	85.50
Rockdale, Ga. ³											
St. Louis	58.50	61.00	62.50	65.50	68.50	71.50	74.50	77.00	79.00	82.00	85.00
Wayne, Pa. ⁵					68.00	70.50	73.50	76.50	⁴ 78.50		
White Plains, N. Y. ⁶		64.50	66.00	68.50	71.50	74.00	77.00	80.00	⁴ 82.00	86.00	90.00
City	Service assistant										
	July 1952	Sept. 1953	Oct. 1954	Nov. 1955	Dec. 1956	Jan. 1958	June 1959	Oct. 1960	Nov. 1961	Nov. 1962	Nov. 1963
	Maximum										
Boston	\$66.50	\$68.00	\$70.50	\$73.00	\$75.50	\$78.00	\$81.50	\$84.50	\$86.50	\$90.00	\$93.00
Buffalo	67.50	69.00	71.50	73.50							
Chicago	69.00	71.00	73.00	75.50	78.50	81.50	85.50	89.00	91.00	94.00	97.00
Cincinnati	67.00	69.50	71.50	74.00	77.00	80.00	83.00	86.50	88.50	91.50	94.50
Cleveland	67.50	69.50	71.00	73.50	76.50	79.50	82.50	85.00	88.00	91.00	94.50
Detroit	70.50	72.00	73.50	76.50	79.50	82.50	85.50	89.00	91.00	94.00	97.00
Hillsboro, Mo. ¹											
Kansas City	65.50	67.50	69.00	72.00	75.00	78.00	81.00	83.50	86.50	89.50	92.50
Louisville	64.00	66.00	67.50	70.00	72.50	75.00	79.00	81.50	83.50	86.50	89.00
Memphis	64.00	66.00	67.50	70.00	72.50	75.00	79.00	81.50	83.50	86.50	89.00
Minneapolis	65.50	67.50	69.00	71.50	74.50	77.50	80.50	83.00	85.50	89.00	
Monrovia, Calif. ²											
New York	69.50	71.50	74.00	76.50	79.50	82.00	85.00	88.00	⁴ 90.00	94.00	98.00
Philadelphia	66.00	68.00	70.50	73.00	76.00	78.50	81.50	84.50	⁴ 86.50	90.50	93.50
Pittsburgh	66.00	68.00	70.50	73.00	76.00	78.50	81.50	84.50	⁴ 86.50	90.50	93.50
Rockdale, Ga. ³											
St. Louis	65.50	68.00	69.50	72.50	75.50	78.50	81.50	84.00	87.00	90.00	93.00
Wayne, Pa. ⁵					76.00	78.50	81.50	84.50	⁴ 86.50		
White Plains, N. Y. ⁶		71.50	74.00	76.50	79.50	82.00	85.00	88.00	⁴ 90.00	94.00	98.00
City	Service observer										
	July 1952	Sept. 1953	Oct. 1954	Nov. 1955	Dec. 1956	Jan. 1958	June 1959	Oct. 1960	Nov. 1961	Nov. 1962	Nov. 1963
	Maximum										
Boston	\$65.50	\$68.00	\$70.50	\$73.00	\$75.50	\$78.00	\$81.50	\$84.50	\$86.50	\$90.00	\$93.00
Buffalo	67.50	69.00	71.50	73.50							
Chicago	69.00	71.00	73.00	75.50	78.50	81.50	85.50	88.00	91.00	94.00	97.00
Cincinnati	66.00	69.50	71.50	74.00	77.00	80.00	83.00	85.50	87.50	91.50	94.50
Cleveland	66.50	69.50	71.00	73.50	76.50	79.50	82.50	85.00	88.00	91.00	94.50
Detroit	69.50	72.00	73.50	76.50	79.50	82.50	85.50	88.00	91.00	94.00	97.00
Hillsboro, Mo. ¹											
Kansas City	64.50	67.50	69.00	72.00	75.00	78.00	81.00	83.50	86.50	89.50	92.50
Louisville	64.00	66.00	67.50	70.00	72.50	75.00	79.00	81.50	83.50	86.50	89.00
Memphis	64.00	66.00	67.50	70.00	72.50	75.00	79.00	81.50	83.50	86.50	89.00
Minneapolis	64.50	67.50	69.00	71.50	74.50	77.50	80.50	83.00	85.00	89.00	
Monrovia, Calif. ²											
New York	69.50	71.50	74.00	76.50	79.50	82.00	85.00	88.00	⁴ 90.00	94.00	98.00
Philadelphia	65.00	68.00	69.50	72.00	75.00	77.50	80.50	83.50	⁴ 85.50	89.50	92.50
Pittsburgh	65.00	68.00	69.50	72.00	75.00	77.50	80.50	83.50	⁴ 85.50	89.50	92.50
Rockdale, Ga. ³											
St. Louis	64.50	68.00	69.50	72.50	75.50	78.50	81.50	84.00	87.00	90.00	⁹ 93.00
Wayne, Pa. ⁵					76.00	78.50	81.50	84.50	⁴ 86.50		
White Plains, N. Y. ⁶		71.50	74.00	76.50	79.50	82.00	85.00	88.00	⁴ 90.00	94.00	98.00

¹ Time required to reach maximum rates for operators reduced from 6½ years to 6 years effective Sept. 2, 1953, and to 5½ years effective Nov. 9, 1961.

² Traffic employees were not employed in Buffalo by the Long Lines Department after May 6, 1956.

³ Traffic employees were first employed in Hillsboro, Monrovia, and Rockdale in 1961.

⁴ Maximum rate increased an additional \$1 effective May 6, 1962.

⁵ Traffic employees, except service observers, were employed in Wayne only for the period 1956-62. Service observers were not employed in Wayne.

⁶ Traffic employees were first employed in White Plains in 1953.

⁷ Traffic employees were not employed in Minneapolis by the Long Lines Department after Mar. 2, 1963.

⁸ Rate increased an additional 50 cents effective Feb. 9, 1964.

⁹ Rate increased an additional \$2 effective Feb. 9, 1964.

E—Weekly Salary Rates for Clerical Employees, Selected Groups and Cities,¹ 1952-63

City	July 1952			September 1953			October 1954			November 1955		
	Minimum	Maximum		Minimum	Maximum		Minimum	Maximum		Minimum	Maximum	
		Group 3 ²	Group 4 ²		Group 3 ²	Group 4 ²		Group 3 ²	Group 4 ²		Group 3 ²	Group 4 ²
Atlanta	\$39.00	\$57.00	\$60.00	\$40.50	\$59.00	\$62.00	\$40.50	\$60.50	\$63.50	\$42.50	\$62.50	\$66.00
Baltimore	39.00		64.00	40.50		66.00	40.50		67.00	43.00		69.50
Birmingham	39.00	57.00	60.00	40.50	59.00	62.00	40.50	60.50	63.50	42.50	62.50	66.00
Boston	37.50	54.00	60.50	39.00	55.50	62.00	39.00	57.00	63.50	41.00	59.00	65.50
Buffalo	41.00	55.00	60.50	42.00	56.50	62.00	42.00	58.00	63.50	44.00	60.00	65.50
Charleston	38.50		60.50	39.00		62.50	39.00		64.00	41.00		66.50
Charlotte	39.00	57.00	60.00	40.50	59.00	62.00	40.50	60.50	63.50	42.50	62.50	66.00
Chatanooga	39.00		60.00	40.50		62.00	40.50		63.50	42.50		66.00
Chicago	43.00	61.50	67.00	45.00	63.50	69.00	46.00	65.50	71.00	48.00	67.50	73.50
Cincinnati	39.00	53.50	60.00	42.00	55.50	62.50	42.00	58.00	65.50	44.50	60.50	68.00
Cleveland	43.00	57.00	61.50	45.00	59.00	63.50	45.00	60.50	65.00	47.50	63.00	67.50
Dallas	40.00	53.00	61.50	42.00	55.00	62.50	42.00	56.50	64.00	44.50	59.50	67.00
Denver	40.00	56.50	59.50	42.00	59.00	62.00	42.00	60.50	63.50	44.00	63.00	66.00
Des Moines	39.00		60.00	42.00		62.00	42.00		63.50	44.00		66.00
Detroit	44.00	60.00	67.00	46.00	61.50	68.50	46.00	62.50	69.50	48.50	65.00	72.50
Duluth												
El Paso	40.00		59.50	41.50		61.50	41.50		63.00	43.50		65.00
Harrisburg	38.00	54.50	61.50	40.00	56.50	63.50	40.00	57.50	64.50	42.00	59.50	67.00
Hartford	38.00		60.50	39.00		62.00	39.00		63.50	41.00		65.50
Houston							42.00		64.00	44.50		67.00
Indianapolis	40.50	56.50	60.50	42.00	57.50	61.50	42.00	58.50	63.00	44.50	60.50	65.00
Kansas City	40.00	53.00	60.50	42.00	55.00	62.50	42.00	56.50	64.00	44.50	59.50	67.00
Knoxville	39.00		60.00	40.50		62.00	40.50		63.50	42.50		66.00
Little Rock	39.00		57.00	41.00		59.00	41.00		60.50	43.50		63.50
Los Angeles				47.00		70.00	47.00		71.50	50.00		74.00
Louisville	39.00	57.00	60.00	40.50	59.00	62.00	40.50	60.50	63.50	42.50	62.50	66.00
Memphis	39.00	57.00	60.00	40.50	59.00	62.00	40.50	60.50	63.50	42.50	62.50	66.00
Miami	39.00		60.00	40.50		62.00	40.50		63.50	42.50		66.00
Milwaukee	39.00		57.00	40.50		59.00	40.50		60.50	43.00		63.00
Minneapolis	39.00	56.50	61.00	42.00	58.50	63.00	42.00	60.00	66.00	44.00	62.50	68.50
Montgomery	38.00		57.00	39.50		59.00	39.50		60.50	41.50		62.50
Nashville	39.00	57.00	60.00	40.50	59.00	62.00	40.50	60.50	63.50	42.50	62.50	66.00
New Orleans	39.00		60.00	40.50		62.00	40.50		63.50	42.50		66.00
New York	42.00	58.00	65.50	43.00	60.00	67.50	43.00	61.50	69.00	45.00	64.00	71.50
Newark	44.00	59.50	65.00	45.00	61.00	66.50	45.00	61.50	67.00	47.00	64.00	69.50
Omaha	39.00	54.50	60.00	42.00	56.50	62.00	42.00	58.00	63.50	44.00	60.50	66.00
Philadelphia	40.00	56.00	62.50	42.00	58.00	64.50	42.00	59.50	66.00	44.00	62.00	68.50
Pittsburgh	40.00	56.00	62.50	42.00	58.00	64.50	42.00	59.50	66.00	44.00	62.00	68.50
Reading	38.00		61.50	40.00		63.50	40.00		64.50	42.00		67.00
Richmond	38.50	55.00	62.00	40.00	56.50	63.50	40.00	58.00	65.00	42.00	60.00	67.00
Salt Lake City	40.00		59.50	41.50		61.50	41.50		63.00	43.50		65.50
San Francisco	43.50	62.50	68.00	47.00	64.50	70.00	47.00	66.00	71.50	50.00	68.50	74.00
Scranton	38.00		61.50	40.00		63.50	40.00		64.50	42.00		67.00
Seattle							47.00		71.00	49.00		73.50
St. Louis	40.00	53.00	60.50	42.00	55.00	62.50	42.00	56.50	64.00	44.50	59.50	67.00
Washington, D.C.	43.50	60.00	66.00	45.00	61.50	67.50	45.00	63.00	69.00	47.50	65.50	71.50
Wayne, Pa.												
White Plains, N.Y.				43.00	60.00	67.50	43.00	61.50	69.00	45.00	64.00	71.50

City	December 1956			January 1958			June 1959			October 1960		
	Minimum	Maximum		Minimum	Maximum		Minimum	Maximum		Minimum	Maximum	
		Group 3 ²	Group 4 ²		Group 3 ²	Group 4 ²		Group 3 ²	Group 4 ²		Group 3 ²	Group 4 ²
Atlanta	\$45.50	\$65.00	\$68.50	\$47.50	\$67.50	\$71.00	\$48.50	\$71.00	\$74.50	\$50.00	\$73.50	\$77.00
Baltimore	47.00		72.00	49.50		74.50	50.50		77.00	53.00		79.00
Birmingham	45.50	65.00	68.50	47.50	67.50	71.00	48.50	71.00	74.50	50.00	73.50	77.00
Boston	44.00	61.50	68.00	46.00	66.00	72.50	49.00	69.00	75.50	51.00	71.50	78.00
Buffalo	46.00	62.00	67.50	48.00	64.00	70.00	49.50		72.00	53.50		75.00
Charleston	45.00		70.00	47.50		73.00	50.00		76.00	51.50		78.00
Charlotte	45.50	65.00	68.50	47.50	67.50	71.00	48.50	71.00	74.50	50.00		77.00
Chatanooga	45.50		68.50	47.50		71.00	48.50		74.50	50.00		77.00
Chicago	51.00	70.50	76.50	53.50	73.50	79.50	54.50	76.50	83.00	56.00	78.50	86.00
Cincinnati	48.50	63.50	71.00	51.00	66.50	74.00	52.50	69.50	77.00	54.00	73.50	80.00
Cleveland	51.50	66.00	70.50	54.50	69.00	73.50	55.50	71.00	75.50	57.50	73.00	77.50
Dallas	47.50	62.50	70.00	50.50	65.50	73.00	52.50		76.00	54.00		79.00
Denver	46.50	66.00	69.00	49.00	69.00	72.00	50.50	72.00	75.00	52.00	74.50	77.50
Des Moines	47.00		69.00	50.00		72.00	50.00		76.00	52.00		78.50
Detroit	51.50	68.00	75.50	55.50	71.00	78.50	58.50	74.00	81.50	60.50		84.00
Duluth							50.00		76.00	52.00		78.50
El Paso	45.50		68.00	48.00		71.00	49.50		74.00	51.00		76.50
Harrisburg	44.00	62.00	69.50	46.00	63.50	71.50	49.00	66.50	74.50	51.00	69.00	77.50
Hartford	44.00		68.50	47.00		71.50	48.50		76.00	50.00		77.50
Houston	47.50		70.00	50.50		73.00	52.50		74.50	54.00		79.00
Indianapolis	48.50	62.50	67.50	51.50	64.50	70.00	53.00	67.00	73.00	54.50		75.50
Kansas City	47.50	62.50	70.00	50.50	65.50	73.00	52.50	68.50	76.00	54.00	71.50	79.00
Knoxville	45.50		68.50	47.50		71.00	48.50		74.50	50.00		77.00
Little Rock	46.00		66.50	48.50		69.50	50.50		72.00	54.00		77.50
Los Angeles	55.00		77.00	57.50		80.00	59.50		82.50	64.00		85.50
Louisville	45.50	65.00	68.50	47.50	67.50	71.00	48.50	71.00	74.50	50.00		77.00
Memphis	45.50	65.00	68.50	47.50	67.50	71.00	48.50	71.00	74.50	50.00		77.00
Miami	45.50		68.50	47.50		71.00	48.50		74.50	50.00		77.00

See footnotes at end of table.

E—Weekly Salary Rates for Clerical Employees, Selected Groups and Cities,¹ 1952-63—Continued

City	December 1956			January 1958			June 1959			October 1960		
	Minimum	Maximum		Minimum	Maximum		Minimum	Maximum		Minimum	Maximum	
		Group 3 ²	Group 4 ²		Group 3 ²	Group 4 ²		Group 3 ²	Group 4 ²		Group 3 ²	Group 4 ²
Milwaukee	\$47.00		\$66.50	\$50.00		\$69.50	\$51.50		\$73.00	\$54.50		\$75.50
Minneapolis	47.00	\$65.50	71.50	50.00	\$68.50	74.50	50.00		77.50	52.00		80.00
Montgomery	44.00		64.50	46.00		67.00	47.00		70.00	49.00		72.50
Nashville	45.50	65.00	68.50	47.50	67.50	71.00	48.50	\$71.00	74.50	50.00		77.00
New Orleans	45.50		68.50	47.50		71.00	48.50		74.50	50.00		77.00
New York	48.00	67.00	74.50	51.00	69.00	77.00	52.00	70.50	79.00	55.00	\$74.00	82.00
Newark	49.50	67.00	72.50	51.50	69.50	75.00	52.00	71.50	77.00	53.50		79.50
Omaha	47.00	63.50	69.00	50.00	66.50	72.00	50.00		76.00	52.00		78.50
Philadelphia	46.00	65.00	71.50	48.00	67.50	74.00	50.00	70.00	77.00	53.00	72.00	81.00
Pittsburgh	46.00	65.00	71.50	48.00	67.50	74.00	50.00	70.00	77.00	53.00	72.00	81.00
Reading	44.00		69.50	46.00		71.50	49.00		74.50	51.00		77.50
Richmond	46.00	63.00	70.00	48.50	66.00	73.00	50.50	67.50	76.00	52.00	69.00	78.50
Salt Lake City	45.50		68.50	48.50		71.50	50.50		74.50	52.00		77.00
San Francisco	55.00	70.00	77.00	57.50	72.50	80.00	59.50		82.50	64.00		85.50
Scranton	44.00		69.50	46.00		71.50	49.00		74.50	51.00		77.50
Seattle	53.00		76.50	55.50		79.50	57.00		82.00	59.00		84.50
St. Louis	47.50	62.50	70.00	50.50	65.50	73.00	52.50	68.50	76.00	54.00	71.50	79.00
Washington, D.C.	51.50	68.50	74.50	54.00	71.00	77.00	55.50	73.50	79.50	57.00	76.00	81.50
Wayne, Pa.	46.00	65.00	71.50	48.00	67.50	74.00	50.00	70.00	77.00	53.00	72.00	81.00
White Plains, N.Y.	48.00	67.00	74.50	51.00	69.00	77.00	52.00	70.50	79.00	55.00	74.00	82.00

City	November 1961			November 1962			November 1963		
	Minimum	Maximum		Minimum	Maximum		Minimum	Maximum	
		Group 3 ²	Group 4 ²		Group 3 ²	Group 4 ²		Group 3 ²	Group 4 ²
Atlanta	\$51.50	\$75.00	\$78.50	\$53.50	\$77.00	\$80.50	\$55.50	\$79.00	\$83.00
Baltimore	54.00		80.50	55.50		83.00	57.50		85.00
Birmingham	51.50	75.00	78.50	53.50	77.00	80.50	55.50	79.00	83.00
Boston	53.00	73.00	79.50	55.00	76.00	82.50	57.00	79.00	85.50
Buffalo	55.00		78.00	57.00		81.00	59.00		85.00
Charleston	53.00		79.50	55.00		82.50	57.00		85.00
Charlotte	51.50		78.50	53.50		80.50	55.50		83.00
Chattanooga	51.50		78.50	53.50		80.50	55.50		83.00
Chicago	57.50	80.00	88.00	59.50	83.00	91.00	62.00	86.00	94.00
Cincinnati	56.00	75.00	81.50	59.00	77.50	84.50	61.00	82.00	87.50
Cleveland	59.00	74.50	79.00	61.00	77.50	83.00	63.50	82.50	87.00
Dallas	55.50		81.00	57.50		84.00	59.50		87.00
Denver	55.00	76.00	79.50	57.00	79.00	82.50	59.50	82.00	85.50
Des Moines	53.50		81.50	55.50		84.50	57.50		87.00
Detroit	63.00		85.50	65.00		88.50	67.50		91.50
Duluth	53.50		81.50	55.50		84.50	57.50		87.00
El Paso	54.00		78.50	56.00		81.00	58.50		83.50
Harrisburg	53.00	72.00	79.50	55.00	75.50	82.00	57.00	78.50	85.00
Hartford	55.50		79.50	57.00		82.00	58.50		85.50
Houston	55.50		81.00	57.50		84.00	59.50		87.00
Indianapolis	56.00		77.00	58.00		80.00	59.50		83.00
Kansas City	55.50	73.00	81.00	57.50	76.00	84.00	59.50	79.00	87.00
Knoxville	51.50		78.50	53.50		80.50	55.50		83.00
Little Rock	55.50		79.50	57.50		82.50	59.50		85.00
Los Angeles	68.00		87.50	71.50		90.50	74.50		95.50
Louisville	51.50		78.50	53.50		80.50	55.50		83.00
Memphis	51.50		78.50	53.50		80.50	55.50		83.00
Miami	51.50		78.50	53.50		80.50	55.50		83.00
Milwaukee	57.00		77.00	59.00		80.00	61.00		83.00
Minneapolis	54.50		82.50	56.50		86.00	59.00		89.00
Montgomery	50.50		74.00	52.50		76.00	54.50		78.00
Nashville	51.50		78.50	53.50		80.50	55.50		83.00
New Orleans	51.50		78.50	53.50		80.50	55.50		83.00
New York	56.50	76.00	84.00	58.50	79.00	87.00	60.50	82.00	90.00
Newark	55.00		81.00	57.00		84.00	59.00		87.00
Omaha	53.50		81.50	55.50		84.50	57.50		87.00
Philadelphia	55.00	74.50	83.00	57.00	78.50	86.00	59.00	81.50	89.00
Pittsburgh	55.00	74.50	83.00	57.00	78.50	86.00	59.00	81.50	89.00
Reading	53.00		79.50	55.00		82.00	57.00		85.00
Richmond	53.50	70.50	80.00	55.00	72.50	82.00	57.00	74.00	84.00
Salt Lake City	55.00		79.00	57.00		81.50	59.50		84.00
San Francisco	68.00		87.50	71.50		90.50	74.50		95.50
Scranton	53.00		79.50	55.00		82.00	57.00		85.00
Seattle	62.50		86.00	64.50		89.00	66.50		91.50
St. Louis	55.50	73.00	81.00	57.50	76.00	84.00	59.50	79.00	87.00
Washington, D.C.	58.50	78.00	83.00	60.50	81.50	85.50	66.00	83.50	87.50
Wayne	55.00	74.50	83.00	57.00	78.50	86.00	59.00	81.50	89.00
White Plains	56.50	76.00	84.00	58.50	79.00	87.00	60.50	82.00	90.00

¹ Cities with populations of 200,000 or more with clerical employees.

² Each clerical group is composed of a number of occupations requiring approximately the same skill or degree of responsibility. Group 3 has 4 occupations, among which are file clerks and typists. Group 4 had 20 occupations up to Feb. 10, 1958; 19 up to July 10, 1959; 18 up to Nov. 9, 1960; 16

thereafter, among which are junior draftsmen, payroll clerks, stenographers, and traffic clerks.

³ Rate increased an additional \$0.50 effective Feb. 9, 1964.

⁴ Rate increased an additional \$2 effective Feb. 9, 1964.

NOTE: Dashes indicate no employees in group.

Technical Note

Calculation of Average Retail Food Prices

DORIS P. ROTHWELL*

DATA ON RETAIL PRICES of foods are collected by the Bureau of Labor Statistics primarily for use in measuring month-to-month changes in food prices as a component of the Consumer Price Index. Selection of the specific foods for which prices are obtained and the scope and sources of information have been governed largely by this basic use of the data.

Despite the Bureau's oft-repeated statements that the data are not entirely suitable for making comparisons of food prices between cities, BLS data on food prices are used widely for this purpose and even for comparing the cost of living between cities. The U.S. average prices are used for calculating comparative worktime required to buy foods in different countries and for other international comparisons. They are also basic to the Department of Agriculture's regional food cost plans and to the series on cost of the farm food market basket and farm-retail spread published monthly.

There are many reasons why price data that are valid for compiling the Consumer Price Index do not yield representative and comparable dollars and cents prices. Variations in food habits and in the brands selected among cities cause differences from city to city in computed average prices that do not represent real price differentials for the same quality. Nor are prices collected for the same brand in all outlets. The single price reported to BLS for each store is for the brand selling in largest volume at that particular store; moreover, a provision for shifting from time to time to different volume selling brands is part of the regular index data collection procedure. In addition, different sizes may be priced in different stores. The resulting variations in the proportions of different

brands, sizes, and qualities included, of course affect the reported average prices. Since prices are obtained for the same brand in 2 consecutive months in any one store, it is possible to base the measurement of price change for the index from one month to the next on paired observations of comparable prices for each outlet.

The revision of the Consumer Price Index completed in January 1964 introduced new complications for food prices—especially for individual cities—that have further reduced the suitability of the Bureau's price data for use in computing representative average prices.

In response to insistent requests from many users who protested the BLS initial plan to suspend publication of the 20-city food prices, the Bureau has developed procedures to make possible the regular publication of estimated prices (excluding sales tax) both for the United States and the 12 largest metropolitan areas, for which the sample sizes are considerably larger than in the other cities. The first report of the new series prices was issued for July 1964 and prices from December 1963 through June 1964 were published in a supplemental issue of *Retail Food Prices by Cities* in January 1965.

An explanation of the sampling design and index procedures is necessary for an understanding of the new method of calculation of prices for publication since the calculation makes use of regular steps in the index process.¹

Outlet Sample

For the new index, part of the difference in prices among cities for particular items and in U.S. prices for different items is due to the outlet

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¹The basic formula and principles underlying the calculation of the Consumer Price Index and the food component, as well as the scheme of replicated or matched samples which was developed in order to estimate the precision of the index, are described in "The Statistical Structure of the Revised CPI," in the *Monthly Labor Review*, August 1964, pp. 916-924.

sample design. Two independent item samples have been set up for pricing in different cities and in different outlet samples. The food items included in the two subsamples are indicated in table 1. A listing of cities, together with the diagram of item and outlet samples for food, is shown in table 2. (This diagram is not the same for non-food items, which are priced in many fewer outlets.) The most important items ("certainty items") are included in both item samples and are priced in every city; but the less important foods, which were selected by a probability procedure, are priced in only part of the cities. In the 12 largest cities, both food samples are priced in two subsamples of stores. In other large cities, both item samples are priced but in different subsamples of stores; and in the remaining cities, only 1 of the 2 samples of items is priced. Chain stores are treated as certainty outlets and included in

both store samples. Since only one sample of items is priced in 22 cities (i.e., item sample 1 is priced in 11 cities and item sample 2 in the other 11 cities), U.S. prices for those food items which appear in only one item sample are generally based on a subsample of 39 of the 50 index cities.

Price Collection

Personal visits of BLS agents are made monthly to collect food prices from a sample of chain and independent food stores totaling 1,525 for the 50 cities. These stores were selected by probability methods. Reporting by stores is on a voluntary basis. Collection occurs on Tuesday, Wednesday, and Thursday of a specified week, usually preceding the 15th of the month. Prices are those prevailing on the day of the agent's visit. They are recorded after inspection of items on the shelf and

TABLE 1. ESTIMATED UNITED STATES AVERAGE RETAIL PRICES OF FOOD,¹ DECEMBER 1963 THROUGH NOVEMBER 1964
[Prices in cents]

Group and unit	City sample	1963 Dec.	1964										
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
Cereals and bakery products:													
Flour.....	5 lb. B	55.4	55.9	55.8	55.8	56.1	56.2	56.8	56.6	57.0	57.6	57.4	57.7
Cracker meal.....	8 oz. B	18.7	18.7	18.7	18.7	18.7	18.8	18.8	18.8	18.8	19.0	19.5	19.8
Corn flakes ²	12 oz. A	28.1	28.1	28.1	28.1	28.2	28.6	28.8	28.9	29.0	29.0	28.9	29.0
Rice, short grain ³	lb. A	18.9	18.8	18.7	18.8	18.7	18.7	18.8	18.8	18.7	18.8	18.9	18.8
Rice, long grain ⁴	lb. A	21.7	21.6	21.7	21.7	21.6	21.7	21.7	21.7	21.7	21.7	21.7	21.8
Bread, white.....	lb. A and B	20.6	20.7	20.6	20.6	20.6	20.5	20.6	20.6	20.6	20.8	20.9	20.9
Bread, whole wheat.....	lb. A	26.1	26.0	26.1	26.1	26.1	26.2	26.2	26.2	26.3	26.5	26.5	26.7
Cookies, cream filled.....	lb. B	51.3	51.2	51.1	51.2	51.2	51.1	50.9	50.7	50.8	50.9	50.9	51.2
Meats, poultry, and fish:													
Beef and veal:													
Steak, round.....	lb. A and B	104.1	103.2	103.3	101.8	102.2	101.7	100.4	103.8	103.8	108.6	107.9	105.3
Steak, sirloin ⁵	lb. B	105.8	104.5	106.4	104.4	103.4	103.2	103.4	106.9	107.1	111.4	109.9	107.5
Steak, porterhouse.....	lb. A	123.7	121.8	122.7	120.6	121.2	120.2	120.1	124.2	124.9	127.8	127.1	124.4
Rump roast, boneless ²	lb. A and B	107.2	105.1	105.8	102.5	103.7	103.5	102.0	104.6	103.9	107.5	107.2	105.7
Rib roast ⁶	lb. B	82.7	82.5	83.1	81.2	81.0	80.2	80.2	82.2	82.4	86.6	85.1	84.6
Chuck roast ⁶	lb. A	58.9	57.2	57.4	56.4	55.9	54.6	53.4	54.6	56.0	59.8	59.7	58.5
Hamburger ⁷	lb. A and B	50.7	50.3	49.7	49.0	48.9	48.4	47.9	49.0	49.1	50.6	50.5	50.5
Beef liver.....	lb. B	56.9	56.7	56.4	55.9	55.0	55.3	55.7	55.6	55.7	56.2	55.7	55.5
Veal cutlets ⁸	lb. A	143.1	142.3	143.4	143.6	143.3	142.5	142.2	141.4	141.6	143.0	140.9	140.3
Pork:													
Chops.....	lb. A and B	86.7	85.5	84.9	82.7	83.1	82.7	84.6	91.9	93.8	99.7	93.1	88.4
Loin roast.....	lb. A	60.3	59.4	59.1	58.1	57.6	57.1	58.2	62.7	64.1	68.6	64.9	62.1
Pork sausage ⁹	lb. B	52.1	51.7	51.8	52.0	52.0	51.5	51.0	51.5	52.3	52.8	53.7	53.1
Ham, whole.....	lb. B	61.2	61.6	61.3	60.8	60.0	59.6	59.6	60.6	61.4	61.2	61.8	61.0
Picnics ¹⁰	lb. A	42.3	42.0	41.5	41.4	40.6	40.3	40.3	40.7	41.1	42.5	41.6	41.2
Bacon.....	lb. A and B	65.5	65.1	66.2	65.8	65.8	65.7	65.7	66.4	67.2	69.6	68.5	67.2
Other meats:													
Lamb chops ¹¹	lb. A	129.0	127.5	127.1	128.1	128.4	128.7	131.1	133.7	134.6	137.3	137.0	134.3
Frankfurters.....	lb. A	62.6	62.3	62.2	62.4	61.9	61.9	61.9	62.0	62.0	61.4	62.5	62.6
Ham, canned ¹²	lb. B	93.6	94.7	94.1	93.6	93.1	92.9	92.5	92.4	92.9	91.1	93.1	93.1
Bologna sausage ¹¹	8 oz. B	40.5	40.6	40.9	40.7	41.0	41.0	41.2	40.6	40.9	40.5	40.7	40.8
Salami sausage ¹³	8 oz. A	50.1	49.6	49.9	49.8	50.3	50.8	50.5	50.5	50.3	51.0	50.1	49.9
Poultry:													
Frying chicken.....	lb. A and B	38.5	37.6	37.6	37.2	37.0	36.9	37.9	38.7	37.9	38.1	38.3	38.1
Chicken breasts ¹⁰	lb. A	67.2	66.4	66.2	65.8	64.3	65.0	65.3	66.6	65.8	65.7	66.0	65.4
Turkey ¹⁰	lb. B	47.3	47.5	46.8	47.0	46.7	46.8	46.9	47.1	46.7	45.9	46.5	47.0
Fish:													
Shrimp, frozen ¹²	10 oz. B	71.8	69.7	69.6	68.4	68.0	67.3	66.7	66.0	66.2	66.6	67.3	67.8
Ocean perch fillet, frozen ¹⁴	lb. A	52.7	53.0	53.1	53.1	53.0	52.7	53.0	52.7	52.5	52.6	52.5	52.8
Haddock fillet, frozen ¹⁵	lb. A	59.4	59.4	60.4	60.4	60.5	60.5	60.3	60.3	60.6	60.5	60.5	60.4
Tuna fish, canned ⁶	6½-oz. can. A	31.3	31.7	31.8	31.7	31.8	31.9	31.8	32.1	32.1	32.1	32.3	32.5
Sardines, canned ⁹	4-oz. flat can. B	13.3	13.3	13.3	13.0	13.1	13.0	13.0	13.0	12.9	12.9	13.2	13.4
Dairy products:													
Milk, fresh, grocery.....	½ gal. A and B	48.1	48.0	47.9	47.6	47.3	47.2	47.2	47.5	47.5	47.7	48.1	48.0
Milk, fresh, delivered.....	½ gal. A and B	53.0	53.0	53.0	52.8	52.5	52.3	52.3	52.9	53.1	53.0	52.8	52.8
Milk, fresh, skim.....	qt. A	22.1	22.2	22.1	22.0	22.0	21.9	21.9	22.0	22.1	22.2	22.3	22.3
Milk, evaporated.....	14½-oz. can. B	14.9	14.9	14.9	14.9	14.8	14.9	14.9	14.8	14.8	14.8	14.8	15.0
Ice cream.....	½ gal. A	82.1	82.0	80.8	81.3	81.1	80.9	81.1	80.7	80.0	79.1	79.2	79.0
Cheese, American process.....	8 oz. B	36.2	36.4	36.6	36.7	36.6	36.6	36.6	36.4	36.5	36.5	37.0	37.4
Butter.....	lb. A and B	73.8	73.7	73.8	73.9	73.9	73.8	73.8	73.7	73.9	74.4	75.6	75.7

See footnotes at end of table.

TABLE 1. ESTIMATED UNITED STATES AVERAGE RETAIL PRICES OF FOOD,¹ DECEMBER 1963 THROUGH NOVEMBER 1964—Con.

[Prices in cents]

Group and unit	City sample	1963 Dec.	1964										
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
Fruits and vegetables:													
Fresh fruits and vegetables:													
Apples ⁷lb.	A and B...	15.1	15.4	16.0	16.3	17.5	18.9	21.5	22.8	21.9	18.4	14.7	14.2
Bananas.....lb.	A and B...	15.2	15.4	16.2	16.2	16.7	17.9	16.8	17.0	16.7	16.3	17.1	15.5
Oranges, size 200.....doz.	A and B...	82.6	78.7	77.8	78.3	83.5	83.5	83.4	88.1	93.8	97.9	104.2	99.5
Orange juice, fresh ¹⁸qt.	A.....	50.4	50.4	50.8	50.9	50.7	50.4	50.6	50.8	51.0	50.8	50.6	50.7
Grapefruit, size 80.....each.	A.....	12.5	12.8	13.2	13.5	13.9	15.7	17.2	17.7	17.4	17.9	19.4	14.9
Grapes, seedless ⁷lb.	A and B...	(16) ¹⁶	(16) ¹⁶	(16) ¹⁶	(16) ¹⁶	(16) ¹⁶	(16) ¹⁶	(16) ¹⁶	(16) ¹⁶	44.4	32.5	25.4	27.4
Strawberries.....pt.	B.....	(16) ¹⁶	(16) ¹⁶	(16) ¹⁶	(16) ¹⁶	38.5	36.4	31.8	(16) ¹⁶	(16) ¹⁶	(16) ¹⁶	(16) ¹⁶	(16) ¹⁶
Watermelon.....lb.	B.....	(16) ¹⁶	(16) ¹⁶	(16) ¹⁶	(16) ¹⁶	(16) ¹⁶	(16) ¹⁶	7.8	5.7	4.8	(16) ¹⁶	(16) ¹⁶	(16) ¹⁶
Potatoes.....10 lb.	A and B...	59.8	59.8	61.0	61.7	66.8	72.8	88.2	100.1	89.6	77.6	72.6	77.7
Onions.....lb.	B.....	11.4	11.4	11.4	11.6	11.5	11.1	11.3	11.5	11.5	10.7	10.8	10.8
Asparagus.....lb.	A.....	(16) ¹⁶	(16) ¹⁶	(16) ¹⁶	39.7	34.4	30.8	29.0	30.9	(16) ¹⁶	(16) ¹⁶	(16) ¹⁶	(16) ¹⁶
Cabbage.....lb.	B.....	8.4	10.4	11.0	10.2	9.9	10.1	11.1	10.4	9.7	10.0	10.2	9.8
Carrots ²lb.	A.....	14.9	15.5	14.6	14.0	13.7	13.7	15.0	15.6	15.6	15.5	15.1	15.1
Celery ²lb.	B.....	13.6	15.5	15.7	18.2	16.5	14.3	14.8	17.3	15.0	15.0	15.3	15.6
Cucumbers.....lb.	A.....	18.3	24.3	30.4	37.4	27.0	19.5	22.8	20.0	17.5	17.4	19.7	29.0
Lettuce, size 24.....head	A and B...	25.7	28.7	28.4	27.4	21.7	20.7	22.8	21.5	22.9	23.9	24.8	23.6
Peppers, green.....lb.	B.....	25.7	35.5	37.4	34.6	40.2	38.9	41.9	35.4	29.7	25.2	25.2	36.2
Spinach ¹⁷lb.	A.....	26.8	28.2	27.0	27.1	27.2	26.9	27.5	29.7	28.5	29.3	29.7	27.9
Tomatoes.....lb.	A and B...	41.5	37.4	34.8	35.5	38.3	36.8	32.8	35.5	28.2	22.8	25.1	28.2
Processed fruits and vegetables:													
Fruit cocktail.....#303 can	B.....	26.5	26.9	27.2	27.5	27.7	27.9	28.1	28.1	27.4	27.1	26.8	26.5
Pears.....#2½ can	A.....	47.0	47.4	48.5	49.2	49.6	50.1	50.5	50.9	50.8	49.8	48.6	48.1
Pineapple-grapefruit juice drink ² 46-oz. can	B.....	34.3	34.6	34.3	34.4	34.5	34.5	34.7	34.5	34.3	34.4	34.1	34.1
Orange juice concentrate.....6-oz. can	B.....	32.3	32.3	32.5	32.4	32.4	31.4	30.6	30.5	30.3	30.3	30.1	29.8
Lemonade concentrate, frozen.....6-oz. can	A.....	14.7	14.8	14.9	14.8	14.8	14.3	13.6	13.3	13.1	12.9	13.2	13.3
Beets.....#303 can	A.....	16.9	17.0	16.9	16.7	16.7	16.7	16.8	16.7	16.5	16.5	16.5	16.6
Peas, green.....#303 can	B.....	22.6	22.6	22.7	22.7	22.8	22.8	22.7	22.7	22.7	22.7	22.6	22.6
Tomatoes ¹¹#303 can	A.....	16.0	15.9	15.9	15.8	15.9	15.9	16.0	16.1	16.1	16.1	16.0	16.0
Dried beans ²lb.	A.....	16.7	16.7	16.7	16.6	16.6	16.7	16.7	16.7	16.7	16.7	16.6	16.7
Broccoli, frozen.....10 oz.	B.....	27.7	27.8	27.7	27.6	27.5	27.1	27.2	27.0	26.9	26.6	26.5	26.6
Other foods at home:													
Eggs, grade A, large.....doz.	A and B...	56.5	60.2	57.6	53.0	51.5	48.4	47.3	49.9	53.2	59.5	56.9	55.9
Fats and oils:													
Margarine ⁷lb.	A and B...	26.1	26.1	26.0	25.9	26.1	26.1	26.0	26.1	25.9	25.8	26.0	26.1
Salad dressing, Italian ²8 oz.	A.....	37.1	37.2	37.2	37.3	37.2	37.4	37.5	37.1	37.2	36.7	36.7	36.5
Salad or cooking oil.....pt.	B.....	32.4	32.5	32.5	32.0	31.8	31.8	31.8	31.7	31.6	31.7	31.8	32.0
Sugar and sweets:													
Sugar.....5 lb.	A.....	70.8	71.3	72.8	70.2	67.5	66.1	63.8	61.1	60.3	59.6	58.9	58.6
Grape jelly ²12 oz.	B.....	30.5	30.8	30.8	30.8	30.9	31.0	31.0	31.2	31.4	31.4	31.4	31.4
Chocolate bar.....1 oz.	A.....	5.0	5.0	5.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
Syrup, chocolate flavored.....16 oz.	B.....	23.1	23.2	23.2	23.1	23.2	23.2	23.2	23.0	22.9	23.0	23.1	23.0
Nonalcoholic beverages:													
Coffee.....1-lb. can	A and B...	69.5	71.1	74.1	78.3	80.9	82.4	83.9	84.4	84.9	84.9	84.6	84.9
Coffee ¹⁸1-lb. bag	A and B...	56.6	58.1	60.6	65.1	70.0	72.2	72.7	72.9	73.3	72.2	72.9	72.2
Coffee, instant.....6 oz.	B.....	91.6	94.4	99.1	104.3	107.9	109.9	110.7	110.3	110.2	109.9	108.1	107.9
Tea bags.....pkg. of 48.	A.....	62.6	62.9	62.2	61.6	61.8	62.3	62.5	62.8	62.5	62.2	61.9	61.8
Cola drink.....carton 72-oz.	B.....	53.9	54.0	54.1	54.0	54.0	53.8	54.3	54.3	54.5	54.0	54.3	54.4
Carbonated drinks ¹⁹carton 72-oz.	A.....	52.8	52.7	52.7	52.7	52.8	53.0	53.3	53.8	53.9	53.9	53.7	53.8
Prepared and partially prepared foods:													
Bean soup ⁹11¼-oz. can	A.....	14.9	14.8	14.9	14.8	14.8	14.8	14.7	14.8	14.7	14.8	14.8	14.7
Chicken soup.....10½-oz. can	B.....	18.3	18.3	18.3	18.2	18.3	18.2	18.2	18.2	18.2	18.2	18.2	18.2
Spaghetti.....15½-oz. can	A.....	15.0	15.1	15.0	15.0	15.0	15.0	15.1	15.2	15.1	15.1	15.1	15.2
Mashed potatoes, instant.....7 oz.	A.....	35.4	35.2	35.0	34.9	34.6	34.6	34.6	34.7	34.7	34.6	34.8	34.7
Potatoes, french fried, frozen.....9 oz.	A.....	17.1	17.0	17.0	16.9	16.9	16.8	16.7	16.5	16.5	16.2	16.2	16.2
Baby foods.....4½-oz. can	B.....	10.6	10.6	10.6	10.6	10.6	10.7	10.6	10.6	10.6	10.6	10.6	10.5
Sweet pickle relish ⁶12 oz.	B.....	31.2	31.2	31.3	31.3	31.3	31.4	31.3	31.2	31.3	31.3	31.3	31.4
Pretzels ⁹8 oz.	B.....	31.1	31.3	31.3	31.3	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.7

¹ Computed from April 1964 benchmark prices from the new series samples. Old series prices from December 1963 through June 1964 were published in monthly issues of *Retail Food Prices by Cities*.
² Average of prices in 38 cities.
³ Average of prices in 15 cities.
⁴ Average of prices in 23 cities.
⁵ 36 cities through August; 37 cities September through November.
⁶ Average of prices in 37 cities.
⁷ Average of prices in 49 cities.
⁸ Average of prices in 29 cities.
⁹ Average of prices in 36 cities.
¹⁰ Average of prices in 35 cities.

¹¹ Average of prices in 28 cities.
¹² Average of prices in 30 cities.
¹³ Average of prices in 34 cities.
¹⁴ 31 cities December through August; 32 cities September through November.
¹⁵ Average of prices in 27 cities.
¹⁶ Priced only in season.
¹⁷ Average of prices in 19 cities.
¹⁸ Priced only in chain stores in 46 cities.
¹⁹ 37 cities December through August; 39 cities September through November.

the price markings. Many chains and supermarkets post lower weekend prices beginning Thursday. First-of-the-week prices are obtained for stores priced on Tuesday and Wednesday, before weekend specials are offered. If the lower weekend prices apply to the particular quality and brand previously selected for pricing, they are in-

cluded for stores priced on Thursday—about 47 percent of the total weight, or 73 percent of the chain store weight. The city averages, therefore, reflect prices for the week as a whole.

In selecting the item to be priced, the agent relies on a manual of specifications or descriptions defining the quality or grade and size range for

each food.² Many of these specifications permit the pricing of deviations from specified quality, if necessary. During the initial visit, prices are obtained for each store, if possible, for the brand and size within the preferred specification which has been selling in greatest volume in the outlet during recent months. At subsequent visits, the agent prices the identical item if it is still sold in volume. If it is unavailable, another item is substituted. Also, if another item meeting specification outsells the one originally selected by as much as 2 to 1 over an extended period of time, the agent substitutes the new item. The prices of this substitute item are compared directly with those of the previous item.

If an item of the preferred quality and exact container size specified is not available, the agent may substitute the price of a deviating item or the nearest available size. This flexibility in specification pricing was introduced in the 1964 revision to make possible the use of prices for the particu-

lar item sold in a store in preference to shifting to another store. This flexibility is a desirable adjunct of probability sampling of outlets,³ but it has increased the spread in prices. Special computation and linking techniques insure that price differences traceable to quality differences do not affect either indexes or published prices.

Calculation of the Food Index

Processing of food prices for the index⁴ involves editing and adjustment of prices for comparability from one period to the next for each store, and calculation of price relatives for each subsample of outlets. Calculation of price relatives is a simple computation of the ratio of average prices of a subsample of stores in the current period to that

of a previous period $\left(\frac{\bar{P}_n}{\bar{P}_{n-1}}\right)$ times 100. At present, for the 12 largest cities, the relative is based on average prices for all reporting stores; for other cities, it is based on average prices for identical stores in the two periods. Sales taxes are not added to the prices of individual items. Sales tax changes are reflected as price change in the index but they are handled as a separate operation.

TABLE 2. CITIES AND PRICING DIAGRAM¹ FOR FOOD FOR THE REVISED CONSUMER PRICE INDEX

City and size stratum, based on 1960 population	Item and outlet samples priced	City and size stratum, based on 1960 population	Item and outlet samples priced
A. Standard Metropolitan Statistical Areas of 1,250,000 or more:		C. Standard Metropolitan Statistical Areas of 50,000 to 250,000:	
Baltimore.....	1A, 1B, 2A, 2B	Austin, Tex.....	1
Boston.....	Do.	Bakersfield, Calif.....	2
Chicago-Northwestern Indiana.....	Do.	Baton Rouge, La.....	2
Cleveland.....	Do.	Cedar Rapids, Iowa.....	1A, 2B
		Champaign-Urbana, Ill.....	Do.
Detroit.....	Do.		
Los Angeles-Long Beach.....	Do.	Durham, N.C.....	Do.
New York-Northeastern New Jersey.....	Do.	Green Bay, Wis.....	1
Philadelphia.....	Do.	Lancaster, Pa.....	1
		Orlando, Fla.....	1A, 2B
Pittsburgh.....	Do.	Portland, Maine.....	2
St. Louis.....	Do.		
San Francisco-Oakland.....	Do.	D. Urban Places of 2,500 to 50,000 in 1960:	
Washington.....	Do.	Anchorage, Alaska.....	1, 2
		Crookston, Minn.....	1
B. Standard Metropolitan Statistical Areas of 250,000 to 1,250,000:		Devils Lake, N.Dak.....	2
Atlanta.....	1A, 2B	Findlay, Ohio.....	1
Buffalo.....	Do.	Florence, Ala.....	1
Dallas.....	Do.	Kingston, N.Y.....	2
Dayton.....	Do.	Klamath Falls, Oreg.....	1
		Logansport, Ind.....	2
Denver.....	Do.	Mangum, Okla.....	1
Hartford.....	Do.	Martinsville, Va.....	2
Honolulu.....	Do.		
Indianapolis.....	Do.	McAllen, Tex.....	2
Nashville.....	Do.	Millville, N.J.....	2
Seattle.....	Do.	Niles, Mich.....	1
Wichita.....	Do.	Orem, Utah.....	2
		Southbridge, Mass.....	1
		Union, S.C.....	1
		Vicksburg, Miss.....	2

¹ Item samples are identified as samples "1" and "2". Outlet samples are identified as samples "A" and "B".

Editing. Each quotation is reviewed in comparison with the price reported in the same outlet for the previous period and quantitative adjustment of prices is made to achieve comparability of quality. In all cities, prices of foods within the accepted range of sizes are converted to a common unit. In a few cases, such as the various grades of beef, and citrus fruits from different growing areas, factors derived from usual market differentials are employed to adjust to a standard quality. Prices seriously out of line are excluded from the calculation and followup inquiries are made to the field agent for the next pricing.

Editing of prices outside the preferred quality or size range differs between the 12 largest cities and the remaining cities. Since the latter are based on matching samples of outlets, the processing routine permits deviating items to be used in the calculations for the index, provided prices for the same (deviating) quality and size are available in the 2 successive months being compared, but the differential in price between qualities is not reflected as price change for the index. On the other hand, because of the larger size of reporter samples, enough prices meeting specification can be obtained in the largest cities to make use of deviating items unnecessary. In addition, matched samples, though desirable, are not essential in these cities. For this group, therefore, prices outside the preferred quality and size range are edited out of the price and index calculations. As soon as necessary programming can be completed, food prices for all cities will be processed by machine, using matched samples and including deviations for all cities on a comparable basis from month to month.

Computing Techniques. After editing, weighted average prices are computed for index purposes for each subsample of stores, using the edited quotations for all stores in the 12 largest cities, but only quotations from the same outlets in 2 successive months in all other cities. Where necessary to achieve matching samples, average prices for the previous month are recomputed. Prices

are weighted averages of separate prices for three strata of stores—chain grocery stores, and other stores (largely independent groceries)⁵ divided into large and small stores. The same chain stores are included in each of the two subsamples, and in each subsample, the chain store average price is combined with prices for large and small independent stores. Chain grocery quotations are the total sales of all stores of each chain organization in a Standard Metropolitan Statistical Area. Average prices for large and for small independent stores are each unweighted means. For the new index, differential percentage weights have been introduced for meats, produce, and dry groceries, representing estimated sales for these groups in the three outlet strata. These weights were derived from 1958 sales data from the Census of Retail Trade and reports from all outlets in the BLS sample giving a rough breakdown of total sales for the three commodity categories. Use of differential weights rather than the single set of weights based on total sales volume formerly used has affected the level of published prices, since it has tended to raise the chain weight for dry groceries and reduce it for meats and produce.

The stratum sales weights are revised about every 5 years or whenever a new Census becomes available, and the internal store weights about every 2 years. Revised outlet weights are linked into the index so that changing proportions of sales in different types of stores are not reflected directly in price changes for the index. Use of the linking procedure has been adopted in recognition of the varying degree of services provided by different stores, because of considerations relating to limitations of the data for weight adjustment, and problems of the store sample.⁶ Prices based on both the old and new weights are published for the "link" month (the last month for which old weights were used and the month in which revised weights were used for comparison with subsequent months).

Food Price Calculation

The food prices computed for the index are not suitable for publication as price averages, since they are not restricted to a single specified quality and size. Therefore, special editing not needed for

⁵ These categories include meat and produce markets, both chain and independent, as well as independent groceries.

⁶ A discussion of these considerations and the possible effect of alternative methods of handling outlet weight changes is contained in "Food Distribution Changes and the CPI" in the January 1964 *Monthly Labor Review*, pp. 58-64.

measurement of price change is needed to develop prices for narrowly defined specifications.

Benchmarks. Procedures have been devised to calculate city and U.S. prices for publication that use index values and price relatives extensively. These procedures employ benchmark prices for defined specifications for each of the 50 cities, adjusted month by month by the price changes reflected in the index. Benchmark prices are computed in an independent operation, using prices for all outlets and not as an average of the two subsamples.⁷ All deviations are excluded. The same outlet weighting factors as used in the index are used. To prevent published prices from deviating widely from an average of collected prices, benchmark prices are to be recomputed annually.

The first benchmark calculation was for April 1964. Using this set of benchmarks, prices were estimated back to December 1963 on the basis of the changes in the indexes for individual items. Similarly, prices will be estimated forward to December 1964. The next benchmark calculation, which will involve a new review of the price data for comparability of specification, is planned for January 1965.

Combining City Prices. Population weights for combining city prices to U.S. averages are based on the 1960 population of the SMSA's—or cities in which prices are collected, and cities of like characteristics represented by the sample cities. A procedure for simple calculation of weighted average U.S. prices has been devised which makes maximum use of data already compiled for the index.

Relative population weights adding to 1 are built into the index values, so that aggregation of city cost-population values to U.S. totals is itself a weighting operation. In the index calculation, price relatives are applied to index values (includ-

ing population weights) for the previous period ($qp_{n-1}w$) by city for each item for each subsample of outlets to derive current period values (qp_nw).⁸ These values and the U.S. item totals that are computed each month become basic tools for calculation of prices for publication. At the benchmark date, city quantity weighting factors including relative population weights,⁹ qw 's are derived for each city by dividing the "cost-population weight" for the item (the sum of the two outlet samples) by the city benchmark average price ($qpw \div p$). The U.S. quantity is a simple summation of the city factors in which the w 's total 1. Weighted average U.S. prices are derived both for the benchmark month and for subsequent months simply by dividing the U.S. total value (cost-population weight) for the item by the U.S. quantity weight.

In periods other than the benchmark month, estimated prices are calculated for each of the 12 large cities by dividing the current index value (qpw) by the city quantity weighting factor, which generally remains fixed between benchmark calculations. The estimated prices are in effect benchmark prices for a defined specifications updated by index price changes. Thus they are not an average of collected prices. This treatment eliminates the need for any special editing in subsequent months except for index purposes. In the 12 cities for which prices are published, between benchmarks it is merely necessary to sum cost-population weights for the two subsamples and divide by the city-weighting factor.

⁷ In the regular index work, separate prices for the two subsamples of outlets need not be combined in city averages. Because of use of matching samples, in most cities there may be two average prices for each of the two subsamples for any given month—one comparable with the previous, the other with the following month.

⁸ Where q =physical quantity weight, p =price of an individual item, and w =city's population weight.

⁹ Since cost-population weights include sales tax while benchmark prices exclude sales tax, quantity weights derived in this way also contain the effect of sales tax. They are adjusted whenever a change in tax is reflected in the index cost weights.

Foreign Labor Brief

European Limitations on Employee Dismissal

ARE EUROPEAN EMPLOYERS more inhibited by custom and law than their American counterparts in exercising their right to discharge or lay off workers? Observations and conversations with European trade unionists and employer representatives indicate that, in the European countries where shortages of qualified labor and many unfilled job vacancies exist, employers do tend to carry surplus workers on their payrolls longer than American employers. Conditions now prevailing in many areas encourage labor hoarding, either to maintain qualified personnel during slack periods against the day when business revives or to protect against resort to the employment of foreign workers. Some German trade unionists, for example, have estimated that labor hoarding in the metals industry at times may run as high as 10 percent.

Although this cause of employer reluctance to separate workers permanently or temporarily may be regarded as transitory, discharges and layoffs for economic reasons have also been curbed by more permanent factors in the Federal Republic of Germany, France, Italy, the Netherlands, and other countries. These factors have included established custom, management practices, and regulations designed to protect workers against dismissals that, although valid under general civil law, appear unwarranted for social reasons.

Federal Republic of Germany

In West Germany, for example, the management of enterprises with more than 20 regular employees must clear decisions involving discharges with the works council, which is entitled to participate in managerial decisionmaking regarding "social matters," i.e., decisions affecting the welfare of the personnel. Moreover, under

the Law on Protection Against Discharge of August 10, 1951, a legally valid discharge may be declared ineffective by the Labor Court if it is "socially unjustified," that is, if it cannot be based on the characteristics or conduct of the employee or on important needs of the enterprise. Even if important business needs warrant the discharge, it is nevertheless "socially unjustified" if the employer selected the employee for discharge without giving sufficient attention to the social factors involved. In the event that the Labor Court holds the separation notice ineffective for social reasons, the employer may be ordered to pay a severance allowance, instead of actually continuing the employment relationship. In addition to the provisions of the Law on Protection Against Discharge, the West German employer is bound by a statutory duty to report intended separations of more than a certain percentage of his work force to enable the public employment service to initiate steps to forestall possible serious effects of mass dismissals.

Italy

A different procedure serving the same purpose as the German law concerning discharge is provided by the Italian labor law. A national management-labor agreement, which was given the force of law in 1960, established a Council of Conciliation and Arbitration to which cases of individual dismissals are submitted when the workers concerned so request. The Council is composed of an employer representative, a workers' representative, and a president who is selected from a list of candidates agreed upon by the provincial organizations of trade unions and employers.

Within 3 days of the dismissal notice, a worker who considers his separation unwarranted may ask his union to meet with the employer's representative in an attempt at conciliation, which must be concluded within the following 4 days. If this initial attempt at conciliation fails, the worker, again through his union, may request the intervention of the Council of Conciliation and Arbitration. Should the Council deem the motives for dismissal invalid, the employer is requested to reinstate the worker with full seniority rights. If the employer refuses, he must pay a penalty in addition to the regular severance allowance.

Under the provisions of another national agreement, likewise given the force of law in 1960, an industrial firm planning a work force reduction must inform the local employers' association, giving reasons for the anticipated layoff, the date, and the number of workers affected. The employers' association then must give this information to the local trade union organizations, which may, within 5 days, request a meeting with management to examine the reasons for the dismissals and to explore ways of avoiding them or to reach a compromise solution. Once the conciliatory procedure is initiated, the dismissals are suspended for 15 days, or until the conciliation procedure is closed.

Regardless of whether a mutual agreement is reached, the firm planning a collective layoff must consider the following factors when selecting workers for dismissal: technical and production requirements, seniority and length of service, and the family responsibilities and financial condition of the employees considered for discharge.

Netherlands

In the Netherlands, an employee who feels that his dismissal is unreasonable may ask a special court to consider his case. The court may deem a discharge unreasonable if the employer gives a false reason or no reason for his action, if the consequences of the dismissal are more serious for the employee than would be his continued employment for the employer, and if seniority provisions of a collective contract are violated, except in cases where the reasons for the dismissal are more weighty.

France

The French Ministry of Labor can require an employer to postpone separations for economic reasons to allow the Ministry time to ascertain that every precaution has been taken to minimize the hardship on workers. The employer is expected to make a strong effort at his own expense to find other employment for workers to be separated. In the case of a layoff, which suspends rather than terminates an employment relationship, the Ministry is not legally authorized to intervene directly,

but it can use informal means to persuade an employer to modify his contemplated action. It can usually expect trade union and public support.

Individual Employer Attitudes

These statutory and administrative dismissal regulations are at the same time both the cause and result of widespread social attitudes that, long observable in European employer behavior, have recently been confirmed by observations and conversations with trade unionists and employer representatives. For example, reports confirm that the German employer's attitude still tends to be somewhat patriarchal, resulting in a feeling of heavy responsibility for the job security of those dependent upon him for employment. In addition, he may also be somewhat afraid of loss of prestige among his fellow employers, because employee layoffs might be interpreted as proof of his failure as a businessman. Similarly, surviving paternalistic trends in small Italian enterprises may still make employers reluctant to lay off or dismiss. However, management's approach in large, modern enterprises probably differs very little from that of its American counterpart. Even prior to the introduction of strict legal regulations, employers in the Netherlands have frequently appeared to be reluctant to separate employees during short slack periods. In France, where trade unions take the position, as does also a large part of the general public, that the employer is under a moral obligation to make great efforts to protect his workers from the hardships of temporary or final job loss, mass dismissals or layoffs are likely to cause retaliatory action. Prevailing French public opinion is inclined to regard the separated worker as a person being deprived of a vested interest in his employment. This feeling is so strong that legislation has been enacted requiring an employer to consult with his works committee before deciding upon a layoff. Because of widespread avoidance, the Government has indicated recently that it will seek to tighten this legislation to assure better protection of workers.

—KURT BRAUN

Division of Foreign Labor Conditions

Significant Decisions in Labor Cases*

Labor Relations

Breach of No-Strike Clause. A United States court of appeals ruled¹ that a suit in a State court to enjoin—under a State law—a union from violating a no-strike clause should not have been removed to a Federal court because its result did not depend upon determination of a controversy over the “validity, construction, or effect” of the Constitution or any law of the United States. The employer’s claim could not be defeated by the removal and by the Federal court’s inability, under the Norris-LaGuardia Act, to grant the injunction sought, the court held.

The Federal district court would not remand the case to the State court in which it originated. It assumed jurisdiction on the ground that the employer’s claim alleged a violation of a collective bargaining agreement for which suit may be brought in a Federal court under section 301(a) of the Labor Management Relations Act. The court held, however, that the Norris-LaGuardia Act’s ban on injunctions in labor disputes² prevented it from granting the injunctive relief sought.

In reversing the lower court’s decision and directing that the case be sent back to the State court, the appellate court, after voluminous citations from judicial history, pointed out that Federal law does not displace State law except where it is the basis of the suit. The court said that section 301(a) of the LMRA, permitting suits for violation of labor contracts, does not prevent the application of a similar State law where, as here, the complaint is cast solely on the State-created right and seeks a remedy available only under State law. Furthermore, the court held that since the district court was powerless—because of the Federal anti-injunction statute—to decide the case

on its merits and render a binding decision, that court had no power to take the case from the State.

The majority opinion rejected as without judicial support a dissenting judge’s reasoning that the Federal law displaces State law in suits of this nature; that the Norris-LaGuardia Act’s anti-injunction provision extends to State laws and renders their injunctive provisions illegal; and that for these reasons the State court was without power to adjudicate the case and to grant the relief sought.

Refusal To Bargain. Last spring, the National Labor Relations Board discarded the rule that a labor organization waived its right to pursue the refusal-to-bargain remedy of the LMRA when it permitted a representation election to be held despite its knowledge that the employer had committed unfair labor practices.³ The Board recently clarified its new approach by declaring⁴ that a union pursuing an unfair labor practice remedy after losing an election can obtain such relief only after having the election set aside on meritorious objections filed in the representation proceeding, even though the employer’s election interference could separately be established in the unfair labor practice case.

After a period of organizing activities at the employer’s plant, the union asked that it be given recognition and that bargaining talks begin. Failing to receive a satisfactory response it filed a petition for an election, which it lost. The union then asked that the election be set aside, basing its charges on alleged employer interference; it filed unfair labor practice charges as well.

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

¹ *American Dredging Co. v. Local 25, Marine Division, International Union of Operating Engineers* (C.A. 3, Oct. 30, 1964).

² *Sinclair Refining Co. v. Atkinson*, 370 U.S. 195 (1962).

³ *Bernel Foam Products Co., Inc. and Textile Workers Union*, 146 NLRB No. 161 (May 4, 1964); see *Monthly Labor Review*, July 1964, p. 808.

⁴ *Irving Air Chute Company, Inc. and Textile Workers Union*, 149 NLRB No. 59 (Nov. 12, 1964).

The Board set the election aside after finding that the employer had threatened some employees with discharge if they actively supported the union, and had called upon them to form an internal representation group and to reject the union. These actions also constituted unfair labor practices—interference with the employees' protected rights, including their freedom of choice in the election, and domination of or interference with the formation of a union—violations of sections 8(a) (1) and (2), respectively, the Board said. These flagrant violations, the Board held, indicated that it was not a good-faith doubt of the union's majority status that made the employer ignore its request for recognition and bargaining; rather, the employer used the preelection period to undermine the union's majority. In the absence of such good-faith doubt, the employer's refusal to bargain could not have been brought about by the union's petition for election; it was, therefore, unlawful under section 8(a)(5) of the act, the Board held.

In clarifying its new position regarding actions by unions seeking bargaining relief where the employer's preelection conduct was unlawful, the Board made the following reservation:

We will not grant such relief . . . unless the election be set aside upon meritorious objections filed in the representation case. Were the election not set aside on the basis of objections in the present . . . case, we would not now direct a bargaining order even though the unfair labor practice phase of this proceeding itself established the employer's interference with the election.

Member Leedom dissented in part, stating that he would retain the rule of waiver which the Board had earlier rejected and, therefore, would not have opened the refusal-to-bargain route. In his view, the Board should have ordered a new election, thus leaving the union to the election procedure it chose to follow in the beginning.

Protected Activity. An employer's honest but mistaken belief that two employees who were soliciting union membership had threatened to dynamite the company's property if the union did not acquire the authorizations did not justify their discharge, the U.S. Supreme Court held.⁵

The employer discharged the two workers, relying upon information furnished by an employee who had been solicited. Subsequent investigation

by the NLRB revealed the charges to be untrue. The Board held that the employer's honest belief that the information was true did not shield him from a finding of interference with protected union activity in violation of section 8(a)(1) of the LMRA, and discrimination with regard to tenure of employment to discourage union membership—a violation of section 8(a)(3) of the act.

The court of appeals refused to enforce the Board's reinstatement order because, in its opinion, the employer's belief that the discharged employees had engaged in activities—threats of violence—which are outside the protection of the act was a valid defense to the charges.

The Supreme Court reversed the court below but chose not to deal with the question of whether the section 8(a)(3) ban on discrimination to discourage union activity had been violated—a question which would have required an examination of the employer's motive. Instead, the Court held that the employer had interfered with the protected right to organize, a violation of section 8(a)(1), and that under this section the good faith of the employer in making the discharges was immaterial. The Court laid down the following test for a violation of that section: A showing "that the discharged employee was at the time engaged in protected activity; that the employer knew it was such, that the basis of the discharge was an alleged act of misconduct in the course of that activity, and that the employee was not, in fact, guilty of that misconduct."

The Court stressed that the immunity given protected activity such as soliciting union membership would acquire a precarious status if innocent employees could be discharged while engaged in it, "even though the employer acts in good faith."

Justice Harlan dissented in part. He agreed with the majority that an employee should not bear the entire brunt of his honest, but mistaken discharge. However, he took the position that a rule fair to both sides would be one requiring reinstatement of a wrongfully discharged employee and back pay only as of the time the employer learned, or should have learned of his mistake, unless there is a valid business reason for refusing reinstatement.

⁵ *NLRB v. Burnup and Sims, Inc.* (U.S. Sup. Ct., Nov. 9, 1964).

Fair Employment Practices

Discrimination in Hire. The Illinois Fair Employment Practices Commission directed an electronics company to cease denying equal employment opportunity to any qualified applicants and to pay a monetary award to a Negro applicant who had passed the company's tests but had been discriminated against when he sought employment.⁶ The Commission, however, did not feel it necessary, as the hearing examiner did, to require the employer to stop using a general ability pre-employment test which might have been inherently discriminatory.

The complainant alleged that the employer had violated the Illinois Fair Employment Practices Act by discriminatorily denying him a position as an "analyzer and phaser" after he had passed the preemployment tests and asserted other qualifications for employment. When the employer refused to participate in a conciliation conference to attempt an amicable settlement, a hearing examiner was appointed to investigate the complaint.

The hearing examiner not only found that the employer had discriminated but also ordered the employer to discontinue using the preemployment test given the applicant, since he found it to be discriminatory against culturally disadvantaged groups. The hearing examiner required, in addition, that if the employer chose to replace the test "that it adopt a test which shall reflect and equate inequalities and environmental factors among the disadvantaged and culturally deprived groups." The examiner further required the company to

offer the complainant the job for which he had applied at the current rate of wages paid those who were in training.

On appeal, the Commission chose not to deal with the question of whether the preemployment test was discriminatory since the complainant had passed the test and did not claim it to have been discriminatory. It emphasized, however, that in a future case, with an appropriate factual situation, the use of such a test might be held in violation of the State fair employment practices statute since it forbids the use of any device to discriminate. In supporting the hearing examiner's finding that the complainant had been discriminated against, the Commission based its conclusion on the evidence that the company discriminated at the first step of its hiring process and thereby precluded the complainant from demonstrating his qualifications for the job sought. Since the complainant was discriminated against before he had a chance to show his merit and the record did not enable the Commission to judge that merit and qualification for the job, the Commission did not require the company to hire him or to give him further consideration for employment. Instead, the Commission directed the employer to pay the complainant \$1,000 for the expense, embarrassment, and possible loss of employment at the company; it also enjoined the company from further discrimination in hiring on the basis of race, color, religion, national origin, or ancestry.

⁶ In re *Myart and Motorola, Inc.* (Ill. Fair Employment Practices Commission No. 63c-127, Nov. 18, 1964).

Chronology of Recent Labor Events

November 1, 1964

THE LOCOMOTIVE ENGINEERS withdrew from participation in the Railway Labor Executives' Association. The Brotherhood had previously withdrawn from railway labor's Political League.

November 3

FULL CREW LAWS specifying train crew sizes were repealed in referendums held in California, Arizona, and North Dakota.

November 9

REVERSING a U.S. Court of Appeals, the U.S. Supreme Court held that an employer, erroneously informed that employee organizers were going to dynamite his plants, violated right-to-organize provisions of the Taft-Hartley Act when he discharged the organizers. The case was *NLRB v. Burnup and Sims, Inc.* (See p. 70 of this issue.)

November 16

THE RAILROAD TRAINMEN and the Nation's railroads agreed to a 2-year contract for 96,000 workers. It provided wage increases of \$1.75 a day for conductors and car retarder operators, \$1.44 for yard helpers and road brakemen, and 21.875 cents an hour for dining car stewards and yard masters, all retroactive to July 12, 1964, and a fourth week of vacation after 20 years' service. Five days later, the Railway Conductors and Brakemen, representing over 16,000 workers, reached a similar agreement. (See also p. 74 of this issue.)

A 19-DAY STRIKE by 11,000 workers ended when Allis Chalmers Manufacturing Co. and the Auto Workers settled on a 3-year contract patterned after other recent farm implement agreements. (See also p. 75 of this issue.)

November 17

AN AGREEMENT based upon recommendations made by Presidential Emergency Board 164 on November 5 was reached between the Nation's railroads and the Locomotive Firemen and Enginemen, representing 28,000 workers. Firemen's wages were to be increased 9 cents an hour retroactive to January 15, 1964, and another 9 cents effective

January 1, 1965, while engineers received minimum increases of \$1.75 a day in basic rates retroactive to June 1, 1964. A fourth week of vacation after 20 years of service was also provided. On the same day, the Locomotive Engineers negotiated a fourth week of vacation after 20 years' service for its 35,000 workers. On November 20 and 21, eight nonoperating unions, representing 367,000 workers, settled on similar wage and fringe benefit agreements. (See also p. 74 of this issue.)

November 18

THE ILLINOIS Fair Employment Practices Commission, finding that a Negro applicant denied employment at Motorola, Inc., had been discriminated against, ruled that the company pay him \$1,000 damages and end future unfair employment practices.

November 19

THE SECRETARY OF DEFENSE announced that 95 military installations would be closed or consolidated over periods ranging from 6 months to 10 years, eliminating 28,500 civilian jobs. Displaced workers were to be retrained and relocated at government expense.

November 21

THE DETROIT PUBLISHERS ASSOCIATION, representing the Free Press and Detroit News, and the Printing Pressmen's Union, on strike since July 13, settled on a new agreement. The parties resolved the major issue of crew sizes on eight-unit presses by agreeing to the present 16-man crew for 1 year. Thereafter, crew sizes may either be reduced to 15 men or the union may submit the issue to arbitration. The Paper and Plate Handlers Union, which had also been on strike, had reached agreement 10 days earlier. (See also pp. 77-78 of this issue.)

November 23

THE LAST OF NINE Ford Motor Co. plants which struck on November 6 over local working conditions ratified an agreement. The strike by 25,500 workers resulted in the layoff of some 80,000 nonstrikers as parts shortages closed other units. (See also p. 75 of this issue.)

A STRIKE begun November 9 was ended when the Detroit Tooling Association, representing 59 tool and die firms in Detroit, reached agreement with the Auto Workers on a 3-year contract providing 5,000 workers wage increases ranging from 26 to 35 cents an hour over the contract term. (See also p. 75 of this issue.)

November 24

THE AFL-CIO EXECUTIVE COUNCIL adjourned a 1-day meeting in Washington, D.C., after formulating its 1965 legislative goals. Among them were: Repeal of Taft-Hartley provisions permitting States to outlaw union shop

agreements; hospital insurance for the aged based on social security principles; a Federal system of reinsurance for private pension plans; increased unemployment and social security benefits; and a \$2 minimum wage, 35-hour workweek, with double time for overtime.

AFTER A 12-DAY STRIKE, the Pacific Coast Association of Pulp and Paper Manufacturers and the Western Pulp and Paper Workers agreed on terms of a contract covering 21,000 workers at 48 plants. The contract provided a modified union shop, wage and fringe benefit increases totaling 19 cents an hour retroactive to June 1, 1964, a

10-cent wage increase on June 1, 1965, and a wage reopener 1 year before the agreement's March 15, 1967, expiration date. (See also p. 77 of this issue.)

November 26

THE Canadian Board of Maritime Trustees announced Leonard J. McLaughlin was elected president of the Canadian branch of the Seafarers Union. He had been executive vice president under Hal C. Banks who was removed from office by the Board. (See Chron. item for Mar. 18, MLR, May 1964 and p. 79 of this issue.) -

Developments in Industrial Relations*

Wages and Collective Bargaining

Transportation and Communications. About 550,000 railroad employees received either wage increases or liberalized fringe benefits under agreements reached during November, while negotiations affecting another 49,000 shop craft workers continued into December.

The Locomotive Engineers, representing 35,000 members, on November 17 signed an agreement providing a fourth week of vacation after 20 years' service.¹

On the same day, the Locomotive Firemen and Enginemen signed an agreement providing most of its 28,000 members a 72-cent-a-day wage increase retroactive to January 15, 1964, with an additional 72 cents scheduled for January 1, 1965. Engineers on trains without firemen received additional increases, while other engineers received \$1.75 a day retroactive to June 1, 1964. A fourth week of vacation after 20 years' service was also established.

On November 16, the Railroad Trainmen agreed to a contract for its 96,000 members, providing a \$1.75-a-day wage increase for conductors and car retarder operators, \$1.44 for yard helpers and road brakemen, and an increase in the basic monthly rates for dining car stewards and yardmasters by an amount equal to 21.875 cents an hour. All increases were retroactive to July 12, 1964. A fourth week of vacation was also established for employees with 20 years' service. On November 20, the Railway Conductors and Brakemen, representing 16,000 members, signed a contract providing the same wage increases and vacation benefits. Later in the month, the Switchmen, representing 8,000 workers, accepted a similar offer from the railroads.

On November 20 and 21, 8² of the 11 nonoperating unions, representing 367,000 members, signed 3-year contracts providing wage increases of 9 cents an hour on January 1 of 1964, 1965, and 1966.

The Railway Signalmen were not covered by the provision for wage increases since they had signed a wage agreement on May 1, 1964.³

Other terms of the agreement, which followed the recommendations made in October by three Presidential Emergency Boards,⁴ were a fourth week of vacation after 20 years' service, an eighth paid holiday (the employee's birthday), \$2,000 life insurance coverage for retired employees, and railroad payment of \$25.22 a month (instead of \$21.82) beginning January 1, 1966, to maintain current health and welfare benefits. Negotiations on job security provisions affecting five nonoperating unions were continuing.⁵

A 3-year contract negotiated by the Teamsters in mid-November for 5,000 tank truck drivers in 13 midwestern States provided general increases of 8 cents an hour effective each November 15 of 1964, 1965, and 1966, with additional increases to eliminate area differentials. The hourly rate of all drivers will be \$3.44 an hour at the termination of the contract. A guaranteed 48-hour week was continued with 8 hours at time and one-half providing \$178.88 a week guaranteed pay at the end of the contract period. The companies agreed to increase their payment to the health and welfare funds to \$7.30 a week (from \$3.50) and to the pension fund to \$8 (from \$6). The cost-of-living clause was revised, and a 4-week vacation was provided after 16 instead of 18 years' service.

Trans World Airlines, Inc., and the Air Line Pilots Association agreed on a 2-year contract gradually cutting the maximum flying time for 1,800 pilots to 75 hours a month by December 1, 1966, from the existing 85, with no loss in monthly pay. The agreement also increased retirement and disability payments.

Several telephone companies reached agreement under wage reopenings with the Communications Workers (CWA) or other unions during late Sep-

*Prepared in the Division of Wage Economics, Bureau of Labor Statistics, on the basis of published material available in early December.

¹ A \$1.75-a-day wage increase had been negotiated in July 1964. See *Monthly Labor Review*, September 1964, p. 1068.

² Railway Clerks, Maintenance of Way Employees, Railroad Telegraphers, Hotel and Restaurant Employees, Boilermakers, Railway Carmen, Firemen and Oilers, and Railroad Signalmen.

³ See *Monthly Labor Review*, July 1964, p. 813.

⁴ See *Monthly Labor Review*, December 1964, p. 2.

⁵ Six shop craft unions signed a job security agreement on Sept. 25, 1964. See *Monthly Labor Review*, November 1964, pp. 1308-1309.

tember, October, or November, with weekly salary increases ranging from \$2 to \$6 a week, and in some cases, additional increases resulting from upgrading of towns. Among the agreements were:

Northwestern Bell and the CWA—\$2 to \$5 a week for about 17,000 employees, effective September 27, with upgrading of some towns.

Bell Telephone Co. of Pa. and the Telephone Workers of Pa. (Ind.)—\$2 to \$6 for about 9,500 plant and service department employees, effective in October.

Pacific Telephone and Telegraph Co. and the CWA—\$2.50 to \$5 for about 18,000 plant and traffic employees in northern California and Nevada, effective October 18.

New England Telephone and Telegraph Co. and the Brotherhood of Telephone Workers (Ind.)—\$2 to \$5 for about 12,500 employees effective in October.

Southern Bell Telephone Co. and the CWA—\$2 to \$5 for about 57,000 employees in all departments in nine southeastern States effective in mid-November, plus reclassification of several towns.

Illinois Bell Telephone Co. and the Electrical Workers (IBEW)—increases ranging from \$2.50 to \$5 and averaging \$4.86 a week for 11,000 plant employees in Illinois and Lake and Porter Counties, Ind.; maximum wage increases of \$5 a week for 34 job classifications including all switchmen, PBX repairmen, installers, and general repairmen and linemen, and increases in all starting rates in amounts ranging from \$3 to \$4.50 a week; contracts retroactive to November 22 if agreement was ratified by December 10.

Services. Members of the Hotel and Restaurant Employees Union, on October 28, ratified an agreement with the Golden Gate Restaurant Association providing 5-percent wage increases in each of the 3 contract years for about 7,000 cooks, waiters, waitresses, bartenders, and other culinary workers. It was expected the contract would be extended to 8,000 workers in other restaurants and bars in the San Francisco area. In the final year of the contract, minimum rates for a 7½-hour day will range from \$14.50 for waiters and cashiers to \$31.80 a day for chefs.

Metalworking. In the automobile industry, a master contract was signed by Ford Motor Co. and the Auto Workers (UAW), and full production was resumed after the last of nine units that had struck over local issues ratified its supplemental agreement in late November. The strike at the plant in Sterling Township, Mich., and the eight others that began November 6 had resulted in the layoff of 80,000 men as parts shortages closed other units.

On November 16, the Allis-Chalmers Manufacturing Co. reached agreement with the UAW on a 3-year contract covering some 11,000 employees, ending a strike that began November 7. Settlement terms were generally similar to the Big Three auto and farm implement agreements.⁶ Wages were to be increased 2½ percent (minimum 6 cents) effective November 1, 1965, and 2.8 percent (minimum 7 cents) effective November 1, 1966. Other provisions included two additional holidays, bringing the total to 9; 4 weeks' vacation after 20 years (instead of 25), and 3 weeks after 10 years (instead of 15); and improvements in regular and early retirement pensions, SUB benefits, insurance, and other benefits.

On November 23, the Detroit Tooling Association, representing 59 firms in the Detroit area, reached agreement with the Auto Workers on a 3-year contract covering some 5,000 workers. The agreement provided wage increases ranging from 26 to 35 cents an hour over 3 years and improvements in fringe benefits. The settlement was preceded by a strike that began on November 9.

A 3-year contract agreed to in mid-October between the Allied Industrial Workers, representing some 1,600 workers, and the Fort Wayne Division of the Dana Corp. deferred a 6-cent-an-hour addition to incentive base rates and a 7-cent increase in rates of hourly workers until October 1965, and scheduled a similar wage increase for 1966. The company assumed the full cost of life and hospitalization insurance for current employees and retirees. Other terms included a ninth paid holiday, improved pension benefits, and establishment of a SUB plan.

After a 20-week strike, the Barber-Colman Co. reached agreement with the Sheet Metal Workers on a 30-month agreement covering some 2,500 workers in Rockford and Loves Park, Ill., and Milton Junction, Wis. The settlement, ratified on October 21, provided a 2.3-percent wage increase (averaging 6 cents an hour) the first year, and 9 cents an hour effective both May 2, 1965, and May 3, 1966. Wage classifications were consolidated from several hundred to 19, providing additional raises averaging 4 cents an hour effective the first year. Other provisions included assumption by the company of the full cost instead of about 70 percent of the cost of life and accident and health benefits, a major medical plan for retirees, and

⁶ See *Monthly Labor Review*, November, 1964, pp. 1306-1308, and December 1964, p. 1435.

improved recall and seniority provisions. Strikers accused of picket line violence were to be reinstated pending arbitration of their status.

Negotiating jointly for some 1,800 workers, Pratt and Whitney Co. and Chandler Evans Corp. of Hartford, Conn., both divisions of Fairbanks Whitney Corp., settled with the UAW on October 5 on a 3-year contract providing immediate 5- to 16-cent-an-hour wage increases and similar increases 18 months later. Other provisions included increased night-shift differentials, the day after Thanksgiving as a ninth paid holiday, a fourth week of vacation after 25 years, improved funeral leave, and increased insurance benefits. Pension benefits were to be raised immediately to \$2.75 a month (from \$2.50) for each year of service up to 35, to \$3 on January 1, 1968, and to \$3.25 for each year beyond January 1, 1968. Seniority provisions were broadened to permit transfer within broad job classes, and wage rates for skilled work were to be open to renegotiation whenever operations are automated.

In early October, the Bridgeport Brass Co. of Bridgeport, Conn., agreed with the Brass Workers (Federal Labor Union No. 24411) on a 3-year contract covering 1,600 workers. The pact deferred a 7-cent-an-hour wage increase until October 1, 1965, but inequity adjustments ranging from 2 to 5 cents an hour for specified job classifications were to be provided in the first and third years. Other provisions increased premium pay for holiday work, improved vacations, and raised life insurance, weekly sickness and accident, and hospital benefits. The pension plan was funded and improved to include deferred vesting rights at age 65 for employees age 40 with 15 years' credited service. Severance pay providing from \$200 after 10 years' service up to \$600 after 30 years' service was established.

The Waterbury, Conn., Division of the Anacosta American Brass Co. reached agreement with the UAW on a 3-year contract covering some 1,600 workers. The pact, ratified on October 19 following a 4-day strike, provided a 6-cent-an-hour general increase in base rates effective October 15, 1964, with an additional 6 cents an hour in October of 1965 and 1966. In addition, skilled employees were to receive 5-cent increases in the first and third years. One-half cent an hour was to be deducted from the second year increase to defray the cost of including total company serv-

ice in computing paid vacations for employees of the Torrington Division who had been transferred to the Waterbury Division.

Other provisions included 4 weeks' vacation after 25 years (instead of the previous maximum of 3 weeks after 15 years), and effective the second year, an additional day's paid vacation for each 2 years worked beyond 15 years. Daily hospital benefits were to be increased, and effective October 15, 1965, company contributions to the security benefit plan were to be increased 5 cents an hour and the maximum weekly payment from individual accounts was to be increased to \$40.

In early November, the Collins Radio Co. signed a 3-year contract with the Electrical Workers (IBEW) covering some 4,200 workers in Cedar Rapids and Anamosa, Iowa. Retroactive to October 10, it provided a 6- to 9-cent wage increase the first year, 6 to 8 cents effective October 9, 1965, and 5 to 8 cents on October 15, 1966. The night-shift differential was raised to 20 cents (from 15 cents) and a 15-cent premium for regularly scheduled weekend work was established. Total paid holidays were brought to 9 by establishing New Year's Eve as a full instead of a half holiday and by adding the day after Thanksgiving, and a fourth week of vacation was made effective after 20 instead of 25 years. Life insurance coverage was also increased and termination pay was established for workers retiring at age 55 with 10 years' or more service.

Wagner Electric Co., of St. Louis, Mo., and the Electrical Workers (IUE), representing 3,500 workers, agreed to a two-part contract on October 6. The wage agreement—effective for 30 months—provided increases of 11 cents an hour, payable in 3 steps; continuation of cost-of-living escalation, with a 3-cent-an-hour annual limitation; and an inequity wage adjustment fund valued at 1 cent an hour. The other contract provisions—in effect for 54 months—provided an additional paid holiday and 4 weeks' vacation after 15 rather than 20 years, with a fifth week after 25 years' service. Pension plan improvements included vesting after 10 years' service instead of 15 years and benefits of \$2.75 a month for each year of credited past service and \$3 a month for each year of future service, instead of the former \$2.25 a month.

The IUE, representing 5,500 production employees of the Whirlpool Corp. at Evansville, Ind.,

ratified a 3-year contract on October 21, after rejecting a previous proposal and striking 4 days. The agreement provided a 7-cent-an-hour increase effective immediately and an additional 6 cents 18 months later. Escalation was continued subject to a maximum increase in the cost-of-living allowance of 3 cents over the life of the agreement. Pension benefits were increased to \$2.80 a month for each year's credited service instead of \$2.50, and vesting provisions were improved.

The steel industry's Human Relations Committee, composed of representatives of the Steelworkers and 11 major companies, undertook a series of "concentrated meetings" in November to evaluate a number of studies relating to the round of industry bargaining begun in mid-December.⁷ In contrast to recent negotiations, bargaining was expected to focus initially on issues peculiar to each company, with negotiations on the basic contracts to begin later. The union's leadership decided on this procedure after some members complained that local issues had been neglected in recent settlements.

Bargaining goals were announced by the union's wage policy committee on December 3. They included a "substantial" wage increase (the latest increase was in October 1961, resulting from the 1960 settlement); additional craft and inequity wage adjustments; resumption of cost-of-living escalation (discontinued by the 1962 settlement); pension improvements, particularly increased incentives for early retirement; improved medical insurance; and additional paid holidays.

The announcement emphasized the "total job security" concept approved at the union's recent convention.⁸ Included would be maintenance of income for "longer service employees" during layoffs, sickness, or disability regardless of duration. It also called for contract provisions, such as the right to strike locally, that could be used to force faster settlement of grievances.

A factor that could affect negotiations is the February 9 election in which incumbent David McDonald, whose term as president expires on

June 1, 1965, is being challenged for the presidency by Secretary-Treasurer I. W. Abel.

Paper and Printing. A 12-day strike ended when the Pacific Coast Association of Pulp and Paper Manufacturers reached contract terms on November 24 with the newly formed Independent Association of Western Pulp and Paper Workers. Provided was a 4-percent general wage increase plus an additional 5 cents to women retroactive to June 1, 1964, with a 10-cent general raise scheduled for June 1, 1965. An eighth paid holiday and insurance improvements were also provided the 21,000 workers covered by the agreement.

Expiring March 15, 1967, the contract was made subject to reopening in March 1966, and provided for a full union shop under specified conditions: All workers hired after June 1, 1964, must join the union and those who were members before that time must remain members. In individual plants, a full union shop was to apply where 80 percent of the workers joined within 120 days or where 70 percent of all the plant workers choose the union after the 120-day period.

In May, the employers' association (representing 18 companies with about 48 mills) had negotiated a 1-year agreement providing a total 16 $\frac{3}{4}$ -cent package (including a 4-percent wage increase) with 2 unions that represented the workers at that time—the Pulp and Sulphite Workers and the United Papermakers and Paperworkers. Subsequent rejection of the contract by rank-and-file members reportedly resulted from dissension within the unions rather than from dissatisfaction with the contract provisions. As a result of a September NLRB election requested by the workers, the newly formed independent union replaced the former unions as bargaining agent.⁹

The Detroit newspaper strike ended on November 21 when Pressmen's Local 13 ratified a 45-month contract with the Detroit Newspaper Publishers Association, enabling the Free Press and the Detroit News to resume publication on November 25, 132 days after the strike began. The walkout by the Pressmen and by Local 10 of the same union representing paper and plate handlers had begun on July 13. The plate handlers ratified a 2-year contract on November 11 but did not return to work because the Pressmen

⁷ Major steel contracts provide for the reopening of negotiations any time on or after Jan. 1, 1965, with the earliest strike date 120 days thereafter.

⁸ See *Monthly Labor Review*, November 1964, pp. 1254-1255.

⁹ *Ibid.*, p. 1312.

could not agree with the Association on the manning requirements for new eight-unit presses at the Detroit News. The union asserted that 16 men were necessary while the Association held that only 15 were needed. Under a compromise suggested by UAW President Walter Reuther, 16 men will be used during the first contract year. Beginning the second year, 15 men will be used or the issue will be arbitrated, whichever the union elects.

Other Manufacturing. Two major shoe manufacturers reached agreement with the United Shoe Workers and the Boot and Shoe Workers on 2-year contracts for 21,600 workers in 68 factories in six States.

The Brown Shoe Co. set the pattern on October 20 by agreeing to 2-percent wage increases on January 4, 1965, and again on January 3, 1966. In addition, rates of workers in lower paid jobs were to be raised by 0.8 to 10 percent (averaging 2 percent) in January 1965. The settlement also included an increase in pension benefits to \$1.50 per credit year (from \$1.25) for persons retiring on or after November 1, 1964, and to \$1.75 for persons retiring after November 2, 1965; an eighth paid holiday; a 7-cent instead of a 5-cent an hour third shift differential; and increased hospital and surgical benefits.

The settlement at International Shoe Co., reached on October 22, provided the same 2-percent general wage increases on January 4, 1965, and January 3, 1966, and raised the lowest group of piecework wages an additional 2 percent. About 13,000 workers were affected by the settlement. Other terms were generally similar to the Brown agreement.

Under a wage reopener, about 2,600 employees of the Armstrong Cork Co., in Lancaster, Pa., represented by the Rubber Workers and the Machinists, received hourly wage increases, effective October 11, ranging from 6 to 13.3 cents and averaging about 7 cents or 2¾ percent.

Announcement was made on October 29 of 3-year agreements to replace contracts scheduled to expire on December 31, 1964, between the American Tobacco Co. and the Tobacco Workers, representing 1,800 workers in Richmond, Va., 4,800 in Reidsville and Durham, N.C., and 1,200 in Louisville, Ky. Wages were increased 2 percent, and

classification adjustments ranging from 5 to 15 cents an hour for some 50 jobs became effective November 2. A reduction in the workweek to 37½ hours from 40, with no loss in weekly pay, was to become effective when the company is able to make the adjustment. Other provisions to become effective in January 1965 included full retirement at age 62, instead of 65, a \$5-a-week increase in sick benefits (to a maximum of \$40 for 24 weeks), and 2 days paid funeral leave.

Phillip Morris, Inc., and the Tobacco Workers agreed to similar 3-year contracts covering some 3,000 employees in Richmond, Va., and Louisville, Ky. Included were additional classification adjustments ranging up to 12 cents an hour to some 40 percent of the employees, and a provision for time and one-half for all work over 7½ hours a day, beginning May 1, 1967. The workweek reduction was not to apply to seasonal employees.

Approximately 3,700 employees at Liggett and Myers plants in Richmond, Va., and Durham, N.C., received an 8¼-percent wage increase, resulting from a clause in the Tobacco Workers' contract tying wages to those at other cigarette and tobacco factories and stemmeries.

Government. The Milwaukee County Board, on November 10, voted a 3-percent general pay raise for the county's 7,000 salaried employees to become effective on January 1, 1965. In addition, payment of \$6 of the \$16 a month premium for family Blue Cross and Blue Shield benefits was approved; the county had previously paid the entire cost of insurance for employees only. The general salary increase was substituted for an automatic cost-of-living adjustment which would have raised earnings by less than 1 percent in 1965.

Other Developments

After 14 years of unsuccessful efforts, the Steelworkers gained bargaining rights for 2,000 employees at the Torrance, Calif., plant of Harvey Aluminum, Inc.—the Nation's fifth largest producer of basic aluminum. In the NLRB election, the vote was 1,019 for the union, 473 for "no union," 3 ballots were void, and 428 votes were challenged by the union and not counted. The company's other plants at The Dalles, Oreg., and Adrian, Mich., were not covered by the election,

although the Steelworkers and other unions had unsuccessfully tried to organize them in the past.

The Railway Clerks, the Air Line Employees (an affiliate of the Air Line Pilots), and the Air Line Dispatchers, announced they would work together to keep "undesirable" elements from gaining bargaining rights in the industry, to organize the unorganized, and to counteract the airlines' mutual aid pact.¹⁰ Shortly before the announcement, the Air Line Employees had defeated the Teamsters in a representation election to retain bargaining rights for 2,000 workers at National Airlines.

Leonard J. McLaughlin was elected president of the Canadian branch of the Seafarers, the Canadian Board of Maritime Trustees announced on November 26. McLaughlin defeated his nearest rival, René Turcotte, by 1,000 votes. Hal C. Banks, former president of the union, was dismissed by the board in March after an investigation of maritime labor difficulties on the Great Lakes.¹¹ At that time, McLaughlin, then executive vice president of the union, was named administrative director by the trustees. In September, Mr. Banks resigned his \$20,000 a year post as vice president and international representative of the parent Seafarers' Union of North America.

¹⁰ See *Monthly Labor Review*, March 1959, p. 304.

¹¹ See *Monthly Labor Review*, June 1964, p. 696.

Book Reviews and Notes

Wages and Social History

Origins of Modern Wage Theories. By N. Arnold Tolles. Englewood Cliffs, N.J., Prentice-Hall, Inc., 1964. 241 pp. \$7.95.

The main point of this book is that the marginal productivity theory of wages, which was developed by the 19th-century economists mainly to answer the wage-share question, is inadequate for explanation of 20th-century wage issues. The author believes that an adequate wage theory should be able to explain wage levels in particular industries and economic groups, and also industrial wage differentials.

The author examines several developments of the past century that he believes have influenced wage levels but have not been incorporated into orthodox theory. These developments are mass immigration into the United States from 1870 to 1914, the growth of labor unions, scientific management, welfare capitalism, national minimum wage laws, government spending and tax policies, social security, and the control of wages. Many of these factors are influencing the course and development of a new wage theory that the author believes should explain the total wage level; the relationship between wage levels and the proportion of the labor force that is unemployed; the relationship between money wages and the prices of all commodities; and, especially, the wage structure.

However, serious students who might be looking for guidance in constructing a more adequate wage theory will be disappointed in this book. The topics receive very superficial treatment; excessive space is devoted to a descriptive and historical development of subjects such as labor unions, government taxation and spending, and immigration, and little attention is given to an analysis of wage theory. The author seems to recognize the de-

scriptive nature of his work when he states, "This is an essay in social history, with wages the central focus."

Origins of Modern Wage Theories can be recommended as reference reading for elementary undergraduate courses in economics, and it should be interesting and informative reading for individuals who have not had much formal education in economics.

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Case Hardened

Problems in Labor Relations. By Benjamin M. Selekmán and others. New York, McGraw-Hill Book Co., 1964. 754 pp. 3d. ed. \$10.50.

The authors offer this book as one "that can be used as the text for a variety of undergraduate and graduate courses in such fields as collective bargaining, industrial relations, labor economics, labor-management relations, and personnel relations." It was intended "primarily for students majoring in business, economics, personnel, or labor relations." With such a diverse target the most recent edition of this well-known work offers, of necessity, a great variety of cases for study.

These cases are presented in six groupings, some carried forward from the earlier edition, some new. The groupings are: Framework for Study of Cases in Labor Relations (carried forward); The Organizing Stage (new); Internal Relations: Problems in the Shop (carried forward); Institutional Relations: Problems at the Bargaining Table (carried forward); Labor Relations and Public Policy (new); and A Look at Labor Relations Overseas (new). The summaries or excerpts which make up the cases suggest well the great variety of problems, personalities, traditions, economic situations, and institutional factors that make labor relations so complex and challenging. In so doing a useful presentation is offered.

In my opinion there remains a significant weakness in the volume. Each case testifies to the complexity of labor relations and the absence of facile solutions. Yet the presentation makes of labor relations a more disoriented study than necessary. The authors fail to introduce a series of cases in such a way as to draw the attention of the reader

to the types of problems likely to arise in certain types of situations. The student reads without certain reference points that might make his study more meaningful—unless the instructor sets such guideposts.

Similarly, at the close of a group of cases in one section of the book the authors fail to draw together in some sort of summary any suggestions as to possible generalizations or conclusions that may seem warranted. Here again an instructor, or the discussion questions at the close of the cases, may help the student derive such conclusions. But not every instructor is experienced and knowledgeable, and many persons may read the book without subsequent class discussion. A book such as this, intended as a text, demands highly competent students and professors—else the student may emerge with only a series of interesting but non-integrated lists of information.

The above is not to be read as a plea for the highly structured text filled with lists of principles to be committed to unthinking memory.

If we must choose between such a presentation and that of Selekmán et al., the latter probably is the better choice. But there should be a middle ground that offers stimulating and realistic presentations of issues that arise in the discipline being studied and also suggests approaches or solutions that seem to have merit. The failure of the authors of this book to utilize introductory statements and concluding remarks detracts from the value of the work.

—GLENN W. MILLER

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Updating Theory

Explorations in Social Change. Edited by George K. Zollschan and Walter Hirsch. New York, Houghton Mifflin Co., 1964. 832 pp. \$10.95.

In his introduction to this symposium of the problems of social and cultural change, Don Martindale (University of Minnesota) points out that while sociology has experienced tremendous growth and impetus in the period since World War II, out of all the recent dramatic transformations has come the admission that sociology's "theory of social change is the weakest branch of

sociological theory." In a very real sense, this publication has for its purpose bridging this gap through an intensive analysis of the many-faceted problems of social change.

The book brings together some 30-odd sociological studies or essays by outstanding spokesmen in the field. For the layman, the document contains much meaty material (e.g., ch. 8, "Functional Analysis As a Source of a Theoretical Repertory and Research Tasks in the Study of Social Change") and is not susceptible of light perusal. For the serious student, however, it represents a well-rounded summary of contemporary thinking on social change, with a considered balance between the general and the specific.

Two chapters will be of special interest to those concerned with labor and industrial relations and the institutional aspects of trade unions. In chapter 27, Fred Cottrell discusses "Technology and Social Change on American Railroads." The sociologist will be principally interested in Professor Cottrell's use of the experiences of American railroads and unions to develop and update the cultural lag theory of social change. But the essay also offers an interesting insight into the problems encountered by railroad management and labor in meeting the thrust of technological change and into the steps taken by each side to cope with the effects of change. No less interesting is Philip M. Marcus' essay on "Organizational Change: The Case of American Trade Unions." Marcus applies a sociological analysis to trade unions to indicate "how changes in the industry, technology, or legal system affect such internal variables as size and composition of membership, relationships between local and national organizations, as well as the total bureaucratic structure." His theme is both interesting and perceptive.

Explorations in Social Change is not an easy book to digest. Its editors, however, have skillfully arranged its many parts into logical divisions and prefaced each major topical section with a comprehensive introduction. The total effort represents not only a symposium on the problems of social and cultural change but also an up-to-date exposition of contemporary sociological theory.

—JOHN N. GENTRY

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Problems of Growth and Vice Versa

Essays in Southern Economic Development. Edited by Melvin L. Greenhut and W. Tate Whitman. Chapel Hill, N.C., University of North Carolina Press, 1964. 498 pp. \$7.50.

The 14 studies included in this volume, which was supported by the Inter-University Committee for Economic Research on the South, range widely in subject matter. Clarence H. Danhop traces "Four Decades of Thought on the South's Economic Problems," and is concerned primarily with the region's slow pace of industrial development. C. Addison Hickman, after examining the traditional concept of the entrepreneurial function, compares entrepreneurship in the South with that of the Nation as a whole. His article "The Entrepreneurial Function: The South as a case Study" is followed by "Negro Entrepreneurship in Southern Economic Development" by Harding B. Young and James M. Hund, who raise the basic question of whether the southern Negro entrepreneur is prepared to move into the mainstream of the region's economy. George Macesish's "Liquidity Preference—A Southern Banking Tradition?" concludes that the southern banker is less conservative in his financial outlook and more active in promoting economic development than is true of bankers elsewhere.

The South accounted for 60 percent of the Nation's rural outmigration in the decade of the fifties; its total population grew slowly, but its urban population boomed and its nonagricultural employment grew faster than that of the Nation. Particular areas of John M. Henderson's "Some General Aspects of Recent Regional Development," which describes these patterns of population growth and employment, are studied in more detail by John L. Fulner in a paper on "Trends in Population and Employment in the South Since 1930 and their Economic Significance." The growth of cities in the South, Mr. Fulner concludes, promises to make employment grow faster than population, thereby lowering the population pressure to the national ratio. Frank Hanna's analysis of "Income in the South since 1929" examines the changes in total and per capita income, in income components, and in income sources. He points out that the reduction since 1939 in the

shares of income going to the upper income groups in the Nation as a whole, revealed in Kuznets' studies, have been paralleled by a similar reduction in the South; hence, a growth in the middle-income groups is evident for both the region and the Nation. Bernard Olsen and Gerald Garh employ factor analysis to explain the growth rate in the South as compared with growth in 10 high-income States from the rest of the Nation. Following their article, "A Factor Analysis of Characteristics of the South," Werner Hochwald studies "Interregional Income Flows and the South." The South, taken as a model of economic development in an open economy, has a "favorable" balance of trade and thus receives a net inflow of income from other regions.

Marshall Colberg's "Area Redevelopment and Related Federal Programs: Effects on the South" indicates the author's preference for market forces over government controls in the determination of industrial location. He believes that ARA may impede the movement of plants from north to south. Plant location is not exclusively price-determined, according to Melvin L. Greenhut and Charles T. Stewart, Jr. ("Economic Theory, Regional Industrial Development, and the Paint Industry"); the paint industry illustrates a locational pattern strongly influenced by the geography of demand. C. E. Ferguson's study, "The Elasticity of Substitution and Regional Estimates of Capital and Capital Ratios in American Manufacturing Industry, 1954-58," finds that the three southern regions encompassed were second only to the Pacific West in the rate of growth of capital stock; technological growth was greater in the South than in the Nation. "The Postwar Corps of Engineers Program in Ten Southern States," by Robert Haveman, argues that while many projects could not be justified on the basis of economic efficiency, these projects have nevertheless aided the region's development. James Rinehart contributes the final essay with "Rates of Return on Municipal Subsidies to Industry," in which he concludes that industrial subsidy investments are extremely profitable.

—JUANITA M. KREPS
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The Unified Concept

The Management Profession. By Louis A. Allen. New York, McGraw-Hill Book Co., 1964. 375 pp., bibliography. \$8.50.

" . . . When a manager is called up to perform both management work and operating work during the same time period, he will tend to give first priority to operating work. This tendency leads to . . . substantial waste and inefficiency." With statements such as this, Louis A. Allen provides his reader with a text that reviews in a very practical way the traditional approach to a study of the management process. His new book is organized in a logical manner which holds the reader's attention as the author develops his management theme.

Mr. Allen proceeds from the thesis of Henri Fayol and other traditional writers to produce his "Unified Concept of Management." This concept consists of five characteristics: (1) Management is a special kind of work; (2) management work can be classified; (3) management must be learned; (4) management work is measurable; and (5) management skills are transferable. The work of a manager is defined as consisting of four key functions: planning, organizing, leading, and controlling. Within each of these functions the author develops, defines, and illustrates the various activities in which every manager is engaged.

Woven throughout the pattern of his theme, Mr. Allen provides a thread of "Allen Principles of Management." Approximately three dozen principles are developed to assist managers to act and to decide in a predictable manner in the performance of day-to-day management activities. The author presents a theory of management, and at the same time offers many practical techniques to apply this theory as he has seen them work in many companies during his professional career as a management consultant.

The author has succeeded in combining a distillation of his own years of experience with the generally recognized findings in past and current literature. His familiarity with traditional management theory is well displayed.

The title of the book would suggest that there is today a profession of management. However, in his text Mr. Allen indicates that although it

has not yet arrived, at this stage, management should rapidly become a profession. Management has long been recognized and practiced as an art, but the author believes that it has not yet developed as a science.

Although Mr. Allen has not developed a new theory of management, he has presented the subject in an easy-to-read and logical manner. His suggested bibliography by subject is helpful, his brief chapter summaries provide a fine review, and his Common Vocabulary of Professional Management assists the reader in overcoming the problem of semantics, so often considered the key problem in communicating a theory of management. The author's reasoning and experienced opinions should make the book popular among businessmen. In addition, the book is well designed as a text for courses in Principles of Management.

—JOSEPH C. SCHABACKER

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Thought Without Pedantry

Economic Rationality and Soviet Politics or Was Stalin Really Necessary? By Alec Nove. New York, Frederick A. Praeger, Publisher, 1964. 316 pp. \$8.50.

Students of Soviet affairs will not wish to miss this latest volume by Professor Nove of the University of Glasgow, a distinguished interpreter of Soviet economic developments. The book consists of reprints of his earlier work—articles, essays, conference papers—brought together from sources that are widely scattered and, at least for the American reader, not easily accessible. Most of the 17 pieces are fairly recent (1962–64), 3 date roughly from 1958, while 1 article is about 10 years old. They make an interesting collection.

Any anthology is a mixed bag, and readers will naturally differ in their opinions of what is most useful, but one general impression emerges clearly. In rereading some of Nove's earlier articles, one realizes how severely a collection of a single author's contributions tests reputation. Nove's is secure—in fact, enhanced. In addition, readers who enjoy discovering that it is possible to convey important thoughts gracefully and without pedantry will welcome this volume, in which

they will also probably find more of the new than of the familiar.

The book has a number of specific attractions. It is a great convenience to find some useful reference articles in one volume: the 1958 "Economica" article on success indicators and the 1960 "Problems of Communism" on social welfare are two good examples. Then, too, the book contains enough variety to suit many tastes. Some selections remind one that when he wants to, Nove can be very much the musician's musician (as in "A Study of Soviet Wages," a review article based on the interesting book by the Soviet economist Figurnov); but one also realizes that, when the occasion calls for it—as in the paper on Soviet economic prospects delivered at the December 1962 American Economic Association meeting—Nove brings to bear enviable talents for solid analysis and balanced synthesis. On another plane, "The Uses and Abuses of Kremlinology" is a true gem.

In addition to reprints, the book contains three articles which have evidently not been published before. One unidentified piece, a fascinating essay entitled "The Peasants in Soviet Literature Since Stalin," is a graphic reminder of Gerschenkron's classic advice on the application of belletristic evidence to nonliterary uses, as well as an original contribution to the study of the post-Stalin literary scene. In another unpublished conference paper, on Soviet planning problems, Nove has some eminently sensible things to say about the necessary distinction between the advantages that Soviet planning might obtain from computers and linear programming techniques, and the irrelevancy of much work in mathematical economics or computer technology to the problems of centralized resource allocation or the choice of a rational set of operating prices. The same article also serves to update Nove's 1962 Soviet Studies article on results of the 1957 industrial reorganization ("Soviet Planning: Reforms in Prospect," included in the volume under review). The piece also provides an excellent account of the range of problems involved in the discussions initiated by Professor Liberman and others. The third new piece, "Economic Irrationality and Irrational Statistics," investigates the "coexistence of misallocation of resources and high rates of growth," in a lucid and interesting manner.

Honesty compels mention of a relatively minor irritant: in his choice of title, Nove has possibly been overly impressed with the advantages of the latest merchandising techniques. His book would still be welcome if it were called something less flamboyant and more accurate. One notes, finally, that Nove's Gilbertian subtitle comes from the piece heading the collection, a reprint from *Encounter* (April 1962). Nove's reply, properly qualified, is that Stalin *was* necessary. One remembers the article with pleasure, though it is hardly the chief attraction in this valuable volume.

—PAUL GEKKER

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Quotations From Recent Books

Economics of the Kennedy Years and a Look Ahead. By Seymour E. Harris. New York, Harper & Row, Publishers, 1964. 273 pp.

I believe that the unemployment problem will be a weakness in the economy throughout the 1960's. But there will be serious attempts to treat this economic disease. A continued level of 5.5 to 6 percent of unemployment or sporadic rises to 6 to 8 percent will put pressure on the Government to act. A more expansionist monetary policy, especially if the balance of payments problem is solved, will clearly help. Further education on modern fiscal policy should help put across more audacious fiscal policies. This country's economic education has advanced in recent years. Not long ago, many believed that budgets must be balanced every year. Now, not only is it widely recognized that a balancing of the Federal budget over the business cycle is still responsible fiscal policy, but also, in the views of increasing numbers, that when the cyclical peak is accompanied by much unemployment continued deficits are still consistent with respectable fiscal behavior. Perhaps by the end of the 1960's, after the strain of high and long-sustained unemployment, the country will be ready to accept adequate fiscal policies.

Labor Economics and Labor Relations. By Lloyd G. Reynolds. Englewood Cliffs, N.J., Prentice-Hall, Inc., 1964. 568 pp. 4th ed. \$11.95.

Prophecy is hazardous. Scarcely anyone in the nineteen twenties foresaw the unionization of mass

production manufacturing in the 'thirties and 'forties. One cannot deny the possibility of a similar expansion of white-collar unionism at some time in the future. It seems likely, however, that expansion will be quite gradual, perhaps no more than sufficient to offset the decline of union membership in other areas. So total union membership is unlikely to change much in the foreseeable future, and the percentage of the labor force in unions will probably continue to fall.

Research, Development, and Technological Innovation—An Introduction. By James R. Bright. Homewood, Ill., Richard D. Irwin, Inc., 1964. 783 pp., bibliography. \$13.35.

While nonmilitary fundamental invention remains a colossal neglected opportunity, it brings us one small benefit: It makes almost easy the prediction of what inventions civilization will be adopting a generation or two hence. For instance, the automobile age, with its universal mobility, its suburban living, the decline of the railways, and the need for great boulevards for automobiles and trucking, was pretty well foreseen by H. G. Wells in 1901. . . . We have spoken of some anticipations of television which go back for centuries in the stage of mere expressed desire, and for 73 years of practical work. . . .

Case Studies in Labor Ideology: The Nordic Countries—Denmark, Finland, Iceland, Norway, and Sweden. By David J. Saposs. Honolulu, University of Hawaii, Industrial Relations Center, 1964. 82 pp. (Monograph 1.)

. . . On the whole, the moderate Socialists have profited handsomely from their ideological transformations. As is to be expected, they have made better gains in some countries than in others. Perhaps the question should be reversed. Would the Socialist movements have been able to avoid heavy losses instead of continuing making historical gains both in the unions and political parties if they had not pursued a policy of moderation by emphasis upon immediate demands. Considering that the ultra revolutionary elements have either fallen by the wayside or have been reduced to insignificant marginal nuisance groups, it is clear that the pragmatic policy was the most successful. . . .

Britain and the Labor Trade in the Southwest Pacific. By O. W. Parnaby. Durham, N.C., Duke University Press, 1964. 234 pp., bibliography. \$6.25.

. . . From his negotiations, Thornton gained the impression that the United States, having just abolished slavery, was inclined to think that no other country had ever done anything in that respect. Because, in official circles in Britain, there was sympathy for the Southern States during the Civil War, many Americans may have doubted the sincerity of Britain's traditional opposition to slavery and the slave trade, and the settlement following the Treaty of Washington may not have restored confidence. In any case, the United States refused to cooperate in controlling the labor trade in the Pacific. . . .

How to Manage People: The Applied Psychology of Handling Human Problems in Business. By William B. Given, Jr. Englewood Cliffs, N.J., Prentice-Hall, Inc., 1964. 224 pp. \$5.95.

. . . Articles and news stories indicate that millions of dollars and untold executive time and effort are spent every year on company picnics, weekend meetings at retreats in the mountains, executive luncheons, hobby clubs, golf outings, theatre parties, informal dinners, and the rest. The assumption somehow seems to be that these occasions will produce harmony.

Will they? . . . The origins of conflict and disagreement are too deep in business for that to happen. . . .

Studies in Organizational Behavior and Management. By Donald E. Porter and Philip B. Applewhite. Scranton, Pa., International Textbook Co., 1964. 741 pp. \$7.75.

By 1952, the union was well organized and had developed a militant antidiscrimination program. Still, there were no Negroes employed in the Sliced Bacon Department because visitors were always conducted through it to see its gleaming machinery; it was assumed that 'the public dislikes having Negro women handle the food, and if such is the practice, does not wish to be cognizant of the fact.' However, pressure from the union finally overcame this assumption.

Other Recent Publications

Education and Training

The Revolution in the Schools. Edited by Ronald Gross and Judith Murphy. New York, Harcourt, Brace and World, Inc., 1964. 250 pp. \$2.95.

Nurse Training Act of 1964. (In Health, Education, and Welfare Indicators, U.S. Department of Health, Education, and Welfare, Washington, October 1964, pp. v-xxv. 45 cents, Superintendent of Documents, Washington.)

Occupational Information—The Dynamics of Its Nature and Use. By Max F. Baer and Edward C. Roeber. Chicago, Science Research Associates, Inc., 1964. 494 pp. (Professional Guidance Series.)

Scientist. By Robert S. Morison, M.D. New York, Macmillan Co., 1964. 207 pp. \$3.95.

So You Want To Be A Chemist. By Alan E. Nourse, M.D. New York, Harper & Row, Publishers, Inc., 1964. 164 pp. \$3.50.

Employee Benefits

Employer Expenditures for Selected Supplementary Remuneration Practices: Finance, Insurance, and Real Estate Industries, 1961. Washington, U.S. Department of Labor, Bureau of Labor Statistics, 1964. 72 pp. (Bulletin 1419.) 45 cents, Superintendent of Documents, Washington.

Report on an Inquiry Into the Incidence of Incapacity for Work: Part I, Scope and Characteristics of Employers' Sick Pay Schemes. London, Ministry of Pensions and National Insurance, 1964. xlviii, 87 pp. \$2.30, British Information Services, Sales Section, New York.

Health and Safety

Occupational Diseases—A Guide to Their Recognition. Edited by W. M. Gafafer. Washington, U.S. Department of Health, Education, and Welfare, Public Health Service, 1964. 375 pp. (PHS Publication 1097.) \$2.25, Superintendent of Documents, Washington.

The Future of Industrial Medicine in Great Britain. By John Rogan. (In *British Journal of Industrial Medicine*, London, October 1964, pp. 251-258. 18s. 6d.)

Industrial Relations

Collective Bargaining by City Employees. By Robert L. Stutz. (In *Labor Law Journal*, Chicago, November 1964, pp. 696-701. \$1.25.)

Collective Action by Public School Teachers. By Wesley A. Wildman. Chicago, University of Chicago, Indus-

trial Relations Center, 1964. 19 pp. (Reprint Series, 119; from *Industrial and Labor Relations Review*, October 1964.)

The Strike, the Non-Strike, and Compulsory Arbitration—A Discussion: Declining Utility of the Strike, by James L. Stern; *Non-Stoppage Strikes—A New Approach*, by Stephen Sosnick; *Compulsory Arbitration—Some Perspectives*, by Orme W. Phelps. (In *Industrial and Labor Relations Review*, Ithaca, N.Y., October 1964, pp. 60-91. \$1.75.)

Unemployment Compensation Law in Labor Disputes—Michigan Compared With Seven Selected States, 1936-1964. By Willard A. Lewis. Kalamazoo, Mich., W. E. Upjohn Institute for Employment Research, 1964. 63 pp. Single copies free.

The Grievance Procedure and Its Application in the United States Postal Service. By Harry R. Blaine, Eugene C. Hagburg, Frederick A. Zeller. (In *Labor Law Journal*, Chicago, November 1964, pp. 725-735. \$1.25.)

Positive Approaches to Labor Peace. By William E. Simkin. (In *Industrial Relations: A Journal of Economy & Society*, University of California, Institute of Industrial Relations, Berkeley, October 1964, pp. 37-44. \$1.50.)

Protection of Employees Affected by Railroad Consolidations. By Edward W. Hummers, Jr. (In *Labor Law Journal*, Chicago, November 1964, pp. 736-744. \$1.25.)

The Regulation of Campaign Tactics in Representation Elections Under the National Labor Relations Act. By Derek C. Bok. (In *Harvard Law Review*, Cambridge, Mass., November 1964, pp. 38-141. \$1.50.)

Labor Force

Entering the Labor Force. By Bernard Goldstein and Harry Stark. New York, Holt, Rinehart and Winston, Inc., 1964. 96 pp., bibliography. (American Problems Series.)

The Geographical Redistribution of Employment: An Examination of the Elements of Change. By Lowell D. Ashby. (In *Survey of Current Business*, U.S. Department of Commerce, Office of Business Economics, Washington, October 1964, pp. 13-20. 30 cents, Superintendent of Documents, Washington.)

Employment Problems of Young Workers. Princeton, N.J., Princeton University, Industrial Relations Section, November 1964. 4 pp. (Selected References 120.) 40 cents.

The New Problem of Large-Scale Unemployability. By Arnold M. Rose. (In *American Journal of Economics and Sociology*, New York, October 1964, pp. 337-350. \$1.)

A Note of Underemployment. By Sanford Cohen. (In *International Development Review*, Society for International Development, Washington, September 1964, pp. 19-21. \$2.50; \$1 to Society members.)

Manpower Studies No. 1—The Pattern of the Future [in United Kingdom]. London, Ministry of Labor, Manpower Research Unit, 1964. 52 pp. 90 cents, British Information Services, Sales Section, New York.

Projecting Manpower Demand [in India]—A Review of Methodology. By R. K. Srivastava. New Delhi, Government of India, Ministry of Home Affairs, 1964. 53 pp.

Conducting a Labor Force Survey in Developing Countries. By Matilda R. Sugg. Washington, U.S. Department of Labor, Bureau of Labor Statistics (for Agency for International Development), 1964. 177 pp., bibliography. (BLS Report 263.)

Labor Separations in an Underdeveloped Area: A Case Study of Worker Adjustment to Change. By Norman G. Pauling. (In *American Journal of Economics and Sociology*, New York, October 1964, pp. 419-434. \$1.)

Long-Run Goals of a 'Laboristic' Economy. By Stanley Young. (In *American Journal of Economics and Sociology*, New York, October 1964, pp. 397-406. \$1.)

Labor Organizations

Labor's Giant Step: Twenty Years of the CIO. By Art Preis. New York, Pioneer Publishers, 1964. xvi, 538 pp.

Labor Organizations in Canada, 1964. Ottawa, Canadian Department of Labor, Economics and Research Branch, 1964. xviii, 100 pp. 50 cents, Queen's Printer, Ottawa.

Personnel Management

Office Incentive Systems. By C. Edward Anderson. Waterford, Conn., National Foremen's Institute, Bureau of Business Practice, 1964. 138 pp. (Complete Management Library, Vol. XXIV.)

Merit System Trends and Problems: Some Underlying Cultural Values. By Erwin W. Fellows. (In *Public Personnel Review*, Chicago, October 1964, pp. 228-232. \$2.)

Sick Leave Usage by Selected Employee Classifications: A Comparative Analysis. By J. E. Kinney, Jr. and D. Robert Papera. (In *Public Personnel Review*, Chicago, October 1964, pp. 245-248. \$2.)

Productivity and Technological Change

Indexes of Output Per Man-Hour for Selected Industries, 1939 and 1947-62. Washington, U.S. Department of Labor, Bureau of Labor Statistics, 1964. 43 pp.

Problems of Applying Productivity Guidelines. By Robert W. Rosen. (In *Personnel*, American Management Association, New York, November-December 1964, pp. 22-26. \$1.75; \$1.25 to AMA members.)

Productivity Trends in the Goods and Service Sectors, 1929-61—A Preliminary Survey. By Victor R. Fuchs. New York, National Bureau of Economic Research, 1964. 48 pp. (Occasional Paper 89.) \$1.75, Columbia University Press, New York.

Automation and the Evaluation of Training. By S. D. M. King. (In *International Labor Review*, Geneva, September 1964, pp. 209-225. 75 cents. Distributed in United States by Washington Branch of ILO.)

A Challenge to Enterprise: How to Put Automation to Work Making Jobs. By Merton C. Bernstein. (In *Challenge*, New York University, New York, October 1964, pp. 23-27. 40 cents.)

Automation and Social Change. (Report of a conference held in Toronto, September 17-19, 1963.) Toronto, Government of Ontario, 1964. 244 pp.

Preserving the Individual in an Age of Automation. By Carey P. McCord, M.D. (In *Journal of Occupational Medicine*, New York, October 1964, pp. 396-404. \$1.)

Automation and the Dropout: The School's Responsibility. By Virgil M. Rogers. (In *Social Education*, National Council for the Social Studies, Washington, November 1964, pp. 391-394. 75 cents.)

Social Security

Social Security Programs of Foreign Countries. (In *Social Security Bulletin*, U.S. Department of Health, Education, and Welfare, Social Security Administration, Washington, September 1964, pp. 16-26. 25 cents, Superintendent of Documents, Washington.)

State UI Legislation in 1964. By Leo H. Fisk. (In *Unemployment Insurance Review*, U.S. Department of Labor, Bureau of Employment Security, Unemployment Insurance Service, Washington, August-September 1964, pp. 7-10. 30 cents, Superintendent of Documents, Washington.)

Delayed Filing for Disability Benefits Under the Social Security Act. By Barbara Levenson and Aaron Krute. (In *Social Security Bulletin*, U.S. Department of Health, Education, and Welfare, Social Security Administration, Washington, October 1964, pp. 15-24. 25 cents, Superintendent of Documents, Washington.)

Social Welfare Expenditures, 1963-64. By Ida C. Merriam. (In *Social Security Bulletin*, U.S. Department of Health, Education, and Welfare, Social Security Administration, Washington, October 1964, pp. 3-14. 25 cents, Superintendent of Documents, Washington.)

- Social Security Farm Statistics, 1955-1961.* (Farmers and farm workers under Old-Age, Survivors, and Disability Insurance.) Washington, U.S. Department of Health, Education, and Welfare, Social Security Administration, 1964. 34 pp.
- A Study of Manpower Requirements for Technical Information Support Personnel.* Prepared by Auerbach Corp. Washington, U.S. Department of Labor, Office of Manpower, Automation and Training, 1964. 75 pp., bibliography. (Final Report 1150-TR-1.)
- Fidelity Bonding Under the Welfare and Pension Plans Disclosure Act.* Washington, U.S. Department of Labor, Office of Labor-Management and Welfare-Pension Reports, 1964. 43 pp.
- A Study of [Texas] Unemployment Insurance Financing.* Austin, Texas Employment Commission, 1964. 75 pp.
- The Long-Term Unemployed, 1961-1962: A Study of Persons Filing Claims in New York State Under the Federal Temporary Extended Unemployment Compensation Program.* New York, State Department of Labor, Division of Employment, 1964. 176 pp.
- State Workmen's Compensation Laws.* By Norene M. Diamond. Washington, U.S. Department of Labor, Bureau of Labor Standards, 1964. 83 pp. (Bulletin 161, revised September 1964.) 35 cents, Superintendent of Documents, Washington.
- ### Wages and Hours
- National Survey of Professional, Administrative, Technical and Clerical Pay, February-March 1964.* Washington, U.S. Department of Labor, Bureau of Labor Statistics, 1964. 61 pp. (Bulletin 1422.) 40 cents, Superintendent of Documents, Washington.
- Incomes Policy in Germany: A Trade Union View.* By Heinz Markmann. (In *British Journal of Industrial Relations*, London School of Economics and Political Science, London, November 1964, pp. 322-339. \$2.50.)
- Family Income and Related Characteristics Among Low-Income Counties and States.* By Alexander L. Radomski and Anita U. Mills. Washington, U.S. Department of Health, Education, and Welfare, Welfare Administration, 1964. 85 pp. (Welfare Research Report 1.) 55 cents, Superintendent of Documents, Washington.
- Industry Wage Survey: Pressed or Blown Glass and Glassware, May 1964.* By Fred W. Mohr. Washington, U.S. Department of Labor, Bureau of Labor Statistics, 1964. 39 pp. (Bulletin 1423.) 30 cents, Superintendent of Documents, Washington.
- Löner, 1961: Del II, Lantarbetare, Industriarbetare, m. fl.* Stockholm, Statistiska Centralbyran, 1964. xvi, 84 pp. (Table of contents and summary in English.) Kr. 4.
- Employees Earnings in Nonmetropolitan Areas of the South and North Central Regions, June 1962.* Washington, U.S. Department of Labor, Bureau of Labor Statistics, 1964. 61 pp. (Bulletin 1416.) 40 cents, Superintendent of Documents, Washington.
- Wage Chronology: Massachusetts Shoe Manufacturing, 1945-64.* Washington, U.S. Department of Labor, Bureau of Labor Statistics, 1964. 15 pp. (BLS Report 209, rev.) 20 cents, Superintendent of Documents, Washington.
- Wage Chronology: Berkshire Hathaway Inc. (Formerly Northern Cotton Textile Association), 1943-64.* Washington, U.S. Department of Labor, Bureau of Labor Statistics, 1964. 12 pp. (BLS Report 281.) 20 cents, Superintendent of Documents, Washington.
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- Managerial and Engineering Economy: Economic Decision-Making.* By George A. Taylor. Princeton, N.J., D. Van Nostrand Co., Inc., 1964. 487 pp. \$12.
- Dynamics of Development: An International Development Reader.* Edited by Gove Hambridge. New York, Frederick A. Praeger, Inc., 1964. 401 pp., bibliography. \$7.50.
- The Economics of Equality.* By Tom Kahn. New York, League for Industrial Democracy, 1964. 70 pp. 75 cents.
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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 Bulletin 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	
	1964											1963				
	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	1961	1960
	Total, both sexes															
Total labor force.....	76,897	77,112	76,865	78,509	78,958	79,389	77,490	76,544	75,553	75,259	74,514	75,201	76,000	76,086	74,175	73,126
Civilian labor force.....	74,166	84,375	74,122	75,758	76,218	76,645	74,742	73,799	72,810	72,527	71,793	72,461	73,261	73,344	71,603	70,612
Unemployment.....	3,373	3,252	3,317	3,654	3,813	4,692	3,640	3,921	4,293	4,524	4,565	3,846	3,936	3,453	4,806	3,931
Unemployment rate seasonally adjusted ²	5.0	5.2	5.2	5.1	4.9	5.3	5.1	5.4	5.4	5.4	5.6	5.5	5.9	5.5	6.7	5.6
Unemployed 4 weeks or less.....	1,658	1,623	1,701	1,691	1,670	2,781	1,671	1,660	1,620	1,669	2,069	1,734	1,955	1,623	1,897	1,799
Unemployed 5-10 weeks.....	707	610	537	862	1,070	674	632	705	807	1,236	988	859	767	662	964	823
Unemployed 11-14 weeks.....	248	238	315	312	216	231	252	321	544	455	402	324	349	251	411	353
Unemployed 15-26 weeks.....	372	390	353	296	322	485	556	693	742	654	605	492	401	443	728	502
Unemployed over 26 weeks.....	387	390	410	494	535	522	529	543	581	510	501	436	463	476	804	454
Employment.....	70,793	71,123	70,805	72,104	72,405	71,953	71,101	69,877	68,517	68,002	67,228	68,615	69,325	69,891	66,796	66,681
Nonagricultural.....	66,248	65,997	65,575	66,704	66,586	66,100	66,094	65,448	64,500	64,071	63,234	64,576	64,548	64,541	61,333	60,958
Worked 35 hours or more.....	47,115	49,349	33,986	49,212	48,645	50,777	51,505	51,452	50,556	48,953	47,179	50,817	46,129	50,960	47,257	46,388
Worked 15-34 hours.....	12,826	9,824	24,268	7,115	7,211	7,602	7,817	7,676	7,717	8,694	9,637	7,679	12,456	7,402	7,522	8,249
Worked 1-14 hours.....	4,084	4,033	3,887	3,169	3,264	3,718	4,466	4,206	4,191	4,321	4,164	4,092	3,935	3,893	3,610	3,279
With a job but not at work ³	2,221	2,791	3,432	7,205	7,464	4,004	2,304	2,115	2,038	2,103	2,255	1,985	2,029	2,288	2,946	3,042
Agricultural.....	4,545	5,126	5,230	5,400	5,819	5,853	5,007	4,429	4,017	3,931	3,993	4,039	4,777	5,350	5,463	5,723
Worked 35 hours or more.....	3,011	3,366	3,577	3,716	3,980	4,154	3,448	2,903	2,391	2,108	2,108	2,179	2,994	3,716	3,540	3,811
Worked 15-34 hours.....	1,044	1,231	1,181	1,085	1,218	1,195	1,089	1,029	1,029	1,077	1,042	1,100	1,196	1,094	1,245	1,279
Worked 1-14 hours.....	361	399	346	440	428	387	378	374	386	524	549	476	411	442	477	444
With a job but not at work ³	129	133	128	160	193	119	92	124	211	223	294	284	176	98	200	190
	Males															
Total labor force.....	50,709	50,918	51,083	52,584	53,057	52,813	51,294	50,665	50,123	49,956	49,731	49,924	50,285	50,368	49,918	49,507
Civilian labor force.....	48,008	48,211	48,370	49,864	50,347	50,100	48,577	47,951	47,411	47,255	47,041	47,215	47,577	47,657	47,378	47,025
Unemployment.....	1,856	1,762	1,813	2,074	2,183	2,630	2,067	2,345	2,681	2,826	2,881	2,477	2,253	1,874	3,066	2,541
Employment.....	46,152	46,448	46,557	47,791	48,164	47,470	46,510	45,607	44,730	44,429	44,160	44,739	45,324	45,784	44,318	44,485
Nonagricultural.....	42,487	42,423	42,476	43,443	43,571	42,860	42,496	41,891	41,299	41,029	40,686	41,294	41,488	41,644	39,811	39,807
Worked 35 hours or more.....	32,895	34,338	25,120	34,831	34,699	35,845	35,748	35,537	34,797	33,782	32,879	34,799	32,166	35,387	32,984	32,511
Worked 15-34 hours.....	6,554	4,658	13,729	3,391	3,345	3,403	3,403	3,332	3,461	4,187	4,580	3,466	6,442	3,238	3,587	4,100
Worked 1-14 hours.....	1,680	1,680	1,599	1,429	1,450	1,538	1,969	1,759	1,743	1,795	1,717	1,718	1,586	1,610	1,511	1,360
With a job but not at work ³	1,357	1,747	2,028	3,790	4,078	2,077	1,376	1,265	1,297	1,265	1,452	1,311	1,292	1,410	1,729	1,836
Agricultural.....	3,666	4,026	4,081	4,348	4,593	4,610	4,014	3,716	3,432	3,400	3,474	4,345	3,836	4,139	4,508	4,678
Worked 35 hours or more.....	2,597	2,912	3,035	3,243	3,439	3,552	3,019	2,622	2,190	1,918	1,908	1,951	2,622	3,121	3,132	3,365
Worked 15-34 hours.....	673	727	708	657	704	667	627	678	741	803	795	820	754	626	827	792
Worked 1-14 hours.....	273	274	232	314	292	290	295	306	325	475	497	409	307	309	370	348
With a job but not at work ³	122	113	106	135	158	99	73	107	176	203	274	263	154	84	179	172
	Females															
Total labor force.....	26,188	26,194	25,782	25,925	25,901	26,576	26,196	25,878	25,430	25,302	24,783	25,277	25,715	25,718	24,257	23,619
Civilian labor force.....	26,158	26,164	25,752	25,894	25,871	26,545	26,165	25,847	25,399	25,271	24,752	25,246	25,684	25,687	24,225	23,587
Unemployment.....	1,517	1,489	1,503	1,581	1,630	2,062	1,574	1,577	1,613	1,698	1,684	1,369	1,682	1,580	1,747	1,390
Employment.....	24,641	24,674	24,248	24,313	24,241	24,483	24,591	24,271	23,786	23,573	23,068	23,877	24,001	24,107	22,478	22,196
Nonagricultural.....	23,762	23,574	23,099	23,261	23,015	23,240	23,598	23,557	23,201	23,042	22,548	23,282	23,061	22,897	21,523	21,151
Worked 35 hours or more.....	14,221	15,011	8,867	14,382	13,947	14,932	15,758	15,912	15,758	15,170	14,301	16,020	13,962	15,572	14,273	13,877
Worked 15-34 hours.....	6,272	5,166	10,539	3,723	3,867	4,199	4,414	4,343	4,256	4,507	5,057	4,213	6,014	4,164	3,934	4,149
Worked 1-14 hours.....	2,407	2,353	2,290	1,740	1,816	2,180	2,497	2,450	2,448	2,526	2,387	2,377	2,349	2,282	2,098	1,919
With a job but not at work ³	863	1,044	1,404	3,415	3,386	1,928	928	849	740	838	803	674	736	879	1,217	1,206
Agricultural.....	879	1,100	1,149	1,052	1,226	1,243	993	713	585	531	520	594	940	1,210	955	1,045
Worked 35 hours or more.....	414	454	541	471	542	599	429	279	201	199	199	224	372	597	408	445
Worked 15-34 hours.....	371	502	473	428	514	528	461	350	288	273	247	280	443	467	419	486
Worked 1-14 hours.....	85	123	112	126	137	96	83	66	61	49	53	69	104	134	107	96
With a job but not at work ³	7	20	22	25	35	20	19	16	35	20	20	22	15	22	17	17

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 Unemployment as a percent of labor force.

³ 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).

Figures for periods prior to April 1962 are not strictly comparable with current data because of the introduction of 1960 Census data into the estimation procedure. The change primarily affected the labor force and employment totals, which were reduced by about 200,000. The unemployment totals were virtually unchanged.

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

[In thousands]

Revised series; see box, p. 98.

Industry	1964											1963		Annual average	
	Nov. ²	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962
Total employees.....	59,349	59,154	59,258	58,680	58,418	58,596	57,874	57,329	56,783	56,445	56,328	58,012	57,647	56,643	55,515
Mining.....	645	644	645	647	646	651	634	627	615	614	618	634	639	635	650
Metal mining.....	84.5	79.8	77.7	77.6	85.2	84.0	82.8	80.9	80.6	79.8	80.4	81.2	80.5	82.3	82.3
Iron ores.....	28.0	28.2	27.7	28.0	27.9	27.5	26.6	25.1	24.9	24.5	25.0	25.8	24.7	25.2	25.2
Copper ores.....	28.3	23.5	21.5	21.6	29.6	28.9	28.6	28.5	28.3	28.0	27.9	27.7	27.7	27.7	28.5
Coal mining.....	145.1	144.0	142.8	142.9	143.3	141.7	143.5	143.6	147.3	148.5	150.6	150.7	148.1	151.9	151.9
Bituminous.....	134.0	132.8	131.5	131.6	132.1	130.7	132.7	132.3	135.9	137.3	139.3	139.3	136.9	140.0	140.0
Crude petroleum and natural gas.....	287.6	291.8	297.3	297.3	295.2	284.9	283.2	282.4	281.5	285.1	289.4	286.4	289.1	298.0	298.0
Crude petroleum and natural gas fields.....	159.3	162.4	165.0	165.1	164.6	160.4	160.5	160.6	161.5	161.4	162.3	162.1	164.3	167.6	167.6
Oil and gas field services.....	128.3	129.4	132.3	132.2	130.6	124.5	122.7	121.8	120.0	123.7	127.1	124.3	124.8	130.4	130.4
Quarrying and nonmetallic mining.....	127.0	129.1	129.1	128.3	126.8	123.4	117.6	107.9	104.8	104.7	113.9	120.5	117.7	118.1	118.1
Contract construction.....	3,260	3,372	3,391	3,482	3,424	3,308	3,130	2,921	2,707	2,631	2,579	2,872	3,121	2,983	2,902
General building contractors.....	1,055.7	1,058.3	1,095.3	1,073.4	1,034.8	975.2	910.4	843.5	820.3	806.4	891.4	873.1	921.9	882.1	882.1
Heavy construction.....	697.3	712.8	736.8	725.5	699.2	643.3	553.6	469.3	450.2	434.1	528.6	627.1	600.1	593.1	593.1
Highway and street construction.....	380.7	394.0	411.0	405.2	385.9	346.6	278.5	217.5	201.3	190.7	256.7	332.9	315.0	299.5	299.5
Other heavy construction.....	316.6	318.8	325.8	320.3	313.3	296.7	275.1	251.8	248.9	243.4	271.9	294.2	285.1	293.6	293.6
Special trade contractors.....	1,619.4	1,619.4	1,649.5	1,624.9	1,574.3	1,511.8	1,456.8	1,394.3	1,360.0	1,338.0	1,451.9	1,520.4	1,461.3	1,426.6	1,426.6
Manufacturing.....	17,603	17,421	17,792	17,498	17,299	17,350	17,135	17,058	17,005	16,937	16,893	17,096	17,193	17,005	16,853
Durable goods.....	10,041	9,794	10,105	9,836	9,855	9,903	9,798	9,756	9,692	9,634	9,626	9,723	9,752	9,625	9,481
Nondurable goods.....	7,562	7,627	7,687	7,662	7,444	7,447	7,337	7,302	7,313	7,303	7,267	7,373	7,441	7,380	7,372
Durable goods															
Ordnance and accessories.....	246.4	246.5	248.2	249.2	254.2	257.9	262.4	266.5	269.0	270.8	275.8	277.6	275.9	274.1	268.8
Ammunition, except for small arms.....	186.7	186.7	187.8	189.2	193.7	196.6	200.1	202.4	203.6	205.0	207.9	208.9	206.4	202.3	186.7
Sighting and fire control equipment.....	12.2	12.4	12.4	12.5	12.5	12.7	13.0	13.4	14.5	14.9	15.6	16.1	16.5	19.2	29.1
Other ordnance and accessories.....	47.6	47.6	48.0	47.5	48.0	48.6	49.3	50.7	50.9	50.9	52.3	52.6	53.0	52.5	53.0
Lumber and wood products, except furniture.....	597.2	606.5	618.0	625.0	623.3	620.1	597.3	582.7	570.8	568.1	565.5	585.1	599.1	586.6	589.3
Logging camps and logging contractors.....	86.4	92.0	94.9	97.4	96.5	94.0	86.3	78.5	73.5	77.0	77.7	83.8	89.3	83.2	83.6
Sawmills and planing mills.....	254.6	257.9	262.1	265.6	266.9	266.1	256.3	251.5	248.1	245.7	242.2	251.1	257.4	254.3	255.9
Millwork, plywood, and related products.....	153.5	154.0	157.5	158.5	157.0	156.5	153.2	152.1	150.1	148.5	149.2	151.3	153.0	149.9	151.5
Wooden containers.....	36.6	36.2	36.9	36.8	37.5	38.3	37.1	36.2	35.4	34.6	34.6	35.7	35.6	36.1	36.6
Miscellaneous wood products.....	66.1	66.4	66.6	66.7	65.4	65.2	64.4	64.4	63.7	62.3	61.8	63.2	63.8	63.0	61.8
Furniture and fixtures.....	414.0	415.7	413.1	408.5	400.8	401.4	391.9	394.1	392.4	389.6	388.5	393.6	396.3	388.9	385.1
Household furniture.....	303.4	303.7	300.9	298.0	292.2	292.4	287.1	288.1	287.6	285.4	283.0	286.2	287.0	279.8	275.2
Office furniture.....	27.7	27.8	27.2	26.5	26.6	26.5	25.3	26.4	26.5	26.2	26.9	27.3	27.6	27.5	28.0
Partitions, office and store fixtures.....	39.0	39.1	39.1	37.8	37.5	36.6	36.5	35.9	35.9	35.7	35.7	36.5	38.1	39.2	40.6
Other furniture and fixtures.....	44.8	45.3	45.3	44.2	44.3	44.9	42.9	43.1	42.4	42.1	42.9	43.6	43.6	42.4	41.3
Stone, clay, and glass products.....	626.2	631.0	640.0	640.3	635.7	634.2	618.6	606.6	591.7	582.7	577.6	597.0	612.9	601.6	592.3
Flat glass.....	34.4	33.8	32.5	32.1	32.0	31.4	30.9	31.3	32.0	32.2	32.6	32.8	31.0	30.4	30.4
Glass and glassware, pressed or blown.....	115.4	115.3	117.4	117.3	115.2	116.7	114.9	113.1	111.5	109.8	106.1	109.2	110.7	110.7	108.9
Cement, hydraulic.....	39.2	39.5	40.5	40.6	40.6	40.3	39.1	37.9	36.8	35.8	36.0	37.3	39.1	38.9	39.8
Structural clay products.....	68.5	68.6	69.8	70.6	70.2	70.3	68.5	67.6	66.0	64.0	64.5	67.8	69.1	68.7	68.5
Pottery and related products.....	42.4	43.8	43.6	42.7	43.1	43.2	43.5	43.5	42.8	43.2	43.7	44.5	43.1	43.5	43.5
Concrete, gypsum, and plaster products.....	175.4	180.0	183.4	185.7	185.3	182.3	174.8	167.9	158.3	155.4	154.1	163.7	173.0	168.4	163.4
Other stone and mineral products.....	129.4	129.5	130.0	128.8	128.7	128.8	126.2	125.5	124.1	123.1	122.2	123.2	123.7	121.6	119.4
Primary metal industries	1,253.3	1,244.8	1,258.8	1,241.2	1,234.6	1,234.0	1,220.7	1,209.1	1,196.4	1,188.0	1,173.8	1,170.1	1,158.2	1,171.7	1,165.6
Blast furnace and basic steel products.....	645.3	642.5	649.0	641.3	636.8	630.6	620.3	610.7	599.6	592.5	582.0	579.7	571.9	589.4	592.8
Iron and steel foundries.....	213.9	208.7	216.7	213.1	211.9	214.3	211.3	209.3	207.8	206.9	204.3	202.8	201.1	198.1	193.6
Nonferrous smelting and refining.....	71.7	71.6	68.9	69.6	69.6	71.1	70.7	70.0	70.1	70.0	70.0	69.7	70.0	68.8	68.1
Nonferrous, rolling, drawing, and extruding.....	187.3	186.9	188.2	184.5	184.4	183.8	185.7	186.2	186.4	186.3	186.0	186.4	184.8	184.8	182.0
Nonferrous foundries.....	74.5	74.7	75.7	74.0	73.2	74.7	73.6	73.5	73.4	73.2	72.7	72.4	71.7	71.8	70.0
Miscellaneous primary metal industries.....	60.6	60.4	60.3	58.7	58.7	59.5	59.1	59.4	59.1	59.1	58.8	59.1	58.7	58.9	59.2
Fabricated metal products	1,222.4	1,195.7	1,239.2	1,209.2	1,187.2	1,202.6	1,186.3	1,180.9	1,171.4	1,164.5	1,162.6	1,175.3	1,178.7	1,152.6	1,127.7
Metal cans.....	59.0	60.1	64.5	65.2	63.7	63.1	62.1	61.4	60.4	59.6	58.2	58.6	59.4	60.4	60.8
Cutlery, handtools, and general hardware.....	151.2	136.6	150.7	144.6	138.5	143.2	144.0	143.6	143.8	143.7	144.5	144.9	143.5	138.8	135.6
Heating equipment and plumbing fixtures.....	80.1	81.1	80.6	79.5	80.6	80.5	78.7	79.5	78.2	78.2	78.7	78.7	78.8	76.7	74.8
Fabricated structural metal products.....	362.6	366.4	368.5	365.9	362.5	358.1	346.9	342.2	336.9	334.4	333.6	340.0	345.5	339.3	332.0
Screw machine products, bolts, etc.....	92.5	92.3	91.9	90.9	89.8	91.3	90.3	90.7	90.8	90.3	90.0	90.4	89.7	89.3	88.1
Metal stampings.....	206.6	191.8	212.6	199.9	191.6	202.5	201.9	202.9	202.0	201.7	202.8	204.4	204.5	195.5	190.2
Coating, engraving, and allied services.....	77.8	77.4	77.7	75.7	73.9	74.5	74.6	73.5	73.2	71.4	71.9	73.3	73.8	70.8	67.4
Miscellaneous fabricated wire products.....	61.0	60.0	59.8	58.7	56.7	58.7	57.8	57.9	57.0	56.6	56.5	56.8	56.2	55.2	55.9
Miscellaneous fabricated metal products.....	131.6	130.0	132.9	128.8	129.9	130.7	130.0	129.2	129.1	128.6	126.9	128.2	127.3	126.5	122.9

See footnotes at end of table.

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

[In thousands]

Revised series; see box, p. 98.

Industry	1964											1963		Annual average	
	Nov. ²	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962
Manufacturing—Continued															
<i>Durable goods—Continued</i>															
Machinery.....	1,631.2	1,629.3	1,636.4	1,617.3	1,618.0	1,622.5	1,607.9	1,603.0	1,593.0	1,566.5	1,567.7	1,561.5	1,542.9	1,531.3	1,493.2
Engines and turbines.....	84.3	84.6	87.3	86.6	86.1	86.2	85.9	85.4	85.1	84.9	84.8	85.5	85.3	84.9	83.9
Farm machinery and equipment.....	122.7	123.2	122.2	122.2	122.5	125.1	125.9	127.2	127.1	125.8	122.5	119.5	116.4	118.9	112.3
Construction and related machinery.....	236.1	234.8	237.3	235.0	234.9	234.3	231.2	229.4	227.4	209.8	224.2	222.0	219.9	216.9	211.4
Metalworking machinery and equipment.....	291.4	289.6	291.0	286.0	287.9	290.7	288.9	287.4	285.6	281.8	278.3	277.6	272.1	268.6	259.3
Special industry machinery.....	176.5	175.6	176.2	174.7	175.6	176.8	174.4	174.4	173.1	172.3	171.2	170.9	170.5	169.8	171.0
General industrial machinery.....	254.4	253.6	253.7	252.0	250.9	251.3	248.3	247.2	245.7	244.4	241.3	240.4	236.9	235.7	229.0
Office, computing, and accounting machines.....	170.4	169.9	168.2	167.3	166.7	164.8	162.9	163.4	163.2	164.1	164.0	164.5	162.5	161.3	158.6
Service industry machines.....	106.4	105.1	105.6	103.6	105.5	106.1	105.4	104.1	103.3	102.6	101.9	101.5	101.4	101.7	101.2
Miscellaneous machinery.....	193.9	193.4	193.9	189.9	187.9	187.2	185.0	184.5	182.5	180.8	179.5	179.6	177.9	173.5	166.6
Electrical equipment and supplies.....	1,590.5	1,581.2	1,576.8	1,544.7	1,531.0	1,529.2	1,516.3	1,518.8	1,523.1	1,528.4	1,541.6	1,554.2	1,558.8	1,556.6	1,568.3
Electric distribution equipment.....	176.8	176.0	174.3	173.7	172.9	172.0	170.3	168.9	169.1	169.4	169.3	169.2	168.9	168.1	167.7
Electrical industrial apparatus.....	190.9	188.9	188.4	185.9	185.0	185.3	182.3	180.8	181.0	179.8	179.4	179.1	178.8	178.5	182.6
Household appliances.....	160.6	159.7	159.6	155.9	154.4	157.5	156.1	157.4	157.1	157.8	157.5	160.2	161.8	154.8	150.3
Electric lighting and wiring equipment.....	158.9	159.4	157.9	154.7	153.2	153.0	151.7	151.8	152.2	152.0	151.1	151.8	153.1	148.7	143.2
Radio and TV receiving sets.....	125.8	127.7	125.4	120.8	116.1	109.3	103.0	104.6	104.4	106.3	109.9	114.7	117.6	111.4	110.5
Communication equipment.....	408.4	404.9	403.5	400.7	400.5	400.2	400.7	404.3	407.6	409.6	416.2	419.0	417.7	433.5	444.9
Electronic components and accessories.....	277.4	273.1	269.5	263.8	257.1	259.2	258.6	257.8	258.3	257.7	259.7	260.1	261.4	262.4	266.1
Miscellaneous electrical equipment and supplies.....	91.7	91.5	98.2	89.2	91.8	92.7	93.6	93.2	93.4	95.8	98.5	100.1	99.5	99.1	103.2
Transportation equipment.....	1,659.9	1,441.2	1,677.0	1,517.9	1,609.2	1,629.9	1,639.7	1,642.8	1,637.6	1,634.5	1,640.5	1,656.7	1,651.8	1,609.3	1,542.6
Motor vehicles and equipment.....	176.8	176.0	174.3	173.7	172.9	172.0	170.3	168.9	169.1	169.4	169.3	169.2	168.9	168.1	167.7
Aircraft and parts.....	595.6	594.9	599.7	592.5	595.9	600.5	608.7	611.0	616.8	622.6	629.2	637.8	636.5	635.1	634.1
Ship and boat building and repairing.....	151.2	148.7	147.3	143.3	139.6	142.8	144.3	142.4	137.7	138.5	135.9	136.1	138.3	141.9	140.7
Railroad equipment.....	48.3	54.8	53.8	53.8	54.4	54.0	52.9	52.4	52.4	51.4	49.1	48.8	48.2	45.0	40.8
Other transportation equipment.....	51.8	52.1	51.3	49.8	51.0	50.2	48.4	46.4	45.2	42.4	43.4	43.4	43.8	42.1	35.4
Instruments and related products.....	371.7	370.6	372.2	370.8	368.2	368.9	364.9	365.7	366.3	365.3	366.4	368.5	369.0	364.7	358.7
Engineering and scientific instruments.....	66.7	67.0	67.0	67.1	67.5	67.6	67.9	68.6	69.4	70.0	71.4	71.6	71.8	72.9	73.8
Mechanical, measuring, and control devices.....	95.7	95.2	97.1	96.7	96.1	96.2	95.0	95.4	95.5	95.3	95.3	95.4	93.7	94.4	94.2
Optical and ophthalmic goods.....	46.1	46.0	45.2	44.9	44.7	45.5	44.9	44.8	44.4	44.3	43.2	43.3	43.3	42.1	40.8
Surgical, medical, and dental equipment.....	55.2	54.8	55.3	55.3	54.6	54.9	54.4	54.2	53.9	53.3	53.2	53.3	53.5	52.7	50.0
Photographic equipment and supplies.....	78.0	78.2	78.9	77.1	76.2	74.6	74.6	74.9	74.1	74.6	75.2	75.8	73.3	71.6	71.6
Watches and clocks.....	29.9	29.4	27.9	28.2	28.5	28.1	28.1	28.2	28.3	28.7	29.7	30.9	29.3	28.2	28.2
Miscellaneous manufacturing industries.....	428.6	431.1	424.8	411.9	393.1	402.3	392.0	386.1	379.9	375.8	366.0	383.8	407.9	387.4	389.6
Jewelry, silverware, and plated ware.....	47.4	46.9	46.6	45.3	43.2	44.6	44.5	44.3	43.7	42.9	42.8	43.2	43.6	41.8	42.2
Toys, amusement and sporting goods.....	129.3	125.2	116.3	101.0	111.3	104.5	99.8	93.8	90.8	85.7	97.0	114.5	102.7	102.1	102.1
Pens, pencils, office and art materials.....	33.1	32.9	32.1	31.5	31.2	30.8	30.8	30.8	31.1	31.2	32.7	32.9	31.5	30.9	30.9
Costume jewelry, buttons, and notions.....	55.4	55.1	55.3	52.0	55.3	53.8	53.2	54.0	53.9	51.4	53.3	54.8	54.5	57.0	57.0
Other manufacturing industries.....	166.2	166.4	165.0	162.9	157.4	159.9	158.4	158.0	157.6	157.1	154.9	157.6	162.1	157.0	157.4
<i>Nondurable goods</i>															
Food and kindred products.....	1,749.6	1,813.5	1,861.9	1,858.7	1,765.6	1,717.8	1,668.5	1,652.0	1,642.5	1,649.6	1,666.3	1,716.3	1,758.7	1,743.7	1,762.1
Meat products.....	323.6	316.5	318.1	318.5	315.3	313.2	307.6	302.3	302.1	308.1	308.6	317.7	319.9	313.8	315.0
Dairy products.....	280.6	283.5	290.1	297.2	298.3	296.6	289.1	285.5	283.4	281.7	281.9	285.6	287.1	293.9	302.5
Canned and preserved foods, except meats.....	302.6	356.6	347.4	264.3	223.2	202.9	200.6	187.8	188.1	193.2	208.8	235.0	247.3	255.8	255.8
Grain mill products.....	125.8	128.6	129.9	130.0	128.1	129.6	127.8	124.8	125.5	125.8	127.4	129.7	128.3	130.0	130.5
Bakery products.....	287.8	288.8	289.8	291.3	292.2	291.5	286.7	284.5	285.3	284.7	284.1	288.3	289.6	288.9	292.5
Sugar.....	48.6	34.4	33.2	32.0	31.4	31.6	32.5	34.7	41.8	45.5	48.8	52.2	37.0	35.7	35.7
Confectionery and related products.....	82.1	80.1	78.1	74.1	69.0	71.3	70.5	70.7	73.1	75.3	75.1	82.0	84.1	76.3	75.3
Beverages.....	217.1	220.5	222.3	226.5	226.6	221.0	213.6	212.1	209.9	208.1	209.1	213.7	215.9	213.6	212.0
Miscellaneous food and kindred products.....	143.2	144.3	142.6	140.5	139.8	140.0	138.7	139.0	140.7	141.0	141.4	143.5	146.6	143.0	142.8
Tobacco manufactures.....	96.5	106.0	102.6	93.6	76.2	76.7	76.3	76.7	80.3	84.3	86.9	93.6	97.5	87.9	90.5
Cigarettes.....	37.8	38.3	38.3	38.3	37.7	37.2	37.0	37.1	37.2	37.2	37.8	38.3	38.1	38.0	37.5
Cigars.....	25.7	25.4	25.0	24.6	25.3	24.8	24.6	24.6	24.3	23.8	22.2	22.8	23.3	22.7	23.8
Textile mill products.....	911.3	906.5	906.9	903.6	888.5	902.0	894.3	892.2	890.2	886.9	879.7	887.3	894.1	888.8	902.3
Cotton broad woven fabrics.....	231.5	231.2	230.0	229.4	228.6	229.2	227.6	228.0	228.9	229.1	228.7	229.7	229.2	229.1	238.9
Silk and synthetic broad woven fabrics.....	88.0	87.5	87.0	87.1	86.4	87.3	86.8	86.8	86.8	86.9	86.7	87.0	86.7	84.8	82.2
Weaving and finishing broad woolsens.....	45.4	45.3	46.8	46.3	46.7	48.9	48.8	48.1	47.9	48.3	47.8	47.3	47.2	50.4	52.2
Narrow fabrics and smallwares.....	30.2	29.5	29.2	29.0	28.4	28.9	28.4	28.5	28.4	28.2	28.1	28.3	28.3	27.8	27.8
Knitting.....	223.4	224.1	224.3	224.1	218.4	220.7	218.1	215.2	213.3	209.7	205.1	209.5	217.7	216.0	219.8
Finishing textiles, except wool and knit.....	77.2	76.8	77.1	77.3	76.2	76.9	76.5	76.7	76.5	76.4	76.0	75.9	76.4	76.2	74.9
Floor covering.....	38.1	37.9	37.0	35.6	36.5	36.5	36.7	37.1	37.5	37.3	37.0	37.7	37.8	37.4	37.3
Yarn and thread.....	107.4	107.0	107.0	107.3	102.5	106.8	104.9	104.6	104.6	104.5	103.7	104.0	103.2	101.4	102.4
Miscellaneous textile goods.....	69.4	67.0	67.6	66.1	65.7	66.8	66.5	67.1	66.4	66.9	66.7	67.4	67.8	66.8	66.6

See footnotes at end of table.

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

[In thousands]

Revised series; see box, p. 98.

Industry	1964											1963		Annual average	
	Nov. ²	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962
Manufacturing—Continued															
<i>Nondurable goods—Continued</i>															
Apparel and related products.....	1,339.0	1,340.7	1,342.2	1,341.4	1,277.9	1,308.3	1,285.8	1,280.6	1,305.8	1,303.6	1,264.2	1,280.8	1,293.3	1,284.5	1,263.7
Men's and boys' suits and coats.....	114.6	113.8	114.1	114.3	105.6	114.3	112.7	109.8	112.8	113.0	112.6	113.4	111.4	114.5	116.6
Men's and boys' furnishings.....	345.1	343.7	342.9	343.8	333.9	340.0	333.3	330.2	328.8	325.6	320.0	323.9	326.9	326.4	318.0
Women's, misses', and juniors' outer wear.....	399.3	402.9	405.2	408.9	386.6	392.0	387.1	391.4	407.8	408.3	388.4	389.4	390.1	392.3	382.5
Women's and children's undergarments.....	124.8	125.2	124.0	122.2	115.3	117.7	116.6	116.5	117.4	116.9	115.4	119.2	123.2	116.7	115.9
Hats, caps, and millinery.....	76.0	77.8	77.3	79.1	79.5	81.6	78.5	75.3	75.8	79.3	76.4	74.7	75.2	76.7	77.6
Fur goods and miscellaneous apparel.....	79.9	79.9	78.6	76.7	72.0	75.9	73.4	72.8	73.2	72.0	67.8	72.0	76.2	73.3	74.0
Miscellaneous fabricated textile products.....	168.4	164.8	167.5	162.2	153.8	157.1	155.5	155.4	154.8	152.5	150.7	156.5	159.6	151.6	146.1
Paper and allied products.....	637.7	638.4	639.7	638.2	631.1	635.6	625.8	624.4	620.6	618.7	619.6	625.2	625.7	620.3	614.4
Paper and pulp.....	217.1	218.3	218.1	221.6	220.6	221.1	217.0	217.0	215.8	215.4	216.1	218.2	218.0	217.9	218.1
Paperboard.....	64.6	66.7	67.4	66.4	65.7	66.6	65.8	65.7	65.8	65.7	65.8	65.7	65.7	65.3	65.1
Converted paper and paperboard products.....	155.7	154.7	156.5	155.1	153.0	153.5	151.7	150.7	149.2	148.4	148.5	149.7	149.0	147.3	144.3
Paperboard containers and boxes.....	200.3	198.7	197.7	195.1	191.8	194.4	191.3	191.0	189.8	189.2	189.2	191.6	193.0	189.7	186.9
Printing, publishing, and allied industries.....	962.6	961.9	958.6	952.7	950.0	952.2	947.8	945.0	943.5	940.4	938.8	948.9	943.8	931.1	926.4
Newspaper publishing and printing.....	339.8	339.5	337.1	338.2	338.6	339.7	337.9	336.6	336.2	334.8	334.5	338.4	335.8	329.6	327.6
Periodical publishing and printing.....	69.0	68.3	67.2	66.4	66.4	66.7	67.3	67.4	68.7	68.3	68.5	68.5	68.3	68.0	69.7
Books.....	74.5	74.7	74.2	74.5	74.7	75.1	75.1	75.1	74.8	73.9	73.5	72.4	72.1	71.8	71.8
Commercial printing.....	310.1	310.3	309.6	304.6	303.7	304.9	303.3	302.6	302.4	300.0	301.5	303.4	302.6	297.7	295.7
Bookbinding and related industries.....	51.4	51.3	51.5	52.0	51.7	51.4	50.8	50.4	49.7	49.3	48.0	50.3	50.0	50.6	49.2
Other publishing and printing industries.....	117.2	117.3	117.4	116.5	115.1	115.1	114.0	113.0	112.7	112.8	112.6	114.8	114.7	113.0	112.4
Chemicals and allied products.....	876.4	876.6	884.3	886.4	883.8	882.1	879.3	878.7	872.5	864.2	862.3	864.1	864.8	865.2	848.5
Industrial chemicals.....	282.9	282.4	287.0	288.7	288.6	287.5	284.3	284.1	283.4	283.0	283.1	283.0	283.6	283.6	282.9
Plastics and synthetics, except glass.....	189.3	188.9	190.2	189.3	187.9	185.8	183.0	182.2	180.9	180.1	180.1	180.0	179.4	176.2	165.4
Drugs.....	111.4	111.6	111.6	113.0	113.1	112.6	111.6	111.6	112.0	111.3	112.6	112.8	112.8	112.4	110.4
Soap, cleaners, and toilet goods.....	99.2	99.9	99.8	99.9	97.9	98.4	95.8	95.6	95.4	95.0	93.9	96.2	96.9	97.0	96.4
Paints, varnishes, and allied products.....	64.5	64.8	65.9	66.9	67.0	66.3	65.0	64.5	63.7	63.2	62.7	63.0	63.3	63.2	62.6
Agricultural chemicals.....	47.9	48.6	48.8	47.8	48.0	50.9	60.1	61.8	57.6	52.7	50.7	49.0	48.1	51.0	48.6
Other chemical products.....	81.2	80.4	81.0	80.8	81.3	80.6	79.5	78.9	79.5	78.9	79.2	80.1	80.9	81.7	82.2
Petroleum refining and related industries.....	185.1	186.5	188.4	189.6	189.7	189.8	187.2	186.1	185.5	185.7	185.8	186.6	188.9	189.8	195.3
Petroleum refining.....	150.6	150.7	151.8	152.9	153.1	153.4	152.2	152.8	152.7	153.0	153.9	153.5	153.9	154.7	160.5
Other petroleum and coal products.....	34.5	35.8	36.6	36.7	36.6	36.4	35.0	33.3	32.8	32.7	31.9	33.1	35.0	35.1	34.7
Rubber and miscellaneous plastic products.....	442.5	440.6	443.9	435.3	425.1	426.9	425.7	421.8	422.1	420.1	418.2	420.0	422.9	417.7	408.4
Tires and inner tubes.....	99.4	96.7	100.4	99.3	98.9	98.4	97.8	97.3	97.8	97.9	97.3	97.1	96.2	97.3	99.4
Other rubber products.....	168.6	168.8	169.3	164.2	162.1	163.9	163.3	162.9	163.6	163.8	163.4	164.5	165.4	163.5	161.3
Miscellaneous plastic products.....	174.5	175.1	174.2	171.8	164.1	164.6	164.6	161.6	160.7	158.4	157.5	158.4	161.3	157.0	147.7
Leather and leather products.....	361.0	356.5	358.0	362.6	356.1	355.6	346.1	344.4	349.5	349.9	345.5	350.2	350.8	350.8	360.7
Leather tanning and finishing.....	32.5	32.2	32.3	32.3	31.9	32.4	31.8	31.4	31.3	31.4	30.2	31.7	31.6	31.3	31.9
Footwear, except rubber.....	238.0	233.9	236.2	241.0	238.5	238.0	233.0	230.3	234.3	235.8	234.6	233.8	231.2	233.2	240.6
Other leather products.....	90.5	90.4	89.5	89.3	85.7	85.2	81.3	82.7	83.9	82.7	80.7	84.7	88.0	86.3	88.1
Transportation and public utilities.....	4,015	4,027	4,045	4,043	4,031	4,005	3,952	3,924	3,885	3,880	3,877	3,935	3,948	3,914	3,906
Railroad transportation.....	754.7	761.4	770.2	771.0	771.0	767.0	760.8	758.3	751.2	749.2	751.4	771.2	768.0	771.9	796.4
Class I railroads.....	661.1	667.5	677.1	678.6	675.7	670.3	667.6	660.3	659.0	662.2	672.1	675.4	679.3	700.2	700.2
Local and interurban passenger transit.....	278.1	276.6	260.2	261.5	269.0	278.1	277.2	272.4	281.5	282.7	280.3	278.0	272.0	270.7	270.7
Taxicabs.....	86.7	86.6	85.9	86.0	87.2	87.5	86.8	81.1	88.4	88.5	88.8	89.1	88.9	88.9	90.9
Intercity and rural buslines.....	107.9	105.9	106.0	106.7	107.4	109.1	111.2	112.9	115.2	115.2	114.8	112.4	112.0	112.5	112.5
Motor freight transportation and storage.....	42.8	44.9	45.4	45.4	45.4	43.5	42.5	41.0	40.3	40.5	41.9	41.3	41.0	41.4	41.3
Air transportation.....	983.4	991.3	977.2	971.0	963.4	928.4	914.0	903.0	902.3	899.5	927.9	939.4	912.1	884.6	884.6
Air transportation, common carriers.....	217.2	216.7	215.7	214.7	211.8	209.2	207.4	206.0	204.9	205.4	204.5	203.7	201.4	196.9	196.9
Pipeline transportation.....	196.7	196.5	195.6	194.8	192.0	189.8	187.7	186.4	185.6	185.3	184.3	183.3	180.7	175.9	175.9
Other transportation.....	19.9	20.4	20.8	20.7	20.6	20.1	20.1	20.1	20.2	20.1	20.3	20.3	20.8	21.6	21.6
Communication.....	312.1	306.9	313.6	308.2	309.9	307.4	303.1	299.2	291.7	291.1	302.1	310.0	302.9	301.6	301.6
Telephone communication.....	851.1	854.8	860.3	858.1	847.2	838.5	835.9	826.8	824.4	821.0	821.0	820.0	823.4	824.1	824.1
Telegraph communication.....	707.6	711.8	716.5	714.7	705.1	697.4	695.2	687.1	684.8	681.5	681.8	681.1	685.1	687.5	687.5
Radio and television broadcasting.....	31.3	31.5	31.9	32.4	32.5	32.5	32.7	32.5	32.3	32.5	32.4	32.7	32.5	33.7	36.8
Electric, gas, and sanitary services.....	107.3	106.6	107.0	106.1	104.7	103.5	103.3	102.5	102.2	102.2	101.6	101.5	99.7	95.3	95.3
Electric companies and systems.....	610.7	616.9	624.9	625.3	616.2	609.5	607.6	606.3	605.3	606.1	607.2	608.4	609.9	610.4	610.4
Gas companies and systems.....	248.1	250.5	253.5	253.6	251.3	246.7	245.8	245.2	245.0	245.4	245.5	245.6	246.1	246.5	246.5
Combined utility systems.....	151.1	152.6	154.9	155.1	151.2	152.1	151.9	152.0	151.9	151.7	152.5	152.8	153.3	154.6	154.6
Water, steam, and sanitary systems.....	173.9	176.0	177.6	177.6	175.2	172.8	172.7	172.5	172.2	172.2	172.6	173.1	173.6	174.2	173.1
	37.6	37.8	38.9	39.0	38.5	37.9	37.2	36.6	36.2	36.4	36.1	36.4	36.3	36.1	36.1

See footnotes at end of table.

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

Industry	1964											1963		Annual average	
	Nov. ²	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962
Wholesale and retail trade	12,497	12,340	12,243	12,201	12,173	12,180	12,031	11,919	11,862	11,772	11,855	12,725	12,110	11,803	11,566
Wholesale trade.....	3,262	3,269	3,258	3,266	3,245	3,211	3,170	3,161	3,156	3,156	3,172	3,210	3,183	3,119	3,056
Motor vehicles and automotive equip- ment.....		244.1	245.8	246.2	244.9	243.8	240.7	239.2	238.0	237.5	237.9	238.9	238.7	235.5	228.3
Drugs, chemicals, and allied products.....		192.7	192.6	191.1	191.5	193.1	190.0	190.2	189.7	189.3	190.4	190.7	190.5	188.5	186.3
Dry goods and apparel.....		137.2	137.2	138.1	137.3	136.0	134.6	133.8	134.0	133.4	132.0	133.8	134.4	132.2	131.0
Groceries and related products.....		520.9	522.0	520.4	524.7	512.9	499.7	497.7	498.3	498.0	501.9	507.9	504.6	493.6	487.0
Electrical goods.....		237.9	239.2	241.7	240.7	239.0	235.8	235.4	235.1	234.2	235.1	234.7	233.4	232.6	219.7
Hardware, plumbing, and heating goods.....		147.3	147.6	149.4	149.1	147.1	145.1	144.8	144.8	144.5	144.3	145.1	144.8	144.2	142.2
Machinery, equipment, and supplies.....		566.2	566.1	566.6	565.1	560.5	555.3	554.1	550.5	550.2	547.2	546.5	545.0	530.4	508.8
Retail trade.....	9,235	9,071	8,985	8,935	8,928	8,969	8,861	8,758	8,706	8,616	8,683	9,515	8,927	8,685	8,511
General merchandise stores.....		1,805.5	1,741.2	1,697.9	1,693.7	1,699.0	1,681.4	1,656.8	1,656.7	1,614.8	1,670.2	2,217.8	1,836.9	1,684.9	1,632.1
Department stores.....		1,108.0	1,060.9	1,035.2	1,035.0	1,040.8	1,027.0	1,014.1	1,010.5	981.5	1,026.8	1,387.1	1,123.9	1,021.5	971.4
Limited price variety stores.....		306.9	301.5	291.5	291.0	295.6	299.1	294.7	299.0	289.3	291.4	394.0	326.7	310.6	320.6
Food stores.....		1,433.5	1,414.3	1,407.8	1,412.1	1,413.5	1,408.0	1,410.6	1,408.4	1,409.0	1,409.3	1,434.0	1,405.4	1,383.4	1,363.6
Grocery, meat, and vegetable stores.....		1,264.8	1,249.6	1,245.0	1,248.6	1,245.6	1,239.5	1,242.0	1,238.3	1,236.4	1,242.5	1,253.3	1,234.7	1,211.6	1,195.4
Apparel and accessories stores.....		639.6	630.1	605.3	603.9	625.2	623.5	609.3	623.6	588.0	607.7	740.3	635.8	617.4	616.7
Men's and boys' apparel stores.....		103.3	100.5	99.6	99.5	102.3	99.8	98.4	98.2	98.9	105.9	129.9	101.5	99.8	99.7
Women's ready-to-wear stores.....		240.9	235.8	228.5	224.8	232.9	234.1	230.5	232.6	220.7	226.0	272.4	238.5	229.9	228.9
Family clothing stores.....		99.9	98.4	93.7	95.8	96.8	95.5	93.9	96.3	93.1	99.7	125.4	100.1	95.7	96.8
Shoe stores.....		118.1	123.1	115.5	114.7	118.7	121.1	115.6	120.3	107.6	108.2	131.4	120.6	120.8	119.9
Furniture and appliance stores.....		401.9	395.8	396.3	394.7	396.2	393.8	393.6	393.9	393.7	394.8	407.1	398.5	390.3	388.5
Eating and drinking places.....		1,831.1	1,842.9	1,857.1	1,853.0	1,862.9	1,819.5	1,788.8	1,754.4	1,742.4	1,726.6	1,743.4	1,749.2	1,747.9	1,720.5
Other retail trade.....		2,959.0	2,960.3	2,970.3	2,970.7	2,972.0	2,899.3	2,868.7	2,867.7	2,874.8	2,871.9	2,900.8	2,900.2	2,861.0	2,789.0
Motor vehicle dealers.....		703.5	703.1	704.1	704.5	700.2	693.2	691.1	689.5	688.8	687.6	683.6	680.2	672.3	641.2
Other vehicle and accessory dealers.....		168.4	168.8	172.1	171.7	171.3	166.0	162.8	158.8	157.5	158.1	170.8	165.0	159.4	151.1
Drug stores.....		392.3	392.2	390.4	389.0	390.5	385.1	381.5	379.4	379.7	380.5	396.2	383.8	378.1	373.8
Finance, insurance, and real estate	2,957	2,962	2,972	2,988	2,998	2,964	2,931	2,919	2,901	2,891	2,882	2,887	2,887	2,884	2,800
Banking.....		763.6	765.7	774.5	773.8	765.1	755.7	754.4	752.8	750.9	748.6	748.3	746.8	740.4	714.7
Credit agencies other than banks.....		322.9	321.2	321.9	321.9	317.6	314.8	313.3	311.3	310.6	310.2	308.4	306.8	300.6	281.9
Savings and loan associations.....		95.6	95.3	96.2	96.7	95.0	93.9	93.6	93.2	93.2	94.0	92.0	91.5	88.8	81.4
Personal credit institutions.....		171.1	169.8	169.2	168.7	166.6	164.8	163.9	162.7	162.2	161.4	161.5	160.4	158.7	151.9
Security dealers and exchanges.....		126.4	127.1	129.1	129.1	127.1	126.5	126.2	125.1	124.6	123.6	124.1	124.0	123.9	131.8
Insurance carriers.....		886.8	889.8	895.8	893.2	885.3	881.3	880.8	880.1	877.4	874.1	875.9	874.8	870.2	852.4
Life insurance.....		470.4	471.9	474.8	472.2	468.8	467.9	468.7	467.6	467.2	466.2	467.4	465.9	463.4	454.2
Accident and health insurance.....		55.3	55.6	55.8	55.8	55.3	54.8	54.8	54.9	54.5	54.2	53.7	53.7	53.3	51.5
Fire, marine, and casualty insurance.....		315.8	316.9	319.1	318.8	315.5	313.8	312.8	313.1	311.2	309.5	310.6	311.0	309.9	305.6
Insurance agents, brokers, and services.....		226.8	227.2	229.0	228.2	226.6	222.9	222.9	222.3	221.5	221.1	220.2	219.0	218.6	211.9
Real estate.....		556.0	562.3	568.0	571.7	565.0	551.6	543.1	531.4	528.5	526.6	531.5	534.1	540.7	530.1
Operative builders.....		44.5	44.6	45.3	46.2	45.1	43.1	42.4	42.6	41.7	41.9	43.4	45.6	46.3	46.1
Other finance, insurance, and real estate.....		79.1	79.1	79.3	79.4	78.7	78.3	77.9	77.7	77.4	77.3	78.2	78.0	78.4	77.6
Services and miscellaneous	8,613	8,678	8,661	8,676	8,698	8,654	8,548	8,453	8,326	8,277	8,233	8,299	8,327	8,230	7,947
Hotels and lodging places.....		623.2	647.0	735.4	733.2	662.6	626.3	602.9	579.6	575.0	561.6	563.2	571.7	605.4	594.6
Hotels, tourist courts, and motels.....		572.2	584.2	618.9	618.6	597.5	570.8	552.3	533.4	529.5	516.2	516.0	523.7	543.1	535.8
Personal services.....		542.2	540.6	542.1	546.8	545.2	539.4	531.2	526.1	525.3	525.2	524.3	527.5	524.0	519.7
Laundries, cleaning and dyeing plants.....															
Miscellaneous business services:															
Advertising.....		110.2	110.0	110.6	110.2	110.2	109.4	109.3	110.0	109.6	109.1	109.9	110.9	109.2	108.3
Motion pictures.....		178.1	181.1	188.5	186.1	180.3	173.9	170.9	163.8	161.6	162.3	168.9	170.0	175.4	178.3
Motion picture filming and distrib- uting.....		46.1	44.3	46.1	44.1	42.1	40.0	38.9	40.3	40.2	41.1	42.8	41.9	41.1	41.5
Motion picture theaters and services.....		132.0	136.8	142.4	142.0	138.2	133.9	132.0	123.5	121.4	121.2	126.1	128.1	134.3	136.9
Medical services:															
Hospitals.....		1,371.9	1,367.1	1,367.0	1,370.7	1,359.4	1,346.2	1,346.2	1,342.5	1,338.0	1,332.3	1,327.8	1,329.2	1,309.6	1,247.7
Government	9,759	9,710	9,509	9,135	9,149	9,484	9,513	9,508	9,480	9,443	9,391	9,564	9,425	9,199	8,890
Federal Government ³	2,336	2,329	2,320	2,356	2,355	2,344	2,332	2,334	2,323	2,321	2,323	2,482	2,343	2,358	2,340
Executive.....		2,298.8	2,289.9	2,325.5	2,324.7	2,313.5	2,302.3	2,304.2	2,293.1	2,290.9	2,293.0	2,451.8	2,312.8	2,328.1	2,310.6
Department of Defense.....		927.5	929.6	938.5	938.4	936.9	935.0	937.1	936.8	937.2	938.1	939.7	940.1	949.2	963.3
Post Office Department.....		591.8	582.9	591.6	586.5	583.7	585.1	586.8	585.9	585.6	588.2	738.0	593.3	598.4	597.2
Other agencies.....		779.5	777.4	795.4	799.8	792.9	782.2	780.3	770.4	768.1	766.7	774.1	779.4	780.5	750.2
Legislative.....		24.6	24.7	25.0	24.9	25.0	24.1	24.3	24.3	24.1	24.1	24.2	24.1	24.1	23.7
Judicial.....		5.8	5.8	5.7	5.8	5.8	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.5
State and local government ⁴	7,423	7,381	7,189	6,779	6,794	7,140	7,181	7,174	7,157	7,122	7,068	7,082	7,082	6,841	6,550
State government.....		1,898.1	1,830.1	1,790.1	1,792.9	1,835.2	1,844.0	1,836.4	1,827.8	1,814.7	1,799.8	1,797.6	1,798.6	1,743.4	1,668.4
State education.....		656.9	562.9	507.2	521.5	584.7	622.1	617.4	618.1	614.2	603.9	601.9	611.4	555.0	510.5
Other State government.....		1,241.2	1,267.2	1,282.9	1,271.4	1,250.5	1,221.9	1,219.0	1,209.7	1,200.5	1,195.9	1,195.7	1,187.2	1,188.5	1,157.8
Local government.....		5,483.2	5,358.6	4,988.4	5,001.3	5,305.2	5,336.5	5,337.1	5,328.9	5,307.5	5,268.2	5,284.7	5,283.7	5,097.3	4,881.2
Local education.....		3,052.1	2,894.5	2,466.8	2,476.5	2,832.8	2,934.9	2,944.2	2,953.3	2,937.3	2,902.9	2,918.7	2,916.9	2,731.5	2,581.2
Other local government.....		2,431.1	2,464.1	2,521.6	2,524.8	2,472.4	2,401.6	2,392.9	2,375.6	2,370.2	2,365.3	2,366.0	2,366.8	2,365.8	2,300.0

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

[In thousands]

Revised series; see box, p. 98.

Industry	1964											1963		Annual average	
	Nov. ²	Oct. ³	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962
Mining		507	507	508	508	512	497	490	478	477	481	497	502	499	512
Metal mining.....		69.7	65.7	64.2	64.1	71.2	70.2	69.0	67.1	66.7	66.3	66.7	67.6	66.6	67.5
Iron ores.....		23.9	24.0	23.6	24.0	24.0	23.7	22.8	21.2	21.0	20.7	21.1	22.0	21.0	21.0
Copper ores.....		22.4	18.4	16.9	17.0	24.3	23.8	23.5	23.4	23.3	23.1	22.9	22.7	22.7	23.4
Coal mining.....		127.8	126.5	125.6	126.0	126.2	124.5	126.2	129.7	129.7	130.8	132.9	132.8	130.5	133.6
Bituminous.....		118.0	116.7	115.6	115.9	116.2	114.9	116.8	116.2	119.6	120.9	122.8	122.7	120.6	123.1
Crude petroleum and natural gas.....		203.0	206.2	210.4	210.6	208.4	199.6	198.0	197.3	196.7	200.0	204.0	202.0	204.4	212.8
Crude petroleum and natural gas fields.....		91.2	93.1	94.5	94.8	94.5	91.3	91.2	91.6	92.4	92.7	93.1	93.7	96.2	99.8
Oil and gas field services.....		111.8	113.1	115.9	115.8	113.9	108.3	106.8	105.7	104.3	107.3	110.9	108.3	108.1	113.1
Quarrying and nonmetallic mining.....		106.4	108.2	108.0	107.2	105.9	102.6	97.1	87.5	84.3	84.1	93.2	99.8	97.1	98.1
Contract construction		2,909	2,927	3,015	2,960	2,853	2,670	2,467	2,260	2,186	2,134	2,426	2,674	2,539	2,462
General building contractors.....		916.0	919.1	956.9	937.1	900.8	839.4	776.4	710.8	687.7	673.5	758.6	840.2	791.6	755.8
Heavy construction.....		616.0	630.1	653.0	642.9	617.2	560.1	472.8	389.6	372.1	355.9	450.7	549.0	523.1	514.8
Highway and street construction.....		345.9	358.4	375.7	370.7	351.5	311.6	244.3	183.8	168.2	157.7	233.1	298.8	282.3	269.0
Other heavy construction.....		270.1	271.7	277.3	272.2	265.7	248.5	228.5	205.8	203.9	198.2	227.6	250.2	240.7	245.7
Special trade contractors.....		1,376.6	1,377.3	1,405.2	1,380.3	1,334.6	1,270.6	1,217.9	1,159.3	1,126.3	1,104.5	1,216.3	1,285.1	1,224.5	1,191.8
Manufacturing	13,096	12,916	13,280	12,966	12,768	12,847	12,666	12,592	12,543	12,482	12,435	12,631	12,722	12,558	12,488
Durable goods.....	7,423	7,184	7,490	7,211	7,227	7,292	7,201	7,160	7,095	7,041	7,029	7,121	7,147	7,030	6,936
Nondurable goods.....	5,673	5,732	5,790	5,755	5,541	5,555	5,465	5,432	5,448	5,441	5,406	5,510	5,575	5,528	5,552
Durable goods															
Ordnance and accessories.....	103.1	102.8	104.3	102.6	103.7	105.5	107.5	109.8	110.7	111.8	115.9	116.7	116.8	115.8	118.2
Ammunition, except for small arms.....	66.1	65.8	66.8	65.7	66.5	67.7	69.1	69.8	70.4	71.1	73.9	74.2	73.8	71.9	69.4
Sighting and fire control equipment.....		5.1	5.2	5.2	5.2	5.3	5.3	5.6	6.0	6.3	6.6	6.7	6.7	8.0	12.3
Other ordnance and accessories.....	31.8	31.9	32.3	31.7	32.0	32.5	33.1	34.4	34.3	34.4	35.4	35.8	36.3	35.9	36.5
Lumber and wood products, except furniture.....	534.5	543.2	555.4	560.8	560.1	555.8	533.8	518.7	507.0	506.0	503.5	522.4	535.8	524.6	526.7
Logging camps and logging contractors.....	81.9	86.8	90.3	92.6	91.3	89.0	80.8	72.3	67.1	71.4	72.6	78.2	83.5	78.0	78.7
Sawmills and planing mills.....	232.5	236.0	240.0	243.5	244.6	242.6	233.9	228.9	225.9	224.0	220.2	229.2	234.9	232.3	233.1
Millwork, plywood, and related products.....	129.8	130.2	133.8	134.5	133.4	133.0	129.9	128.8	126.9	125.5	126.0	128.1	129.9	127.1	128.2
Wooden containers.....	32.9	32.5	33.3	33.2	34.1	34.7	33.5	32.7	31.9	31.2	31.2	32.2	32.2	32.7	33.2
Miscellaneous wood products.....	57.4	57.7	58.0	57.0	56.7	56.5	55.7	56.0	55.2	53.9	53.5	54.7	55.3	54.6	53.5
Furniture and fixtures.....	344.7	346.5	344.5	340.8	333.3	334.2	325.3	327.7	325.9	323.4	322.2	327.6	330.4	323.3	319.6
Household furniture.....	260.3	260.8	258.4	256.4	250.6	250.9	246.0	246.0	246.2	244.1	241.7	245.2	246.1	239.3	235.0
Office furniture.....		21.8	22.0	21.3	20.5	20.6	19.3	20.5	20.7	20.5	21.1	21.6	21.9	21.8	22.4
Partitions; office and store fixtures.....		28.8	29.3	29.2	28.0	27.8	26.9	26.2	26.4	26.3	27.0	28.5	29.4	30.5	
Other furniture and fixtures.....	34.4	35.1	34.8	33.9	34.2	34.9	33.1	33.3	32.8	32.4	33.1	33.8	33.9	32.7	31.8
Stone, clay, and glass products.....	506.2	511.3	519.4	519.0	513.5	513.3	499.4	487.4	473.9	465.1	460.9	480.3	495.1	484.5	477.7
Flat glass.....		27.8	27.5	26.0	25.7	25.8	25.2	24.7	25.1	25.8	26.1	26.5	26.7	25.1	25.3
Glass and glassware, pressed or blown.....	100.8	100.7	102.8	102.7	100.5	102.2	100.4	98.3	96.9	95.1	91.8	95.3	96.0	95.4	92.6
Cement, hydraulic.....	30.7	31.0	31.9	32.1	32.1	31.8	30.7	29.7	28.7	27.7	27.9	29.2	30.9	30.9	31.9
Structural clay products.....	58.1	58.2	59.3	60.2	59.7	59.9	58.2	57.3	55.7	53.7	54.1	57.4	58.8	58.4	58.5
Pottery and related products.....		35.9	37.1	36.8	35.9	36.3	36.7	36.8	37.0	36.3	36.7	37.2	38.0	36.6	37.0
Concrete, gypsum, and plaster products.....	138.0	142.9	145.6	147.2	146.8	143.9	137.3	130.3	121.4	118.5	117.5	126.8	135.9	131.9	128.1
Other stone and mineral products.....	97.4	97.5	97.8	96.8	95.7	96.5	94.2	93.8	92.6	91.9	91.0	91.9	92.4	90.4	89.2
Primary metal industries.....	1,023.5	1,014.2	1,027.4	1,009.1	1,003.0	1,005.4	994.1	983.5	971.6	963.7	949.8	945.7	933.1	946.9	937.3
Blast furnace and basic steel products.....	531.1	527.8	533.7	526.3	522.5	518.3	508.6	499.8	489.1	482.8	472.3	469.1	461.4	478.7	476.3
Iron and steel foundries.....	183.1	178.2	186.2	182.1	181.0	184.0	181.3	179.4	178.0	177.1	174.8	173.4	171.1	168.2	163.7
Nonferrous smelting and refining.....	55.7	55.4	52.9	53.3	53.0	54.6	54.6	53.8	54.4	54.1	53.9	53.8	54.0	53.2	52.6
Nonferrous rolling, drawing, and extruding.....	142.9	142.4	143.4	139.4	139.2	139.0	141.5	142.2	142.3	142.0	141.9	142.4	140.8	140.8	139.6
Nonferrous foundries.....	61.9	62.1	63.0	61.6	60.7	62.0	61.1	61.0	60.9	60.7	60.3	60.1	59.4	59.6	58.2
Miscellaneous primary metal industries.....	48.8	48.3	48.2	46.4	46.6	47.5	47.0	47.3	46.9	47.0	46.6	46.9	46.4	46.5	46.9
Fabricated metal products.....	943.3	917.2	960.6	930.9	909.2	927.0	910.8	906.8	898.5	892.4	891.2	903.9	907.7	883.7	863.7
Metal cans.....	49.5	50.5	54.8	55.4	53.9	53.4	52.4	51.6	50.7	49.9	48.5	48.9	49.8	50.5	50.8
Cutlery, handtools, and general hardware.....	119.7	105.2	119.2	113.2	107.4	112.1	113.0	112.9	113.5	113.4	114.4	114.7	113.8	109.1	106.8
Heating equipment and plumbing fixtures.....	60.3	61.3	60.9	59.5	60.4	60.9	59.3	60.4	59.1	59.1	58.9	59.4	59.6	57.7	55.6
Fabricated structural metal products.....	259.9	263.9	265.8	263.0	260.2	257.3	245.9	242.0	237.1	234.7	234.2	240.7	245.9	240.8	235.0
Screw machine products, bolts, etc.....	72.9	72.5	72.2	71.3	70.1	71.5	70.6	70.9	71.2	70.8	70.4	70.8	70.3	70.3	69.5
Metal stampings.....	167.8	153.0	174.0	161.6	153.3	164.3	164.1	165.1	164.1	163.9	164.9	167.1	167.1	158.4	153.6
Coating, engraving, and allied services.....	65.9	65.4	65.8	63.8	62.1	62.8	62.7	61.8	61.4	59.9	60.2	61.5	62.1	58.9	56.2
Miscellaneous fabricated wire products.....	49.2	48.4	48.2	47.1	45.3	47.1	46.2	46.5	45.9	45.5	45.3	45.5	44.9	44.0	44.4
Miscellaneous fabricated metal products.....	98.1	97.0	99.7	96.0	96.5	97.6	96.6	95.6	95.5	95.2	94.4	95.3	94.2	94.1	91.8

See footnotes at end of table.

TABLE A-3. Production or nonsupervisory workers in nonagricultural establishments, by industry¹—Continued

Industry	1964											1963		Annual average	
	Nov. ²	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962
Manufacturing—Continued															
<i>Durable goods—Continued</i>															
Machinery.....	1,134.2	1,135.4	1,141.8	1,117.8	1,120.0	1,130.0	1,121.3	1,118.0	1,110.4	1,086.8	1,089.1	1,082.8	1,064.8	1,058.7	1,037.8
Engines and turbines.....	57.7	57.4	59.5	58.0	57.4	57.5	57.5	57.1	56.8	56.5	56.2	56.9	56.6	56.1	55.6
Farm machinery and equipment.....	88.5	88.9	87.2	88.2	90.9	92.5	94.0	94.3	92.8	90.1	86.6	86.6	83.6	86.1	80.4
Construction and related machinery.....	162.0	161.1	162.9	160.5	160.4	160.4	158.1	156.2	154.4	137.3	151.4	149.4	147.1	144.8	139.9
Metalworking machinery and equipment.....	216.5	217.1	218.8	213.0	215.0	218.5	217.3	216.7	215.3	212.2	209.4	209.1	203.4	200.6	193.8
Special industry machinery.....	120.8	120.7	121.4	119.3	119.8	121.5	119.8	119.7	118.8	118.1	117.5	117.1	116.4	116.2	118.0
General industrial machinery.....	171.1	170.2	170.5	167.7	166.4	167.9	165.8	164.8	163.8	163.9	160.2	159.4	156.2	156.8	154.8
Office, computing and accounting machines.....	98.2	97.9	96.8	95.1	94.9	95.3	94.4	94.9	94.8	95.4	95.4	95.3	94.3	95.1	98.7
Service industry machines.....	73.3	72.3	72.6	70.4	72.7	73.3	72.8	71.7	71.0	70.3	69.7	69.1	68.8	69.2	69.3
Miscellaneous machinery.....	150.8	150.2	150.4	146.6	145.2	144.7	143.1	142.9	141.2	140.3	139.2	139.9	138.4	133.9	127.3
Electrical equipment and supplies.....	1,079.4	1,074.9	1,068.3	1,037.2	1,021.8	1,021.7	1,010.5	1,012.0	1,013.1	1,017.1	1,027.6	1,039.7	1,043.0	1,036.6	1,051.5
Electric distribution equipment.....	119.3	118.8	116.9	116.2	114.8	114.7	114.7	112.3	112.0	112.0	111.9	111.8	111.8	111.5	111.2
Electrical industrial apparatus.....	132.5	130.9	130.5	128.1	127.1	127.9	125.6	124.0	124.2	123.0	122.8	122.7	122.5	122.1	124.8
Household appliances.....	125.0	124.1	124.1	120.2	118.4	121.5	120.1	121.3	121.1	121.1	119.9	123.7	125.0	118.7	114.8
Electric lighting and wiring equipment.....	123.8	124.8	123.7	120.3	119.0	119.3	118.1	118.2	118.7	118.3	117.7	118.7	119.8	115.9	111.5
Radio and TV receiving sets.....	99.1	101.2	99.1	94.8	90.2	83.7	78.0	78.5	78.1	79.9	83.9	88.3	91.5	84.0	82.5
Communication equipment.....	205.4	204.1	201.6	198.6	197.8	196.5	196.3	199.4	201.0	202.7	207.1	207.7	205.8	217.7	229.5
Electronic components and accessories.....	205.4	202.4	197.4	192.9	185.7	188.7	188.5	188.2	187.8	187.5	190.0	190.7	191.1	192.1	198.2
Miscellaneous electrical equipment and supplies.....	68.9	68.6	75.0	66.1	68.8	69.4	70.3	70.1	70.2	72.6	74.3	76.1	75.4	75.0	78.9
Transportation equipment.....	1,171.1	954.1	1,186.5	1,026.6	1,116.8	1,142.9	1,155.0	1,157.2	1,150.3	1,145.1	1,149.0	1,161.0	1,155.6	1,112.8	1,061.1
Motor vehicles and equipment.....	417.2	118.8	116.9	116.2	114.8	114.7	613.6	613.5	609.6	603.3	611.9	611.8	613.5	576.7	534.0
Aircraft and parts.....	334.4	333.6	336.0	327.5	328.3	333.7	337.8	343.1	346.3	349.5	352.7	356.6	353.9	348.4	350.2
Ship and boat building and repairing.....	126.3	124.2	122.8	119.8	115.9	118.5	121.1	119.7	115.4	115.5	113.3	113.3	115.6	119.3	118.2
Railroad equipment.....	36.2	42.6	41.5	42.2	42.0	41.0	40.8	40.8	39.9	37.7	37.5	36.9	34.0	30.1	28.6
Other transportation equipment.....	42.9	43.3	42.7	41.0	42.4	41.7	40.1	38.2	36.9	34.3	35.2	35.7	34.4	34.4	28.6
Instruments and related products.....	235.9	234.7	236.8	234.9	231.7	232.9	230.3	231.1	232.0	231.2	231.4	234.2	235.0	232.2	229.1
Engineering and scientific instruments.....	34.2	34.7	34.3	34.6	34.8	35.0	35.5	36.1	36.3	37.2	37.5	37.9	38.5	39.2	39.2
Mechanical measuring and control devices.....	62.1	61.8	63.8	63.5	62.8	63.0	61.9	62.2	62.3	62.1	61.9	62.1	60.7	61.4	61.6
Optical and ophthalmic goods.....	32.9	33.0	32.1	32.0	31.8	32.4	32.2	32.1	31.9	31.8	30.6	30.9	31.2	30.2	29.7
Surgical, medical, and dental equipment.....	37.9	37.5	38.1	38.3	37.6	37.8	37.5	37.3	37.3	36.9	36.8	37.0	37.2	36.8	34.7
Photographic equipment and supplies.....	44.2	44.4	44.7	42.7	42.5	41.6	41.7	41.9	41.4	41.9	42.6	42.7	41.5	41.1	41.1
Watches and clocks.....	24.0	23.7	22.1	22.2	22.4	22.1	22.3	22.5	22.7	23.0	24.1	25.3	23.8	22.7	22.7
Miscellaneous manufacturing industries.....	347.1	349.3	344.6	331.3	313.6	323.1	313.4	307.8	301.8	298.7	288.8	306.7	330.1	311.0	313.2
Jewelry, silverware, and plated ware.....	37.6	37.2	37.0	35.7	33.9	34.9	34.7	34.5	34.0	33.4	33.1	33.6	33.7	32.2	32.8
Toys, amusement, and sporting goods.....	110.2	106.9	97.6	90.5	93.2	86.5	81.7	76.0	73.3	67.5	79.2	97.0	85.6	85.2	85.2
Pens, pencils, office and art materials.....	24.7	24.5	23.8	23.2	23.1	22.8	22.8	22.7	22.9	23.2	24.5	24.7	23.7	23.1	23.1
Costume jewelry, buttons, and notions.....	46.1	46.0	46.0	42.8	45.6	44.5	44.5	44.2	44.7	44.5	42.2	44.1	45.4	45.1	47.3
Other manufacturing industries.....	130.9	131.1	130.2	128.2	123.2	126.3	124.9	124.6	124.4	124.6	122.8	125.3	129.3	124.3	124.9
<i>Nondurable goods</i>															
Food and kindred products.....	1,169.0	1,225.8	1,271.5	1,262.4	1,171.1	1,125.9	1,084.9	1,069.7	1,061.8	1,069.4	1,087.5	1,135.0	1,175.2	1,160.8	1,177.8
Meat products.....	259.5	253.2	255.6	255.6	252.6	250.7	245.6	240.1	240.2	241.2	247.5	256.4	258.2	252.4	253.2
Dairy products.....	132.7	134.3	139.0	144.4	145.9	145.7	140.3	137.3	135.4	134.6	135.0	137.8	139.2	144.5	151.6
Canned and preserved food, except meats.....	262.8	315.9	306.2	224.6	184.2	165.2	162.9	150.2	155.4	170.5	155.4	170.5	196.2	207.8	216.5
Grain mill products.....	87.2	90.8	92.0	91.7	89.9	91.1	89.0	85.9	87.0	86.9	88.5	88.3	88.9	91.0	91.3
Bakery products.....	166.0	166.9	168.2	168.4	168.9	168.0	164.1	162.0	162.7	162.2	161.8	166.6	167.4	166.9	167.8
Sugar.....	67.4	40.9	27.2	26.1	24.9	24.1	24.3	25.2	27.4	34.4	38.2	42.0	45.1	30.4	29.8
Confectionery and related products.....	113.0	115.6	116.1	118.6	118.9	114.4	109.8	108.9	107.5	105.9	106.9	112.2	113.5	112.0	111.6
Beverages.....	95.2	95.9	94.0	91.6	90.7	90.9	90.5	91.1	92.7	93.4	93.8	95.7	98.8	95.0	96.0
Miscellaneous food and kindred products.....	95.2	95.9	94.0	91.6	90.7	90.9	90.5	91.1	92.7	93.4	93.8	95.7	98.8	95.0	96.0
Tobacco manufactures.....	84.8	93.8	90.9	82.1	64.9	65.4	65.2	65.7	69.0	72.8	75.1	81.6	85.4	76.0	78.7
Cigarettes.....	31.4	32.0	31.9	31.3	30.9	30.8	31.0	31.1	31.2	31.2	31.7	32.0	31.8	31.6	31.4
Cigars.....	24.1	23.9	23.6	23.2	23.8	23.3	23.1	22.8	22.1	20.5	21.2	21.7	21.1	22.0	22.0
Textile mill products.....	814.9	811.0	811.4	808.1	792.8	807.2	800.3	798.0	797.1	794.2	787.3	794.2	801.0	796.4	812.1
Cotton broad woven fabrics.....	213.1	212.8	211.7	211.1	210.2	211.1	209.7	210.2	211.2	211.5	211.5	212.5	212.0	212.1	222.1
Silk and synthetic broad woven fabrics.....	79.3	78.9	78.5	78.4	77.6	78.7	78.3	78.5	78.5	78.7	78.5	78.8	78.3	76.5	74.4
Weaving and finishing broad woollens.....	39.6	39.5	41.0	40.6	41.0	43.0	42.8	42.2	41.9	42.4	41.9	41.5	41.3	44.4	46.3
Narrow fabrics and smallwares.....	26.6	26.2	25.8	25.6	25.0	25.5	25.1	25.2	25.2	25.0	24.8	24.9	25.0	24.4	24.4
Knitting.....	200.5	201.2	201.5	201.4	195.7	198.1	195.1	192.9	191.4	187.8	183.2	187.3	195.5	194.4	198.6
Finishing textiles, except wool and knit.....	66.2	66.0	66.1	66.4	65.4	66.1	65.7	65.6	65.7	65.3	65.3	65.6	65.3	64.2	64.3
Floor covering.....	31.5	31.4	30.4	29.2	30.2	30.3	30.3	30.7	31.2	30.9	30.6	31.3	31.5	31.0	31.2
Yarn and thread.....	99.4	99.1	99.0	99.4	94.3	98.9	97.0	96.8	96.6	96.5	95.7	95.9	95.2	93.3	94.7
Miscellaneous textile goods.....	57.8	55.8	56.4	54.8	54.4	55.6	55.5	55.9	55.4	56.1	55.8	56.4	56.9	56.1	56.2

See footnotes at end of table.

TABLE A-3. Production or nonsupervisory workers in nonagricultural establishments, by industry¹—Continued

[In thousands]

Revised series; see box, p. 98.

Industry	1964											1963		Annual average	
	Nov. ²	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962
Manufacturing—Continued															
<i>Nondurable goods—Continued</i>															
Apparel and related products.....	1,192.1	1,192.9	1,195.6	1,193.8	1,132.9	1,161.1	1,141.2	1,137.4	1,159.7	1,158.5	1,120.6	1,135.0	1,146.5	1,139.4	1,122.9
Men's and boys' suits and coats.....	102.1	101.9	102.1	102.2	94.1	102.3	101.0	98.0	100.8	101.2	100.9	101.4	99.3	102.3	104.3
Men's and boys' furnishings.....	312.7	311.6	311.6	312.2	301.9	308.6	302.9	300.0	298.3	295.4	289.7	293.3	296.2	296.5	288.8
Women's, misses', and juniors' outerwear.....	358.5	361.7	363.7	366.7	345.5	349.4	344.9	349.7	365.0	365.4	346.1	346.1	346.5	349.7	342.8
Women's and children's undergarments.....	110.9	111.1	109.9	108.2	101.8	104.3	103.3	103.4	104.0	103.6	101.9	105.8	109.8	103.4	102.5
Hats, caps, and millinery.....	67.9	69.6	69.0	70.8	71.2	73.1	70.2	67.1	67.7	71.4	68.4	66.7	66.9	68.5	69.5
Fur goods and miscellaneous apparel.....	70.0	70.0	68.8	67.0	62.5	66.2	63.9	63.7	63.7	62.3	58.3	62.3	66.2	63.4	64.0
Miscellaneous fabricated textile products.....	142.7	138.1	141.6	136.3	128.2	131.1	130.0	129.7	128.8	127.2	125.8	131.5	134.8	126.6	121.6
Paper and allied products.....	498.6	499.7	501.4	498.8	492.0	498.0	489.6	487.7	485.1	482.8	484.2	490.5	491.3	487.7	486.0
Paper and pulp.....	173.0	174.1	174.0	176.7	176.0	176.8	173.5	172.9	172.4	171.8	172.8	175.0	174.8	175.2	175.9
Paperboard.....	51.0	53.2	54.2	53.0	52.1	53.2	52.4	52.4	52.2	51.9	51.9	52.2	52.4	52.1	52.3
Converted paper and paperboard products.....	114.9	113.9	115.6	114.2	112.3	113.5	112.0	111.1	109.9	109.1	109.4	111.0	110.5	109.7	108.3
Paperboard containers and boxes.....	159.7	158.5	157.6	154.9	151.6	154.5	151.7	151.3	150.6	150.0	150.1	152.3	153.6	150.7	149.5
Printing, publishing, and allied industries.....	611.6	610.9	609.5	602.5	599.2	602.9	600.7	598.7	597.9	594.6	592.6	602.7	598.3	590.7	594.5
Newsprint publishing and printing.....	173.1	172.1	170.9	170.3	170.0	171.2	171.2	170.6	170.0	169.0	168.3	172.2	170.0	165.7	168.1
Periodical publishing and printing.....	26.3	26.3	26.0	25.1	24.6	24.8	25.4	26.2	26.3	26.5	26.3	26.5	26.6	27.0	28.2
Books.....	45.9	45.8	45.8	45.1	45.4	46.1	46.6	46.4	46.6	46.1	45.0	44.6	43.5	43.7	43.8
Commercial printing.....	242.9	243.0	242.6	237.8	236.9	238.0	236.7	236.1	236.4	234.4	235.8	238.2	237.3	233.5	233.6
Bookbinding and related industries.....	41.6	41.5	41.7	42.2	41.7	41.6	40.9	40.4	39.6	39.5	38.2	40.4	40.0	40.7	39.6
Other publishing and printing industries.....	82.0	82.1	82.5	82.0	80.6	81.2	79.9	79.0	79.0	79.1	79.0	80.8	80.9	80.2	81.1
Chemicals and allied products.....	525.4	526.0	532.3	532.0	530.1	533.0	533.6	533.2	529.0	521.3	519.5	522.2	522.7	525.4	519.3
Industrial chemicals.....	160.6	160.4	164.7	164.9	165.2	165.6	163.4	163.1	162.4	162.3	162.6	162.6	162.9	164.1	164.9
Plastics and synthetics, except glass.....	127.4	127.1	128.3	126.8	125.7	124.8	123.1	122.2	121.4	120.6	120.8	120.9	120.3	118.2	112.8
Drugs.....	58.8	58.8	58.7	59.6	59.8	60.2	59.5	59.5	60.2	59.4	60.5	60.8	60.9	60.6	59.5
Soap, cleaners, and toilet goods.....	61.1	62.0	61.7	61.5	59.7	60.1	58.1	58.2	58.1	57.9	56.5	58.8	59.5	59.2	58.3
Paints, varnishes, and allied products.....	36.0	36.4	37.3	38.3	38.3	38.1	37.0	36.5	36.1	35.6	35.4	35.6	35.8	36.0	35.9
Agricultural chemicals.....	30.6	31.3	31.4	30.4	30.2	33.3	42.6	44.3	40.4	35.9	34.0	32.4	31.6	34.4	33.1
Other chemical products.....	60.9	50.0	50.2	50.5	51.2	50.9	49.9	49.4	50.4	49.6	49.8	51.1	51.7	52.9	54.8
Petroleum refining and related industries.....	114.1	115.5	117.5	118.5	118.5	119.0	116.8	115.4	115.5	115.6	115.2	117.0	119.2	120.5	125.5
Petroleum refining.....	90.0	90.2	91.4	92.3	92.5	93.1	92.3	92.5	93.3	93.6	93.7	94.3	94.5	95.8	101.0
Other petroleum and coal products.....	24.1	25.3	26.1	26.2	26.0	25.9	24.5	22.9	22.2	22.0	21.5	22.7	24.7	24.8	24.5
Rubber and miscellaneous plastic products.....	344.3	342.7	344.9	336.7	326.2	329.1	328.1	324.3	325.0	323.3	320.6	323.2	326.1	322.1	316.5
Tires and inner tubes.....	71.4	69.6	72.5	71.0	70.6	70.2	69.8	69.6	70.1	70.2	69.2	69.3	68.2	69.8	72.2
Other rubber products.....	133.2	133.1	133.2	128.4	126.2	128.3	127.5	127.0	127.7	128.0	127.7	129.2	130.1	128.3	127.3
Miscellaneous plastic products.....	139.7	140.0	139.2	137.3	129.4	130.6	130.8	127.7	127.2	125.1	123.7	124.7	127.8	124.1	117.0
Leather and leather products.....	318.1	313.7	314.9	319.8	313.4	313.2	304.3	302.3	307.4	308.2	303.8	308.3	309.1	309.2	318.9
Leather tanning and finishing.....	28.3	28.2	28.2	28.2	27.9	28.3	27.8	27.5	27.4	27.5	26.3	27.8	27.8	27.4	28.1
Footwear, except rubber.....	211.5	207.6	209.7	214.5	211.9	211.7	207.1	204.2	208.1	209.6	208.6	208.1	205.5	207.7	215.1
Other leather products.....	78.3	77.9	77.0	77.1	73.6	73.2	69.4	70.6	71.9	71.1	68.9	72.4	75.8	74.1	75.7
Transportation and public utilities:															
Local and interurban passenger transit:															
Local and suburban transportation.....	82.2	82.3	81.6	81.7	82.8	83.2	82.6	76.8	84.1	84.3	84.5	84.8	84.7	86.6	86.6
Intercity and rural buslines.....	39.5	41.7	42.1	42.3	40.4	39.2	37.9	37.2	37.4	38.7	38.1	38.0	38.4	38.4	38.4
Motor freight transportation and storage.....	895.4	902.6	888.3	881.8	873.8	839.7	825.9	815.7	814.7	813.1	842.0	853.1	828.2	808.1	808.1
Pipeline transportation.....	16.7	17.2	17.5	17.5	17.4	16.9	17.0	17.1	17.1	17.1	17.2	17.3	17.8	18.5	18.5
Communication:															
Telephone communication.....	566.4	569.9	575.9	574.9	565.4	559.4	557.8	550.4	548.0	545.2	546.4	546.1	552.9	552.9	559.3
Telegraph communication ³	22.1	22.4	22.5	22.8	22.7	22.7	22.6	22.6	22.6	22.6	22.7	22.9	23.0	24.0	26.8
Radio and television broadcasting.....	87.2	87.2	87.1	86.5	85.6	84.6	84.6	84.6	83.9	83.4	84.3	83.8	82.9	81.9	79.5
Electric, gas, and sanitary services.....	533.1	539.7	547.7	546.1	537.0	530.6	528.4	527.5	526.3	527.0	528.7	530.1	532.7	536.6	536.6
Electric companies and systems.....	210.9	213.1	216.0	216.3	214.2	209.7	208.8	208.4	208.2	208.7	209.0	209.2	210.1	211.4	211.4
Gas companies and systems.....	134.1	136.0	138.4	136.6	132.3	133.8	133.4	133.6	133.5	133.5	134.2	134.6	135.3	137.1	137.1
Combined utility systems.....	155.6	157.7	159.4	159.4	156.7	154.1	153.7	153.6	153.0	153.2	154.1	154.5	155.5	156.6	156.6
Water, steam, and sanitary systems.....	32.5	32.9	33.9	33.8	33.8	33.8	33.0	32.5	31.9	31.6	31.6	31.4	31.8	31.8	31.5

See footnotes at end of table.

TABLE A-3. Production or nonsupervisory workers in nonagricultural establishments, by industry¹—Continued

[In thousands]

Revised series; see box below.

Industry	1964											1963		Annual average	
	Nov. ²	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962
Wholesale and retail trade⁴		9,321	9,218	9,172	9,153	9,151	9,053	8,974	8,958	8,887	8,986	9,844	9,233	8,953	8,794
Wholesale trade	2,788	2,779	2,788	2,769	2,737	2,700	2,691	2,689	2,693	2,709	2,750	2,725	2,670	2,625	
Motor vehicles and automotive equipment	205.1	206.6	207.2	206.3	205.0	202.6	201.5	200.4	200.4	200.5	201.7	201.5	199.6	193.0	
Drugs, chemicals, and allied products	160.1	159.8	158.6	158.3	160.0	156.8	157.1	157.2	156.8	157.5	159.1	158.3	156.5	155.8	
Dry goods and apparel	113.0	112.9	114.1	113.4	112.6	111.1	110.0	110.5	110.3	108.9	110.5	110.5	111.0	109.3	109.1
Groceries and related products	460.3	460.9	459.4	464.4	453.6	440.7	438.6	439.6	439.5	443.7	449.5	446.0	435.7	431.0	
Electrical goods	197.7	199.4	201.9	201.5	201.0	199.4	197.8	198.0	199.0	198.9	199.9	199.3	200.9	192.3	
Hardware, plumbing, and heating goods	125.9	126.2	127.9	127.8	126.0	124.3	124.3	124.4	124.3	124.3	125.2	124.8	124.8	123.2	
Machinery, equipment, and supplies	480.0	480.7	481.7	480.3	475.8	470.8	470.4	466.4	466.8	464.8	464.5	463.6	451.0	433.8	
Retail trade ⁴	6,533	6,439	6,384	6,384	6,414	6,353	6,283	6,269	6,194	6,277	7,094	6,508	6,283	6,168	
General merchandise stores	1,651.3	1,589.8	1,548.0	1,546.0	1,549.5	1,532.6	1,508.4	1,507.9	1,466.9	1,523.9	2,070.0	1,691.9	1,545.3	1,501.5	
Department stores	1,016.8	970.7	945.6	946.7	951.7	938.9	926.3	922.4	894.2	938.3	1,296.8	1,036.0	936.9	892.3	
Limited price variety stores	283.2	278.6	268.5	268.3	272.5	275.7	270.9	274.7	265.0	269.2	371.8	304.5	288.3	299.7	
Food stores	1,334.1	1,314.3	1,310.0	1,314.8	1,316.4	1,311.2	1,313.0	1,311.5	1,311.6	1,310.9	1,336.8	1,310.2	1,289.6	1,273.0	
Grocery, meat, and vegetable stores	1,174.4	1,159.2	1,155.4	1,159.5	1,157.3	1,151.2	1,153.0	1,149.9	1,147.8	1,152.6	1,164.0	1,147.7	1,126.3	1,113.5	
Apparel and accessories stores	577.1	568.7	544.6	543.3	564.3	563.4	568.6	563.3	529.6	547.6	680.0	577.0	559.3	560.0	
Men's and boys' apparel stores	93.2	91.0	89.9	89.6	92.3	89.9	88.1	88.1	89.4	95.9	120.1	92.1	90.5	90.7	
Women's ready-to-wear stores	219.1	214.3	206.8	203.6	211.7	213.3	209.6	211.4	200.0	204.9	251.1	217.5	209.3	208.7	
Family clothing stores	92.8	91.2	87.3	88.8	89.7	88.5	86.9	89.3	86.7	92.8	117.9	93.2	88.7	89.6	
Shoe stores	103.0	108.0	100.9	99.7	103.8	106.4	100.9	105.8	93.2	93.7	117.0	106.4	106.9	106.7	
Furniture and appliance stores	356.0	350.5	351.5	349.4	350.0	349.0	348.5	349.0	349.4	350.7	362.7	354.1	346.9	346.3	
Other retail trade	2,614.5	2,615.6	2,629.9	2,630.8	2,633.3	2,596.4	2,564.1	2,537.6	2,536.5	2,543.4	2,644.2	2,574.8	2,541.5	2,487.3	
Motor vehicle dealers	608.5	608.4	609.9	609.6	606.5	600.6	599.1	597.3	597.1	595.9	594.0	590.3	585.0	559.1	
Other vehicle and accessory dealers	145.2	145.6	149.3	148.6	148.3	143.0	140.1	136.0	134.6	135.2	147.6	142.0	136.1	128.2	
Drug stores	359.7	357.6	358.2	357.5	358.8	353.7	351.0	349.4	349.8	350.9	368.2	355.6	350.3	347.5	
Finance, insurance, and real estate:															
Banking	642.6	645.3	654.3	653.7	645.3	636.3	635.7	633.9	632.9	631.4	632.5	631.9	627.0	607.3	
Security dealers and exchanges ⁵	112.0	112.7	114.6	114.8	113.0	112.3	112.1	110.9	110.6	109.8	113.7	113.8	113.8	122.3	
Insurance carriers ⁵	633.4	636.8	642.7	641.7	635.9	632.7	632.7	632.6	630.8	628.6	783.1	782.4	779.7	768.9	
Life insurance ⁵	277.4	279.0	281.9	280.8	278.9	278.4	279.5	279.6	279.4	279.1	421.2	420.5	418.5	413.0	
Accident and health insurance ⁵	47.1	47.3	47.6	47.6	47.1	46.5	46.6	46.6	46.3	46.0	48.0	47.9	47.6	46.2	
Fire, marine, and casualty insurance ⁵	270.4	271.8	274.0	273.8	271.0	269.7	268.9	268.8	267.0	265.8	276.0	276.1	276.3	273.8	
Services and miscellaneous:															
Hotels and lodging places:															
Hotels, tourist courts, and motels	536.5	547.3	581.5	579.5	558.8	534.1	516.0	499.1	495.5	482.1	484.4	492.0	511.3	505.4	
Personal services:															
Laundries, cleaning and dyeing plants ⁶	483.6	482.8	483.3	488.0	486.6	480.6	472.2	467.0	465.7	462.8	383.8	386.7	384.2	380.3	
Motion pictures:															
Motion picture filming and distribution	28.4	27.8	29.5	28.1	27.7	25.4	25.0	26.1	25.1	25.7	27.7	26.7	25.7	25.7	

¹ For comparability of data with those published in issues prior to October 1963, and coverage of these series, see footnote 1, table A-2.

For mining and manufacturing 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 leadman 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., powerplant), 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.

⁵ Beginning January 1964, nonoffice salesmen excluded from nonsupervisory count.

⁶ Beginning January 1964, data relate to nonsupervisory workers and are not comparable with the production worker levels of prior years.

Caution

The revised series on employment, hours, and earnings, and labor turnover in non-agricultural establishments should not be compared with those published in issues prior to January 1965. (See footnote 1, table A-2, and "BLS Establishment Employment Estimates Revised to March 1963 Benchmark Levels" appearing in the December 1964 issue of *Employment and Earnings*. Moreover, when the figures are again adjusted to new benchmarks, the data presented in this issue should not be compared with those in later issues which reflect the adjustments.

Comparable data for earlier periods are published in *Employment and Earnings Statistics for the United States, 1909-64* (BLS Bulletin 1312-2), which is available at depository libraries or which may be purchased from the Superintendent of Documents for \$3.50 a copy. For an individual industry, earlier data may be obtained upon request to the Bureau.

TABLE A-4. Employees in nonagricultural establishments, by industry division and selected groups, seasonally adjusted¹

Industry division and group	1964											1963	
	Nov. ²	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.
	Total	58,790	58,372	58,458	58,301	58,256	58,104	57,931	57,827	57,754	57,684	57,334	57,291
Mining	641	638	634	634	639	639	631	633	633	633	632	636	635
Contract construction	3,150	3,102	3,080	3,103	3,107	3,106	3,093	3,081	3,122	3,132	2,941	3,052	3,015
Manufacturing	17,472	17,164	17,449	17,339	17,344	17,285	17,225	17,224	17,208	17,171	17,131	17,115	17,059
Durable goods	9,962	9,691	9,986	9,886	9,890	9,826	9,780	9,798	9,784	9,740	9,725	9,717	9,670
Ordnance and accessories	245	247	248	250	255	260	265	267	269	271	274	275	274
Lumber and wood products, except furniture	595	592	593	595	599	593	596	600	603	602	597	600	597
Furniture and fixtures	408	407	405	403	405	402	398	398	397	394	392	392	390
Stone, clay, and glass products	620	617	620	617	618	616	613	613	616	613	609	610	607
Primary metal industries	1,266	1,254	1,258	1,242	1,246	1,222	1,199	1,196	1,190	1,189	1,183	1,178	1,170
Fabricated metal products	1,209	1,178	1,223	1,208	1,196	1,192	1,185	1,190	1,187	1,183	1,174	1,173	1,166
Machinery	1,646	1,645	1,643	1,625	1,620	1,608	1,597	1,589	1,584	1,565	1,572	1,568	1,557
Electrical equipment and supplies	1,569	1,559	1,558	1,546	1,550	1,537	1,533	1,536	1,535	1,535	1,540	1,540	1,537
Transportation equipment	1,624	1,417	1,667	1,632	1,632	1,628	1,633	1,646	1,641	1,626	1,626	1,623	1,616
Instruments and related products	369	369	369	369	371	369	367	368	368	368	367	367	366
Miscellaneous manufacturing industries	411	406	402	399	398	399	394	395	394	394	391	391	390
Nondurable goods	7,510	7,473	7,463	7,453	7,454	7,459	7,445	7,426	7,424	7,431	7,406	7,398	7,389
Food and kindred products	1,734	1,719	1,716	1,726	1,719	1,720	1,731	1,730	1,730	1,746	1,743	1,742	1,743
Tobacco manufactures	92	88	82	83	89	89	89	88	88	88	87	90	92
Textile mill products	906	899	899	895	894	895	895	895	897	896	891	890	889
Apparel and related products	1,326	1,322	1,317	1,311	1,309	1,323	1,305	1,298	1,290	1,296	1,291	1,286	1,281
Paper and allied products	635	634	632	631	632	631	630	629	627	627	625	624	623
Printing, publishing, and allied industries	956	955	956	954	955	953	952	948	946	944	943	942	937
Chemicals and allied products	880	879	881	879	879	880	874	871	874	872	871	869	869
Petroleum refining and related industries	186	187	185	185	187	187	187	188	189	189	190	190	190
Rubber and miscellaneous plastic products	437	433	439	435	433	427	429	427	426	424	419	417	417
Leather and leather products	358	357	356	354	357	354	353	353	350	349	347	348	348
Transportation and public utilities	3,999	3,995	4,005	3,999	3,983	3,965	3,968	3,964	3,940	3,943	3,936	3,931	3,932
Wholesale and retail trade	12,290	12,277	12,229	12,231	12,223	12,187	12,135	12,096	12,077	12,083	12,021	11,950	11,910
Wholesale trade	3,236	3,233	3,226	3,224	3,223	3,227	3,212	3,206	3,198	3,191	3,188	3,172	3,158
Retail trade	9,054	9,044	9,003	9,007	8,991	8,960	8,923	8,890	8,879	8,892	8,833	8,778	8,752
Finance, insurance, and real estate	2,969	2,965	2,960	2,951	2,948	2,943	2,934	2,931	2,924	2,917	2,911	2,904	2,896
Service and miscellaneous	8,639	8,635	8,592	8,573	8,561	8,509	8,489	8,461	8,455	8,437	8,401	8,366	8,352
Government	9,630	9,596	9,509	9,471	9,451	9,470	9,456	9,437	9,395	9,368	9,361	9,337	9,302
Federal	2,338	2,331	2,320	2,328	2,322	2,323	2,339	2,341	2,337	2,337	2,342	2,346	2,345
State and local	7,292	7,265	7,189	7,143	7,129	7,147	7,117	7,096	7,058	7,031	7,019	6,991	6,957

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 adjusted¹

Major industry group	1964											1963	
	Nov. ²	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.
	Manufacturing	12,963	12,663	12,956	12,847	12,839	12,794	12,736	12,732	12,731	12,692	12,659	12,647
Durable goods	7,345	7,082	7,377	7,279	7,271	7,219	7,174	7,188	7,181	7,139	7,124	7,115	7,071
Ordnance and accessories	102	102	103	104	105	107	109	110	111	112	115	115	115
Lumber and wood products, except furniture	533	528	530	531	536	528	532	536	539	539	535	537	534
Furniture and fixtures	339	339	338	335	338	336	331	331	330	329	326	327	325
Stone, clay, and glass products	500	498	500	498	497	496	493	493	498	493	490	492	490
Primary metal industries	1,036	1,023	1,026	1,012	1,017	995	972	967	966	965	958	954	944
Fabricated metal products	930	900	945	932	918	916	910	916	914	911	903	901	895
Machinery	1,148	1,149	1,149	1,129	1,125	1,118	1,109	1,103	1,099	1,082	1,091	1,088	1,078
Electrical equipment and supplies	1,058	1,053	1,049	1,040	1,041	1,029	1,024	1,027	1,025	1,023	1,026	1,026	1,023
Transportation equipment	1,136	933	1,180	1,145	1,141	1,141	1,146	1,156	1,150	1,136	1,134	1,128	1,121
Instruments and related products	233	233	234	234	236	233	232	233	233	233	232	233	232
Miscellaneous manufacturing industries	330	324	323	319	317	320	316	316	316	316	314	314	314
Nondurable goods	5,618	5,581	5,579	5,568	5,568	5,575	5,562	5,544	5,550	5,553	5,535	5,532	5,521
Food and kindred products	1,152	1,134	1,133	1,142	1,134	1,134	1,144	1,143	1,150	1,157	1,157	1,158	1,158
Tobacco manufactures	80	77	71	72	78	78	77	76	77	76	75	78	81
Textile mill products	810	803	803	799	798	800	800	803	803	803	799	797	796
Apparel and related products	1,178	1,177	1,173	1,165	1,164	1,176	1,160	1,152	1,145	1,150	1,146	1,140	1,133
Paper and allied products	496	495	494	493	494	494	493	492	491	491	489	489	488
Printing, publishing, and allied industries	605	604	606	604	604	604	601	600	598	597	598	598	592
Chemicals and allied products	528	527	530	530	531	531	527	525	529	527	526	526	526
Petroleum refining and related industries	115	116	116	115	117	117	116	118	118	118	118	119	120
Rubber and miscellaneous plastic products	338	335	340	337	334	329	330	329	329	326	322	321	320
Leather and leather products	316	313	313	311	314	312	311	310	308	307	306	306	307

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	1964										1963		
	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.
Employment service: ²													
New applications for work.....	846	854	816	896	1,160	857	873	874	916	1,037	793	827	953
Nonfarm placements.....	579	639	554	549	572	572	541	478	414	443	432	493	662
State unemployment insurance programs:													
Initial claims ^{3, 4}	966	858	937	1,238	976	908	1,086	1,136	1,181	1,848	1,865	1,200	1,157
Insured unemployment ⁵ (average weekly volume) ⁶	1,138	1,125	1,261	1,343	1,297	1,447	1,755	2,050	2,243	2,395	1,972	1,542	1,333
Rate of insured unemployment ⁷	2.6	2.5	2.9	3.1	3.1	3.4	4.2	4.9	5.3	5.7	4.7	3.6	3.1
Weeks of unemployment compensated.....	3,996	4,149	4,556	5,098	5,023	5,658	7,381	8,303	8,060	9,186	6,705	4,733	4,923
Average weekly benefit amount for total unemployment.....	\$35.92	\$35.40	\$35.60	\$35.35	\$35.27	\$35.50	\$36.02	\$36.26	\$36.24	\$36.07	\$35.78	\$35.37	\$35.15
Total benefits paid.....	\$143,165	\$148,423	\$164,510	\$180,519	\$183,132	\$201,498	\$258,046	\$292,618	\$283,809	\$319,302	\$232,954	\$164,977	\$171,957
Unemployment compensation for ex-servicemen: ⁸													
Initial claims ^{3, 6}	25	25	26	32	25	20	27	28	29	39	39	29	31
Insured unemployment ⁵ (average weekly volume).....	35	36	43	44	42	46	57	67	72	73	60	48	43
Weeks of unemployment compensated.....	136	159	173	173	184	200	281	261	284	307	231	164	174
Total benefits paid.....	\$5,043	\$5,888	\$6,285	\$6,172	\$6,626	\$7,029	\$9,654	\$8,893	\$9,586	\$10,241	\$7,622	\$5,396	\$5,857
Unemployment compensation for Federal civilian employees: ^{9, 10}													
Initial claims ³	12	10	10	15	12	9	11	11	13	20	15	13	14
Insured unemployment ⁵ (average weekly volume).....	25	24	25	26	25	27	32	38	40	39	34	32	29
Weeks of unemployment compensated.....	100	103	104	102	110	115	157	154	157	165	143	111	120
Total benefits paid.....	\$3,986	\$4,178	\$4,212	\$3,993	\$4,661	\$4,558	\$5,829	\$5,596	\$5,768	\$6,109	\$5,369	\$4,297	\$4,723
Railroad unemployment insurance:													
Applications ¹¹	11	12	12	38	16	5	13	5	7	13	12	11	12
Insured unemployment (average weekly volume).....	33	32	29	31	27	32	42	45	51	53	47	45	41
Number of payments ¹²	74	69	67	66	67	76	101	109	111	125	110	86	98
Average amount of benefit payment ¹³	\$77.27	\$79.31	\$79.65	\$76.53	\$74.41	\$70.46	\$73.17	\$80.06	\$80.33	\$80.49	\$79.04	\$78.60	\$77.05
Total benefits paid ¹⁴	\$5,602	\$5,259	\$5,169	\$4,928	\$4,851	\$5,208	\$7,411	\$8,466	\$8,784	\$9,930	\$8,590	\$6,672	\$7,475
All programs: ¹⁵													
Insured unemployment ⁵	1,264	1,256	1,396	1,491	1,448	1,605	1,918	2,201	2,410	2,563	2,122	1,686	1,476

¹ Includes data for Puerto Rico beginning January 1961 when the Commonwealth's program became part of the Federal-State UI system.

² Includes Guam and the Virgin Islands.

³ Initial claims are notices filed by workers to indicate they are starting periods of unemployment. Excludes transitional claims.

⁴ Includes interstate claims for the Virgin Islands.

⁵ Number of workers reporting the completion of at least 1 week of unemployment.

⁶ Initial claims and State insured unemployment include data under the program for Puerto Rican sugarcane workers.

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 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. The average amount is an average for all compensable periods, not adjusted for recovery of overpayments or settlement of underpayments.

¹³ Adjusted for recovery of overpayments and settlement of underpayments.

¹⁴ 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

Major industry group	1964										1963			Annual average	
	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	1963	1962
	[Per 100 employees] Revised series; see box, p. 98.														
Accessions: Total															
Manufacturing:															
Actual.....	3.9	4.8	5.1	4.4	5.1	3.9	3.8	3.7	3.4	3.6	2.5	2.9	3.9	3.9	4.1
Seasonally adjusted.....	3.9	3.8	4.0	4.0	4.1	3.8	3.9	4.0	4.0	3.8	4.0	3.7	3.9	3.9	4.1
Durable goods.....	3.4	4.3	4.8	3.8	4.6	3.6	3.7	3.7	3.3	3.5	2.4	2.7	3.6	3.6	3.8
Ordnance and accessories.....	1.7	2.3	2.0	2.1	2.2	1.6	2.1	2.2	2.0	1.8	1.7	2.0	2.7	2.4	2.9
Lumber and wood products, except furniture.....	4.4	5.8	5.5	5.7	7.7	7.1	6.6	5.6	4.8	4.4	2.8	3.5	4.9	5.6	5.5
Furniture and fixtures.....	5.0	6.2	6.6	5.8	5.3	4.7	4.6	4.8	4.2	4.2	2.7	3.3	4.8	4.4	4.5
Stone, clay, and glass products.....	2.8	3.6	3.6	4.0	5.2	4.5	4.8	4.7	3.6	3.6	2.0	2.5	3.1	3.8	3.8
Primary metal industries.....	2.3	3.3	3.0	2.9	3.8	3.1	3.1	3.1	3.2	3.5	2.6	2.5	2.6	3.0	2.8
Fabricated metal products.....	3.8	5.0	5.4	4.8	5.4	4.1	4.1	4.0	3.6	3.9	2.6	3.0	4.0	4.0	4.1
Machinery.....	2.8	3.3	3.1	3.0	4.1	2.7	3.1	3.0	2.9	3.0	2.4	2.6	2.9	2.9	3.0
Electrical equipment and supplies.....	3.7	4.0	4.0	3.1	4.0	3.1	3.0	3.1	2.6	2.9	2.2	2.5	3.2	3.1	3.6
Transportation equipment.....	3.6	5.0	8.0	3.8	4.3	3.3	3.4	3.7	3.4	3.4	2.5	2.9	4.0	4.0	4.7
Instruments and related products.....	2.7	3.3	3.6	2.9	3.9	2.4	2.5	2.7	2.3	2.6	1.8	2.0	2.7	2.7	2.7
Miscellaneous manufacturing industries.....	5.6	7.6	7.5	6.8	6.0	5.6	5.7	5.5	5.3	5.7	2.4	3.7	5.6	5.4	5.6
Nondurable goods.....	4.5	5.4	5.4	5.2	5.7	4.3	3.9	3.7	3.5	3.8	2.5	3.1	4.3	4.2	4.3
Food and kindred products.....	7.3	8.7	8.7	8.0	8.9	6.0	4.9	4.4	4.0	4.0	3.0	3.9	6.5	5.9	6.4
Tobacco manufactures.....	6.1	14.8	18.1	7.9	4.5	2.6	2.9	3.3	3.9	5.0	6.8	4.3	5.8	6.6	6.4
Textile mill products.....	3.7	4.5	4.5	4.4	4.2	4.0	3.9	3.6	3.6	3.4	2.2	3.0	4.0	3.6	3.6
Apparel and related products.....	5.4	5.9	6.2	7.3	6.2	6.0	5.2	4.9	5.2	6.0	3.3	4.5	5.0	5.3	5.5
Paper and allied products.....	2.6	3.2	3.0	2.9	4.6	2.8	2.7	2.7	2.1	2.4	1.8	2.0	2.6	2.6	2.6
Printing, publishing, and allied industries.....	3.1	3.8	3.4	3.1	4.2	2.7	2.8	2.9	2.8	3.0	2.1	2.5	3.0	2.9	3.0
Chemicals and allied products.....	1.8	2.4	2.0	2.1	3.5	2.1	2.2	2.5	1.9	1.8	1.3	1.3	1.8	2.1	2.1
Petroleum refining and related industries.....	1.2	1.7	1.5	1.7	3.4	1.9	1.7	1.3	1.3	1.4	.7	.9	1.2	1.5	1.4
Rubber and miscellaneous plastic products.....	3.5	4.8	4.9	4.9	4.8	3.7	3.7	3.5	3.1	3.5	2.3	2.6	3.8	3.6	3.8
Leather and leather products.....	5.0	4.9	5.5	6.1	6.1	5.7	4.7	4.3	4.6	5.7	3.5	4.1	4.8	5.0	5.0
Nonmanufacturing:															
Metal mining.....	2.6	2.9	3.2	2.7	4.7	3.0	5.2	3.0	2.7	3.0	1.8	2.5	2.8	3.1	2.9
Coal mining.....	1.9	2.0	2.2	1.3	1.5	1.6	1.8	1.5	1.4	2.6	1.3	1.6	1.8	2.0	1.7
Accessions: New hires															
Manufacturing:															
Actual.....	2.7	3.5	3.4	2.9	3.6	2.6	2.4	2.2	2.0	2.0	1.4	1.8	2.6	2.4	2.5
Seasonally adjusted.....	2.5	2.7	2.5	2.5	2.6	2.5	2.6	2.6	2.6	2.4	2.6	2.5	2.4	2.4	2.5
Durable goods.....	2.5	3.3	3.1	2.5	3.3	2.4	2.3	2.2	1.9	1.9	1.3	1.7	2.4	2.1	2.3
Ordnance and accessories.....	.8	1.1	1.1	1.1	1.3	.9	1.1	1.2	1.2	1.0	1.0	1.3	1.9	1.6	2.0
Lumber and wood products, except furniture.....	3.6	5.1	4.7	4.7	6.2	5.3	4.6	4.0	3.3	3.0	2.0	2.9	4.2	4.3	3.9
Furniture and fixtures.....	4.3	5.4	5.7	4.9	4.3	3.8	3.6	3.5	3.1	3.1	1.8	2.7	4.0	3.5	3.5
Stone, clay, and glass products.....	2.0	2.7	2.6	2.9	3.9	2.9	2.8	2.4	1.7	1.6	1.1	1.5	2.0	2.3	2.2
Primary metal industries.....	1.5	2.5	2.1	1.7	2.7	2.0	1.8	1.6	1.5	1.3	.8	.8	1.1	1.2	1.1
Fabricated metal products.....	3.1	3.9	4.0	3.0	3.8	2.8	2.6	2.3	2.1	2.2	1.5	2.0	2.9	2.5	2.4
Machinery.....	2.1	2.5	2.3	2.1	3.2	2.0	2.2	2.3	2.2	2.2	1.6	1.7	2.0	1.9	2.0
Electrical equipment and supplies.....	2.6	2.8	2.6	1.9	2.6	1.8	1.8	1.7	1.5	1.6	1.3	1.6	2.2	1.9	2.4
Transportation equipment.....	2.1	3.4	3.1	1.9	2.6	1.8	1.9	1.9	1.6	1.7	1.3	1.6	2.3	1.9	2.1
Instruments and related products.....	1.9	2.3	2.1	2.2	2.9	1.7	1.7	1.8	1.5	1.6	1.2	1.4	2.0	1.9	2.0
Miscellaneous manufacturing industries.....	4.5	6.1	5.7	4.4	4.0	3.4	3.4	3.1	2.9	2.9	1.5	2.7	4.4	3.4	3.8
Nondurable goods.....	3.1	3.8	3.8	3.4	4.0	2.8	2.5	2.3	2.1	2.1	1.4	1.9	2.9	2.7	2.8
Food and kindred products.....	4.6	5.8	5.7	5.5	6.0	3.7	2.8	2.3	2.1	2.1	1.6	2.3	4.1	3.6	3.8
Tobacco manufactures.....	3.6	9.2	12.4	2.3	2.2	1.6	1.9	2.0	2.0	1.7	4.0	2.3	3.8	3.8	3.1
Textile mill products.....	2.8	3.4	3.4	3.0	3.2	2.9	2.7	2.4	2.2	2.1	1.4	2.1	2.9	2.5	2.5
Apparel and related products.....	3.6	3.9	4.1	3.9	3.8	3.3	3.2	3.1	3.2	3.1	1.6	2.4	3.3	3.3	3.5
Paper and allied products.....	2.1	2.7	2.4	2.2	3.6	2.1	1.9	1.7	1.4	1.4	1.1	1.3	2.1	1.8	1.8
Printing, publishing, and allied industries.....	2.5	3.0	2.7	2.4	3.3	2.1	2.2	2.1	2.1	2.1	1.5	1.8	2.4	2.2	2.3
Chemicals and allied products.....	1.4	1.7	1.5	1.5	2.8	1.6	1.6	1.7	1.3	1.2	.8	.9	1.3	1.4	1.5
Petroleum refining and related industries.....	.9	1.3	1.2	1.3	2.7	1.3	1.1	.8	.7	.6	.5	.7	.8	1.1	1.0
Rubber and miscellaneous plastic products.....	2.6	3.8	3.6	2.8	3.3	2.4	2.3	2.2	1.9	1.9	1.3	1.7	2.8	2.3	2.4
Leather and leather products.....	3.5	3.6	4.2	4.2	4.4	3.5	2.9	2.5	2.7	3.2	2.3	2.6	3.5	3.2	3.1
Nonmanufacturing:															
Metal mining.....	2.0	2.2	2.0	2.0	3.6	1.9	2.0	2.0	1.7	1.7	1.0	1.3	1.7	1.7	1.5
Coal mining.....	.9	1.1	.9	.8	.8	.8	.9	.8	.7	1.1	.6	.7	1.1	.8	.5

See footnotes at end of table.

TABLE B-1. Labor turnover rates, by major industry group¹—Continued

[Per 100 employees]

Revised series; see box, p. 98.

Major industry group	1964											1963			Annual average	
	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	1963	1962	
	Separations: Total															
Manufacturing:																
Actual.....	4.0	5.1	4.3	4.4	3.5	3.6	3.5	3.5	3.3	4.0	3.7	3.9	4.1	3.9	4.1	
Seasonally adjusted.....	3.7	4.1	3.8	4.2	3.9	3.9	3.8	3.9	3.9	3.9	3.8	3.9	3.8	3.9	3.8	
Durable goods.....	3.5	4.4	4.0	4.3	3.3	3.4	3.2	3.2	3.1	3.8	3.4	3.5	3.7	3.6	3.8	
Ordnance and accessories.....	3.5	3.0	3.2	3.6	4.6	3.9	3.1	3.4	3.1	3.8	2.0	2.3	2.5	2.7	2.7	
Lumber and wood products, except furniture.....	5.1	7.4	6.2	5.2	4.9	5.0	5.1	5.4	4.7	6.1	4.9	5.8	5.6	5.5	5.6	
Furniture and fixtures.....	4.7	5.9	5.4	4.9	4.4	4.7	4.2	4.2	4.0	4.7	3.8	4.0	4.9	4.4	4.6	
Stone, clay, and glass products.....	3.6	4.8	3.9	3.5	3.0	3.1	3.2	3.0	3.3	4.7	4.9	4.0	3.9	3.8	4.1	
Primary metal industries.....	2.3	3.5	2.7	2.4	2.3	2.1	2.2	2.1	2.0	2.5	2.2	2.7	3.4	2.8	3.3	
Fabricated metal products.....	4.6	5.3	4.3	4.7	3.9	3.8	3.4	3.4	3.5	4.2	3.7	4.0	4.2	4.0	4.2	
Machinery.....	2.7	3.5	3.0	3.2	2.6	2.5	2.6	2.5	2.2	2.6	1.9	2.3	2.7	2.7	2.8	
Electrical equipment and supplies.....	2.7	3.8	3.1	3.2	2.8	3.2	3.1	3.3	3.5	3.7	3.0	3.5	3.4	3.4	3.3	
Transportation equipment.....	3.7	4.1	5.3	7.6	3.8	4.1	3.4	3.5	3.4	4.2	3.6	3.1	3.5	4.1	4.6	
Instruments and related products.....	3.2	3.6	3.0	2.7	2.3	2.6	2.6	2.7	2.6	3.3	2.3	2.4	2.7	2.7	2.6	
Miscellaneous manufacturing industries.....	5.2	5.9	4.9	5.8	4.4	4.6	4.4	4.5	3.9	5.9	10.4	7.1	5.3	5.5	6.0	
Nondurable goods.....	4.7	5.9	4.6	4.4	3.7	3.9	3.9	3.8	3.5	4.1	4.1	4.3	4.7	4.2	4.4	
Food and kindred products.....	7.3	9.7	6.4	5.5	4.6	4.6	4.6	4.9	5.0	5.5	5.5	6.7	7.6	6.0	6.3	
Tobacco manufactures.....	5.5	4.6	7.2	3.6	3.0	2.5	6.7	6.6	8.9	7.1	10.9	11.8	8.5	6.2	6.6	
Textile mill products.....	3.9	4.7	4.3	4.4	3.3	3.7	3.7	3.5	3.2	3.8	3.3	3.6	4.0	3.8	3.7	
Apparel and related products.....	5.8	6.2	5.5	7.4	5.2	5.7	6.0	5.5	4.3	5.3	5.7	5.3	5.5	5.5	5.8	
Paper and allied products.....	2.7	4.5	3.3	2.6	2.4	2.4	2.4	2.3	2.4	2.8	2.6	2.7	2.8	2.7	2.8	
Printing, publishing, and allied industries.....	3.0	4.2	3.4	2.7	3.0	2.8	2.6	2.6	2.6	3.2	2.5	2.7	3.1	2.9	2.9	
Chemicals and allied products.....	2.1	3.3	2.3	1.9	2.2	2.5	1.9	1.6	1.6	1.9	1.7	1.8	2.0	2.0	2.1	
Petroleum refining and related industries.....	2.0	3.0	2.2	1.6	1.7	1.5	1.3	1.3	1.4	1.5	2.3	1.8	1.8	2.0	1.8	
Rubber and miscellaneous plastic products.....	4.2	4.8	4.0	4.3	3.1	3.6	3.6	3.6	3.1	3.9	3.9	3.7	3.7	3.7	3.6	
Leather and leather products.....	5.4	6.0	5.4	4.9	3.9	5.0	5.2	5.1	4.2	5.3	5.4	4.2	4.8	5.0	5.2	
Nonmanufacturing:																
Metal mining.....	2.7	4.3	3.3	3.4	2.4	2.5	2.5	2.3	2.2	2.4	3.1	3.3	3.1	3.1	3.5	
Coal mining.....	1.4	2.0	1.3	1.7	1.5	2.0	2.2	1.8	1.8	2.7	2.1	1.5	1.4	2.1	2.8	
	Separations: Quits															
Manufacturing:																
Actual.....	1.6	2.7	2.1	1.5	1.4	1.5	1.3	1.2	1.1	1.2	0.8	1.1	1.5	1.4	1.4	
Seasonally adjusted.....	1.5	1.5	1.5	1.5	1.4	1.5	1.4	1.4	1.5	1.5	1.3	1.4	1.4	1.4	1.4	
Durable goods.....	1.4	2.5	1.9	1.3	1.3	1.3	1.2	1.1	.9	1.0	.7	1.0	1.3	1.2	1.2	
Ordnance and accessories.....	.9	1.4	1.2	1.0	1.1	.9	.8	.9	.8	1.0	.6	.8	1.0	1.0	1.2	
Lumber and wood products, except furniture.....	2.7	5.1	3.8	3.1	3.0	3.0	2.8	2.4	1.9	2.0	1.5	2.1	2.9	2.7	2.4	
Furniture and fixtures.....	2.6	3.9	3.5	2.7	2.3	2.6	2.4	2.1	1.7	1.9	1.2	1.7	2.3	2.1	2.1	
Stone, clay, and glass products.....	1.4	2.6	2.0	1.4	1.3	1.3	1.2	1.0	.8	.9	.6	.9	1.2	1.2	1.2	
Primary metal industries.....	.8	2.2	1.3	.8	.7	.7	.6	.5	.6	.4	.5	.6	.6	.6	.6	
Fabricated metal products.....	1.7	2.6	2.2	1.5	1.4	1.4	1.3	1.1	1.0	1.1	.8	1.0	1.4	1.3	1.3	
Machinery.....	1.1	2.0	1.5	1.0	1.0	1.1	1.1	1.0	.9	.9	.6	.8	1.0	1.0	1.0	
Electrical equipment and supplies.....	1.3	2.1	1.6	1.2	1.1	1.1	1.1	1.0	1.0	1.1	.9	1.1	1.4	1.3	1.4	
Transportation equipment.....	1.0	1.8	1.4	.9	.9	1.0	1.0	.9	.7	.8	.6	.7	.9	.9	1.0	
Instruments and related products.....	1.7	2.0	1.5	1.1	1.0	1.1	1.0	.9	.8	1.1	.7	.9	1.1	1.2	1.2	
Miscellaneous manufacturing industries.....	2.4	3.6	2.7	2.1	1.8	2.0	1.9	1.6	1.3	1.5	1.1	1.6	2.3	1.8	2.0	
Nondurable goods.....	1.9	3.1	2.4	1.8	1.6	1.7	1.5	1.4	1.3	1.4	1.0	1.3	1.8	1.6	1.7	
Food and kindred products.....	2.4	4.2	2.9	2.0	1.8	1.8	1.5	1.4	1.3	1.4	1.0	1.5	2.2	1.8	1.9	
Tobacco manufactures.....	1.8	2.3	1.8	1.1	1.2	1.1	1.2	1.1	.9	1.0	.7	.8	1.0	.9	.9	
Textile mill products.....	2.1	3.1	2.8	2.3	2.0	2.2	2.1	1.8	1.6	1.6	1.1	1.6	2.2	1.9	1.9	
Apparel and related products.....	2.5	3.1	2.9	2.6	2.1	2.3	2.1	2.0	1.8	1.9	1.3	1.8	2.3	2.2	2.3	
Paper and allied products.....	1.3	2.9	2.0	1.2	1.1	1.1	1.0	.9	.8	.9	.7	.9	1.2	1.1	1.1	
Printing, publishing, and allied industries.....	1.5	2.5	2.0	1.4	1.5	1.4	1.3	1.2	1.2	1.4	1.0	1.1	1.4	1.4	1.5	
Chemicals and allied products.....	.8	2.0	1.2	.7	.7	.8	.7	.6	.6	.6	.4	.5	.7	.8	.8	
Petroleum refining and related industries.....	.6	1.5	1.0	.6	.6	.6	.4	.4	.4	.4	.3	.4	.6	.7	.7	
Rubber and miscellaneous plastic products.....	1.7	2.8	2.2	1.4	1.4	1.5	1.4	1.2	1.1	1.1	.9	1.1	1.6	1.4	1.5	
Leather and leather products.....	2.8	3.6	3.2	2.6	2.3	2.4	2.1	2.0	1.9	2.0	1.5	1.9	2.5	2.3	2.3	
Nonmanufacturing:																
Metal mining.....	1.1	3.2	2.1	1.5	1.4	1.6	1.4	1.3	1.0	1.1	.7	.8	1.2	1.3	1.3	
Coal mining.....	.6	.7	.6	.5	.3	.4	.3	.4	.4	.4	.3	.4	.5	.4	.4	

See footnotes at end of table.

TABLE B-1. Labor turnover rates, by major industry group¹—Continued

[Per 100 employees]

Revised series; see box, p. 98.

Major industry group	1964											1963			Annual average	
	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	1963	1962	
	Separations: Layoffs															
Manufacturing:																
Actual.....	1.6	1.5	1.4	2.1	1.3	1.4	1.4	1.6	1.6	2.0	2.3	2.1	1.9	1.8	2.0	
Seasonally adjusted.....	1.5	1.5	1.4	2.0	1.6	1.7	1.7	1.8	1.8	1.7	1.7	1.8	1.8	1.8	1.9	
Durable goods.....	1.3	1.1	1.3	2.2	1.3	1.4	1.2	1.4	1.5	2.0	2.1	1.8	1.6	1.7	1.9	
Ordnance and accessories.....	1.9	1.1	1.5	2.1	2.9	2.4	1.8	1.9	1.9	2.3	1.0	1.1	.9	1.2	.9	
Lumber and wood products, except furniture.....	1.6	1.4	1.4	1.2	1.0	1.0	1.3	2.1	2.1	3.3	2.8	3.0	1.8	2.0	2.4	
Furniture and fixtures.....	1.2	1.0	.9	1.4	1.4	1.3	1.0	1.2	1.5	2.1	2.0	1.6	1.7	1.6	1.8	
Stone, clay, and glass products.....	1.5	1.4	1.2	1.3	.9	1.1	1.2	1.4	1.9	3.1	3.7	2.4	1.9	1.9	2.2	
Primary metal industries.....	.7	.6	.6	.9	.8	.7	.8	.7	.7	1.1	1.3	1.6	2.0	1.5	2.1	
Fabricated metal products.....	2.0	1.6	1.2	2.3	1.7	1.6	1.3	1.6	1.8	2.3	2.3	2.3	2.1	2.0	2.2	
Machinery.....	.9	.7	.9	1.4	.8	.8	.7	.8	.7	.8	.7	.9	1.1	1.1	1.2	
Electrical equipment and supplies.....	.7	.9	.8	1.4	.9	1.4	1.4	1.6	1.7	1.8	1.5	1.6	1.2	1.4	1.1	
Transportation equipment.....	1.9	1.5	3.0	5.8	2.0	2.3	1.6	1.9	1.8	2.4	2.3	1.7	1.6	2.4	2.8	
Instruments and related products.....	.9	.7	.9	1.0	.6	.9	.9	1.1	1.0	1.5	1.1	.9	.9	.9	.7	
Miscellaneous manufacturing industries.....	2.0	1.3	1.4	2.9	1.7	1.8	1.8	2.1	1.9	3.6	8.6	4.7	2.1	2.9	3.1	
Nondurable goods.....	2.1	2.1	1.5	2.0	1.4	1.6	1.8	1.8	1.6	2.1	2.6	2.5	2.3	2.0	2.1	
Food and kindred products.....	4.2	4.6	2.8	2.8	2.1	2.2	2.5	3.0	3.1	3.4	3.9	4.6	4.7	3.5	3.7	
Tobacco manufactures.....	3.2	1.8	4.7	1.8	1.2	.7	5.0	5.0	7.3	5.3	9.8	10.5	7.0	4.9	5.3	
Textile mill products.....	1.0	.9	.8	1.4	.7	.9	1.0	1.1	1.1	1.5	1.7	1.5	1.2	1.2	1.2	
Apparel and related products.....	2.6	2.3	1.8	3.9	2.2	2.5	3.1	2.8	1.7	2.6	3.8	2.9	2.4	2.6	2.7	
Paper and allied products.....	.8	.8	.7	.8	.7	.6	.7	.8	1.0	1.3	1.4	1.2	.9	1.0	1.0	
Printing, publishing, and allied industries.....	.9	1.1	.9	.8	.9	1.0	.8	.9	.9	1.2	1.2	1.1	1.2	1.0	1.0	
Chemicals and allied products.....	.9	.7	.6	.7	1.0	1.2	.7	.6	.6	.7	.9	.9	.7	.8	.8	
Petroleum refining and related industries.....	1.0	.9	.6	.5	.5	.4	.4	.4	.6	.6	1.5	1.0	.8	.7	.6	
Rubber and miscellaneous plastic products.....	1.7	1.1	1.0	2.1	1.0	1.4	1.4	1.6	1.2	2.1	2.4	2.0	1.3	1.6	1.5	
Leather and leather products.....	1.7	1.6	1.2	1.5	.9	1.9	2.3	2.3	1.6	2.5	3.3	1.5	1.7	2.0	2.1	
Nonmanufacturing:																
Metal mining.....	1.1	.4	.5	1.2	.3	.3	.5	.3	.4	.6	1.9	1.9	1.2	1.1	1.5	
Coal mining.....	.5	.9	.4	.8	.8	1.1	1.3	.9	1.0	1.4	1.4	.7	.5	1.2	1.9	

¹ For comparability of data with those published in issues prior to January 1965, see footnote 1, table A-2.

Month-to-month changes in total employment in manufacturing and nonmanufacturing 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 midmonth 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.

C.—Earnings and Hours

TABLE C-1. Gross hours and earnings of production workers,¹ by industry

Revised series; see box, p. 98.

Industry	1964											1963		Annual average	
	Nov. ²	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962
	Average weekly earnings														
Mining.....	\$122.69	\$118.53	\$119.56	\$117.18	\$118.58	\$117.74	\$115.64	\$113.70	\$115.36	\$115.49	\$116.62	\$114.12	\$114.54	\$110.43	\$110.43
Metal mining.....	124.98	125.40	121.95	121.06	122.72	122.60	121.01	121.64	121.35	121.93	120.93	119.02	118.86	117.45	117.45
Iron ores.....	124.71	130.92	129.37	129.34	125.29	125.11	119.74	124.09	123.16	125.02	123.91	116.80	120.04	122.19	122.19
Copper ores.....	135.41	132.01	124.44	124.03	131.02	129.68	129.13	129.33	128.74	127.28	126.69	128.17	124.56	120.70	120.70
Coal mining.....	134.39	124.50	131.01	121.32	131.86	126.49	121.82	115.97	121.09	125.29	126.56	118.31	119.98	113.06	113.06
Bituminous.....	136.61	126.67	133.27	122.84	134.53	129.03	123.33	117.76	123.52	127.12	128.40	119.45	121.43	114.46	114.46
Crude petroleum and natural gas.....	116.33	113.57	112.32	113.63	110.62	119.14	119.14	111.57	112.78	113.36	112.71	113.94	112.83	112.41	109.20
Crude petroleum and natural gas fields.....	120.95	123.37	120.66	121.60	117.97	119.14	119.14	120.54	121.25	122.43	121.54	120.54	120.42	115.46	115.46
Oil and gas field services.....	112.41	105.50	105.25	106.46	104.73	106.46	105.41	106.14	106.09	104.66	107.32	106.46	105.35	103.63	103.63
Quarrying and nonmetallic mining.....	118.68	116.36	119.25	117.81	116.79	114.86	111.00	106.46	105.53	102.34	105.33	108.24	109.03	105.43	105.43
Contract construction.....	138.62	131.03	136.64	134.49	133.32	132.65	130.24	128.12	126.37	121.74	124.61	124.51	127.19	122.47	122.47
General building contractors.....	128.04	121.79	125.46	122.67	122.61	122.64	122.04	120.27	117.60	110.85	115.25	115.50	117.36	112.50	112.50
Heavy construction.....	142.52	130.87	140.53	137.92	134.83	133.46	127.66	121.60	122.54	118.22	117.81	123.60	128.03	122.31	122.31
Highway and street construction.....	141.38	128.15	139.80	136.16	132.44	130.97	122.31	113.59	114.55	110.52	108.72	120.09	125.16	118.37	118.37
Other heavy construction.....	143.79	133.96	142.04	139.78	138.44	136.78	133.32	128.18	129.42	124.32	126.54	127.98	131.14	126.48	126.48
Special trade contractors.....	143.62	137.14	142.13	140.61	139.50	138.75	137.23	135.00	133.08	129.24	133.48	131.01	133.59	128.50	128.50
Manufacturing.....	\$104.70	102.97	104.60	103.07	102.97	103.48	102.97	102.47	101.40	101.15	100.30	102.66	100.85	99.63	96.56
Durable goods.....	113.98	111.78	114.13	112.47	111.92	113.01	112.47	111.51	110.29	109.21	111.90	110.00	108.50	104.70	104.70
Nondurable goods.....	92.17	91.77	91.87	91.83	91.14	91.37	90.91	89.83	89.67	89.44	88.24	90.57	89.10	87.91	85.93
	Average weekly hours														
Mining.....	42.6	41.3	42.1	41.7	42.2	41.9	41.3	40.9	41.2	41.1	41.5	41.2	41.5	40.9	40.9
Metal mining.....	41.8	41.8	41.2	40.9	41.6	41.7	41.3	41.8	41.7	41.9	41.7	40.9	41.2	41.5	41.5
Iron ores.....	40.1	41.3	41.2	40.8	39.9	40.1	38.5	39.9	39.6	40.2	40.1	37.8	39.1	39.8	39.8
Copper ores.....	43.4	43.0	40.8	40.8	43.1	42.8	42.9	43.4	43.2	43.0	42.8	43.3	43.1	42.8	42.8
Coal mining.....	40.6	37.5	39.7	40.2	38.8	37.6	36.7	38.2	39.4	39.8	37.8	37.8	38.8	36.9	36.9
Bituminous.....	40.9	37.7	39.9	40.4	39.1	37.6	36.8	38.6	39.6	40.0	37.8	38.9	37.0	37.0	37.0
Crude petroleum and natural gas.....	42.3	41.6	41.6	42.4	41.9	42.0	42.1	42.4	42.3	41.9	42.2	42.1	42.1	42.0	42.0
Crude petroleum and natural gas fields.....	41.0	41.4	40.9	41.5	40.4	40.8	40.8	41.0	41.1	41.5	41.2	41.0	41.1	40.8	40.8
Oil and gas field services.....	43.4	41.7	42.1	43.1	43.1	43.1	43.2	43.5	43.3	42.2	43.1	43.1	43.0	43.0	43.0
Quarrying and nonmetallic mining.....	46.0	45.1	46.4	46.2	45.8	45.4	44.4	43.1	42.9	41.1	42.3	44.0	44.5	44.3	44.3
Contract construction.....	38.4	36.6	38.6	38.1	38.2	37.9	37.0	36.5	35.8	34.1	35.3	36.3	37.3	37.0	37.0
General building contractors.....	36.9	35.3	36.9	36.4	36.6	36.5	36.0	35.9	35.0	32.7	34.3	35.0	36.0	35.6	35.6
Heavy construction.....	42.8	39.9	43.2	42.7	42.4	42.1	40.4	39.1	38.9	36.6	36.7	40.0	41.3	40.5	40.5
Highway and street construction.....	43.5	40.3	44.1	43.5	43.0	42.8	40.5	38.9	38.7	36.0	35.3	40.3	42.0	41.1	41.1
Other heavy construction.....	41.8	39.4	41.9	41.6	41.7	41.2	40.4	39.2	39.1	37.0	38.0	39.5	40.6	39.9	39.9
Special trade contractors.....	37.4	35.9	37.6	37.1	37.3	37.1	36.4	36.0	35.3	34.1	35.5	35.6	36.5	36.3	36.3
Manufacturing.....	40.9	40.7	40.7	40.9	40.7	40.9	40.7	40.5	40.4	40.3	39.8	40.9	40.5	40.4	40.4
Durable goods.....	41.6	41.4	41.5	41.5	41.3	41.7	41.5	41.3	41.0	41.0	40.6	41.6	41.2	40.1	40.9
Nondurable goods.....	39.9	39.9	39.6	40.1	39.8	39.9	39.7	39.4	39.5	39.4	38.7	39.9	39.6	39.6	39.6
	Average hourly earnings														
Mining.....	\$2.88	\$2.87	\$2.84	\$2.81	\$2.81	\$2.81	\$2.80	\$2.78	\$2.80	\$2.81	\$2.81	\$2.77	\$2.76	\$2.70	\$2.70
Metal mining.....	2.99	3.00	2.96	2.96	2.95	2.94	2.93	2.91	2.91	2.91	2.90	2.91	2.88	2.83	2.83
Iron ores.....	3.11	3.17	3.14	3.17	3.14	3.12	3.11	3.11	3.11	3.11	3.09	3.09	3.07	3.07	3.07
Copper ores.....	3.12	3.07	3.05	3.04	3.04	3.03	3.01	2.98	2.98	2.96	2.96	2.96	2.89	2.82	2.82
Coal mining.....	3.31	3.32	3.30	3.28	3.26	3.24	3.16	3.17	3.18	3.18	3.13	3.12	3.12	3.09	3.09
Bituminous.....	3.34	3.36	3.34	3.33	3.30	3.28	3.20	3.20	3.21	3.21	3.16	3.15	3.12	3.12	3.12
Crude petroleum and natural gas.....	2.75	2.73	2.70	2.68	2.64	2.67	2.65	2.66	2.68	2.69	2.70	2.68	2.67	2.60	2.60
Crude petroleum and natural gas fields.....	2.95	2.98	2.95	2.93	2.92	2.92	2.92	2.94	2.95	2.95	2.95	2.94	2.93	2.83	2.83
Oil and gas field services.....	2.59	2.53	2.50	2.47	2.43	2.42	2.44	2.44	2.45	2.48	2.49	2.47	2.45	2.41	2.41
Quarrying and nonmetallic mining.....	2.58	2.58	2.57	2.55	2.55	2.53	2.50	2.47	2.46	2.49	2.49	2.46	2.45	2.38	2.38
Contract construction.....	3.61	3.58	3.54	3.53	3.49	3.50	3.52	3.51	3.53	3.57	3.53	3.43	3.41	3.31	3.31
General building contractor.....	3.47	3.45	3.40	3.37	3.35	3.36	3.39	3.35	3.36	3.39	3.36	3.30	3.26	3.16	3.16
Heavy construction.....	3.33	3.28	3.26	3.23	3.18	3.17	3.16	3.11	3.15	3.23	3.21	3.09	3.10	3.02	3.02
Highway and street construction.....	3.25	3.18	3.17	3.13	3.08	3.06	3.02	2.92	2.96	3.07	3.08	2.98	2.98	2.88	2.88
Other heavy construction.....	3.33	3.40	3.39	3.36	3.32	3.32	3.30	3.27	3.31	3.36	3.33	3.24	3.23	3.17	3.17
Special trade contractors.....	3.84	3.82	3.78	3.79	3.74	3.74	3.77	3.75	3.77	3.79	3.76	3.68	3.66	3.54	3.54
Manufacturing.....	\$2.56	2.53	2.57	2.52	2.53	2.53	2.53	2.51	2.51	2.52	2.51	2.49	2.46	2.39	2.39
Durable goods.....	2.74	2.70	2.75	2.71	2.71	2.71	2.71	2.70	2.69	2.69	2.69	2.67	2.64	2.56	2.56
Nondurable goods.....	2.31	2.30	2.32	2.29	2.29	2.29	2.28	2.27	2.27	2.27	2.27	2.25	2.22	2.17	2.17

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Revised series; see box, p. 98.

Industry	1964											1963		Annual average	
	Nov. ²	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962
	Average weekly earnings														
Manufacturing—Continued															
<i>Durable goods</i>															
Ordnance and accessories.....	\$125.46	\$124.14	\$121.60	\$121.10	\$119.70	\$121.91	\$119.90	\$120.09	\$119.39	\$119.29	\$121.47	\$123.26	\$120.47	\$119.31	\$116.31
Ammunition, except for small arms.	128.74	127.48	122.93	123.38	122.28	122.71	120.69	121.71	119.70	120.60	124.12	125.63	122.51	120.25	116.69
Sighting and fire control equip-		129.27	128.74	130.51	128.93	131.65	129.43	129.51	132.84	131.05	128.15	129.78	128.75	125.36	126.18
Other ordnance and accessories.....	117.79	116.40	116.85	115.14	113.08	117.96	116.97	115.14	116.52	115.02	114.62	117.29	114.77	115.77	111.92
Lumber and wood products, except															
furniture.....	86.62	88.07	88.00	89.98	87.89	87.72	86.67	84.19	81.97	82.37	80.29	83.20	82.97	81.80	79.20
Sawmills and planing mills.....	78.60	81.00	80.40	81.80	80.59	80.56	79.37	77.79	77.20	76.24	74.10	76.43	76.42	75.20	72.10
Millwork, plywood, and related															
products.....	94.21	93.94	93.02	94.66	93.34	94.47	93.83	92.55	92.32	91.88	89.02	91.72	90.83	89.40	87.53
Wooden containers.....	70.12	70.88	67.79	70.30	71.17	70.76	69.89	68.85	67.94	66.18	64.84	68.17	67.49	67.87	66.40
Miscellaneous wood products.....	77.93	78.14	78.17	79.49	76.17	77.49	77.49	76.52	75.92	75.92	74.24	76.14	75.74	74.30	72.54
Furniture and fixtures.....	86.94	86.94	85.49	85.48	83.23	83.43	81.81	83.03	82.42	82.62	79.59	85.06	83.43	81.80	79.37
Household furniture.....	83.75	83.33	80.95	81.51	78.55	79.32	77.95	79.15	78.74	78.94	75.25	81.87	79.87	77.30	75.07
Office furniture.....		98.71	101.10	100.91	98.53	96.12	96.70	96.46	95.41	97.23	94.80	99.36	94.37	95.76	92.57
Partitions, office and store fixtures		109.45	108.92	108.21	108.39	105.18	101.91	105.85	103.62	100.36	100.62	102.26	101.89	103.42	103.57
Other furniture and fixtures.....	88.81	89.44	88.81	89.03	86.93	86.93	86.67	86.24	86.46	85.41	83.92	87.56	86.51	84.04	81.41
	Average weekly hours														
Ordnance and accessories.....	41.0	40.7	40.0	40.1	39.9	40.5	40.1	40.3	40.2	40.3	40.9	41.5	40.7	41.0	41.1
Ammunition, except for small arms.	41.0	40.6	39.4	39.8	39.7	40.1	39.7	40.3	39.9	40.2	41.1	41.6	40.7	40.9	40.8
Sighting and fire control equip-		41.3	41.0	41.3	40.8	41.4	40.7	40.6	41.0	40.7	40.3	41.2	41.4	41.1	42.2
ment.....		40.9	40.7	41.0	40.4	40.1	40.9	40.4	40.6	40.5	40.5	41.3	40.7	41.2	41.3
Other ordnance and accessories.....	40.9	40.7	41.0	40.4	40.1	41.1	40.9	40.4	40.6	40.5	40.5	41.3	40.7	41.2	41.3
Lumber and wood products, except															
furniture.....	40.1	40.4	40.0	40.9	40.5	40.8	40.5	39.9	39.6	39.6	38.6	40.0	39.7	40.1	39.8
Sawmills and planing mills.....	39.9	40.5	40.0	40.9	40.7	41.1	40.7	40.1	40.0	39.3	38.0	39.6	39.8	40.0	39.4
Millwork, plywood, and related															
products.....	41.5	41.2	40.8	41.7	41.3	41.8	41.7	41.5	41.4	41.2	40.1	41.5	41.1	41.2	40.9
Wooden containers.....	40.3	40.5	38.3	40.4	40.9	40.9	40.4	39.8	39.5	38.7	37.7	40.1	39.7	40.4	40.0
Miscellaneous wood products.....	40.8	40.7	40.5	41.4	40.3	41.0	41.0	40.7	40.6	40.6	39.7	40.5	40.5	40.6	40.3
Furniture and fixtures.....	42.0	42.0	41.3	41.9	40.8	41.1	40.5	40.7	40.6	40.7	39.4	41.9	41.3	40.9	40.7
Household furniture.....	42.3	42.3	41.3	41.8	40.7	41.1	40.6	40.8	40.8	40.9	39.4	42.2	41.6	40.9	40.8
Office furniture.....		41.3	42.3	42.4	41.4	40.9	41.5	40.7	40.6	41.2	40.0	42.1	40.5	41.1	40.6
Partitions, office and store fixtures		41.3	41.1	41.3	40.9	40.3	39.5	40.4	39.7	38.9	39.0	40.1	39.8	40.4	41.1
Other furniture and fixtures.....	41.5	41.6	41.5	42.6	41.2	41.2	40.5	40.3	40.4	40.1	39.4	41.3	41.0	40.6	40.3
	Average hourly earnings														
Ordnance and accessories.....	\$3.06	\$3.05	\$3.04	\$3.02	\$3.00	\$3.01	\$2.99	\$2.98	\$2.97	\$2.96	\$2.97	\$2.97	\$2.96	\$2.91	\$2.83
Ammunition, except for small arms.	3.14	3.14	3.12	3.10	3.08	3.06	3.04	3.02	3.00	3.00	3.02	3.02	3.01	2.94	2.86
Sighting and fire control equip-		3.13	3.14	3.16	3.16	3.18	3.18	3.19	3.24	3.22	3.18	3.15	3.11	3.05	2.99
ment.....		2.88	2.86	2.85	2.82	2.87	2.86	2.85	2.87	2.84	2.83	2.84	2.82	2.81	2.71
Other ordnance and accessories.....	2.88	2.86	2.85	2.85	2.82	2.87	2.86	2.85	2.87	2.84	2.83	2.84	2.82	2.81	2.71
Lumber and wood products, except															
furniture.....	2.16	2.18	2.20	2.20	2.17	2.15	2.14	2.11	2.07	2.08	2.08	2.08	2.09	2.04	1.99
Sawmills and planing mills.....	1.97	2.00	2.01	2.00	1.98	1.96	1.95	1.94	1.93	1.94	1.95	1.93	1.92	1.88	1.83
Millwork, plywood, and related															
products.....	2.27	2.28	2.28	2.27	2.26	2.26	2.25	2.23	2.23	2.22	2.22	2.21	2.21	2.17	2.14
Wooden containers.....	1.74	1.75	1.77	1.74	1.74	1.73	1.73	1.73	1.72	1.71	1.72	1.70	1.70	1.68	1.66
Miscellaneous wood products.....	1.91	1.92	1.93	1.92	1.89	1.89	1.89	1.88	1.87	1.87	1.87	1.88	1.87	1.83	1.80
Furniture and fixtures.....	2.07	2.07	2.07	2.04	2.04	2.03	2.02	2.04	2.03	2.03	2.02	2.03	2.02	2.00	1.95
Household furniture.....	1.98	1.97	1.96	1.95	1.93	1.93	1.92	1.94	1.93	1.93	1.91	1.94	1.92	1.89	1.84
Office furniture.....		2.39	2.39	2.38	2.38	2.35	2.33	2.37	2.35	2.36	2.37	2.36	2.33	2.33	2.28
Partitions, office and store fixtures		2.65	2.65	2.62	2.65	2.61	2.58	2.62	2.61	2.58	2.58	2.55	2.56	2.56	2.52
Other furniture and fixtures.....	2.14	2.15	2.14	2.09	2.11	2.11	2.14	2.14	2.14	2.13	2.13	2.12	2.11	2.07	2.02

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Revised series; see box, p. 98.

Industry	1964											1963		Annual average	
	Nov. ²	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962
	Average weekly earnings														
Manufacturing—Continued															
Durable goods—Continued															
Stone, clay, and glass products.....	\$107.59	\$108.36	\$107.33	\$107.78	\$107.36	\$107.36	\$106.93	\$104.83	\$102.25	\$101.75	\$99.50	\$101.50	\$103.75	\$102.42	\$98.57
Flat glass.....	144.28	151.98	144.06	141.86	146.86	145.25	136.68	139.47	140.56	137.90	135.74	143.45	135.20	126.01	
Glass and glassware, pressed or blown.....	103.57	102.11	101.49	102.36	103.22	102.47	103.07	103.22	101.15	100.65	100.00	98.39	100.50	99.75	98.33
Cement, hydraulic.....	124.27	122.13	127.26	123.14	124.91	122.30	122.06	118.12	117.26	116.00	116.81	117.26	120.30	116.60	112.75
Structural clay products.....	93.83	94.08	92.74	92.35	91.74	92.40	91.05	91.32	88.51	87.70	84.67	88.29	90.03	88.99	86.28
Pottery and related products.....	92.69	90.25	91.18	92.83	93.93	94.07	93.67	92.04	92.40	90.02	91.71	91.83	89.54	86.85	
Concrete, gypsum, and plaster products.....	108.12	113.78	110.08	114.62	112.78	111.57	110.88	106.75	100.94	99.96	96.19	100.86	106.21	105.90	100.96
Other stone and mineral products.....	108.26	107.84	108.62	108.20	106.34	108.03	108.29	107.36	105.92	104.49	102.82	104.33	103.75	102.18	98.33
Primary metal industries.....	129.90	129.48	136.21	130.00	128.96	130.20	129.58	128.54	127.10	126.18	125.77	126.38	123.73	124.64	119.80
Blast furnace and basic steel products.....	139.33	139.67	148.86	138.77	137.61	138.02	138.10	136.94	135.20	133.46	133.06	131.41	128.58	133.06	127.40
Iron and steel foundries.....	115.51	114.40	120.13	119.26	118.15	121.24	119.26	119.26	119.26	118.71	117.87	120.81	116.20	113.01	106.52
Nonferrous smelting and refining.....	121.76	122.06	127.54	120.18	119.48	119.52	119.23	117.67	118.12	118.98	120.25	119.97	118.98	118.14	114.95
Nonferrous rolling, drawing, and extruding.....	120.96	120.25	124.84	121.82	121.69	124.56	122.84	120.84	120.13	119.43	120.98	123.12	120.56	118.72	116.05
Nonferrous foundries.....	109.06	109.45	111.10	110.12	109.59	110.81	110.27	109.86	109.86	108.24	108.50	110.35	108.62	107.12	104.55
Miscellaneous primary metal industries.....	139.75	138.02	135.88	133.56	130.00	133.46	133.46	134.83	133.25	131.57	130.41	134.62	130.73	128.96	124.50
Average weekly hours															
Stone, clay, and glass products.....	41.7	42.0	41.6	42.1	42.1	42.1	42.1	41.6	40.9	40.7	39.8	40.6	41.5	41.3	40.9
Flat glass.....	41.7	41.7	43.3	42.0	41.6	42.2	42.1	40.2	40.9	41.1	40.8	40.4	41.7	40.0	38.3
Glass and glassware, pressed or blown.....	40.3	40.2	39.8	40.3	40.8	40.5	40.9	40.8	40.3	40.1	40.0	39.2	40.2	39.9	40.3
Cement, hydraulic.....	41.7	41.4	42.0	41.6	42.2	41.6	41.8	41.3	41.0	40.7	40.7	41.0	41.2	41.2	41.0
Structural clay products.....	41.7	42.0	41.4	41.6	41.7	42.0	41.2	41.7	40.6	40.6	39.2	40.5	41.3	41.2	40.7
Pottery and related products.....	40.3	38.9	39.3	39.5	39.8	39.8	40.2	39.5	40.0	38.8	39.7	40.1	39.1	39.3	
Concrete, gypsum, and plaster products.....	42.4	44.1	43.0	44.6	44.4	44.1	44.0	42.7	41.2	40.8	39.1	41.0	43.0	43.4	42.6
Other stone and mineral products.....	41.8	41.8	42.1	42.1	41.7	42.2	42.3	42.1	41.7	41.3	40.8	41.4	41.5	41.2	40.8
Primary metal industries.....	41.5	41.5	42.7	41.8	41.6	42.0	41.8	41.6	41.4	41.1	41.1	41.3	40.7	41.0	40.2
Blast furnace and basic steel products.....	41.1	41.2	42.9	41.3	41.2	41.2	41.1	41.0	40.6	40.2	40.2	39.7	39.2	40.2	39.2
Iron and steel foundries.....	41.7	41.6	42.6	42.9	42.5	43.3	42.9	42.9	42.9	42.7	42.4	43.3	42.1	41.7	40.5
Nonferrous smelting and refining.....	41.7	41.8	42.8	41.3	41.2	41.5	41.4	41.0	41.3	41.6	41.9	41.8	41.6	41.6	41.2
Nonferrous rolling, drawing, and extruding.....	42.0	41.9	42.9	42.3	42.4	43.4	42.8	42.4	42.3	42.2	42.6	43.2	42.6	42.4	42.2
Nonferrous foundries.....	41.0	41.3	41.3	41.4	41.2	41.5	41.3	41.3	41.3	41.0	41.1	41.8	41.3	41.2	41.0
Miscellaneous primary metal industries.....	43.0	42.6	42.2	42.0	41.4	42.1	42.1	42.4	42.3	41.9	41.4	42.6	41.9	41.6	41.5
Average hourly earnings															
Stone, clay, and glass products.....	\$2.58	\$2.58	\$2.58	\$2.56	\$2.55	\$2.55	\$2.54	\$2.52	\$2.50	\$2.50	\$2.50	\$2.50	\$2.48	\$2.41	
Flat glass.....	3.46	3.51	3.43	3.41	3.48	3.45	3.40	3.41	3.42	3.38	3.36	3.44	3.38	3.29	
Glass and glassware, pressed or blown.....	2.57	2.54	2.55	2.54	2.53	2.53	2.52	2.53	2.51	2.51	2.50	2.51	2.50	2.44	
Cement, hydraulic.....	2.98	2.95	3.03	2.96	2.96	2.94	2.92	2.86	2.86	2.85	2.87	2.86	2.92	2.83	
Structural clay products.....	2.25	2.24	2.24	2.22	2.20	2.20	2.21	2.19	2.18	2.16	2.16	2.18	2.18	2.16	
Pottery and related products.....	2.30	2.32	2.32	2.32	2.35	2.36	2.34	2.33	2.33	2.31	2.32	2.31	2.29	2.29	
Concrete, gypsum, and plaster products.....	2.55	2.58	2.56	2.57	2.54	2.53	2.52	2.50	2.45	2.45	2.46	2.46	2.47	2.44	
Other stone and mineral products.....	2.59	2.58	2.58	2.57	2.55	2.56	2.56	2.55	2.54	2.53	2.52	2.52	2.50	2.48	
Primary metal industries.....	3.13	3.12	3.19	3.11	3.10	3.10	3.10	3.09	3.07	3.07	3.06	3.06	3.04	3.04	
Blast furnace and basic steel products.....	3.39	3.39	3.47	3.36	3.34	3.35	3.36	3.34	3.33	3.32	3.31	3.31	3.28	3.31	
Iron and steel foundries.....	2.77	2.75	2.82	2.78	2.78	2.80	2.78	2.78	2.78	2.78	2.79	2.76	2.71	2.63	
Nonferrous smelting and refining.....	2.92	2.92	2.98	2.91	2.90	2.88	2.88	2.87	2.86	2.86	2.87	2.87	2.86	2.84	
Nonferrous rolling, drawing, and extruding.....	2.88	2.87	2.91	2.88	2.87	2.87	2.87	2.85	2.84	2.83	2.84	2.85	2.83	2.80	
Nonferrous foundries.....	2.66	2.65	2.69	2.66	2.66	2.67	2.67	2.66	2.66	2.64	2.64	2.64	2.63	2.60	
Miscellaneous primary metal industries.....	3.25	3.24	3.22	3.18	3.14	3.17	3.17	3.18	3.15	3.14	3.15	3.16	3.12	3.10	

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Revised series; see box, p. 98.

Industry	1964												1963		Annual average	
	Nov. ²	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962	
	Average weekly earnings															
Manufacturing—Continued																
<i>Durable goods—Continued</i>																
Fabricated metal products.....	\$112.98	\$110.24	\$112.86	\$112.98	\$111.07	\$112.29	\$112.02	\$111.22	\$109.18	\$109.18	\$108.39	\$111.04	\$109.56	\$108.05	\$104.81	
Metal cans.....	128.29	128.83	132.18	139.46	136.53	133.80	132.44	131.21	128.59	128.83	131.63	129.44	129.44	128.17	126.30	
Cutlery, handtools, and general hardware.....	110.30	100.04	109.52	109.36	105.37	106.97	107.90	108.58	104.96	105.73	105.11	109.04	108.00	103.32	99.14	
Heating equipment and plumbing fixtures.....	106.30	105.63	102.03	104.60	103.68	104.34	103.83	101.63	101.75	103.20	99.94	102.87	102.62	101.56	98.55	
Fabricated structural metal products.....	110.68	110.95	110.00	111.61	110.51	110.92	110.12	109.33	108.65	107.45	105.86	109.03	108.36	107.27	104.60	
Screw machine products, bolts, etc.....	115.34	115.61	112.25	112.36	111.67	113.52	112.04	112.30	112.56	112.56	110.56	110.24	107.68	108.03	106.00	
Metal stampings.....	125.42	114.93	127.90	123.70	121.98	123.69	124.56	123.55	119.56	119.71	121.13	123.26	119.71	116.47	111.76	
Coating, engraving, and allied services.....	98.71	99.60	99.39	99.95	97.44	99.95	97.75	97.75	95.51	96.70	95.27	97.34	96.64	94.94	93.11	
Miscellaneous fabricated wire products.....	103.81	101.02	99.87	99.46	97.03	99.77	99.53	98.16	97.51	97.68	96.96	99.01	97.17	97.17	96.64	
Miscellaneous fabricated metal products.....	110.81	110.68	109.88	109.59	108.39	109.45	108.39	107.04	105.44	105.44	104.00	106.75	104.90	105.67	103.53	
Machinery.....	123.11	122.54	120.67	121.11	121.82	123.26	122.69	121.98	121.26	120.56	118.43	120.42	117.88	116.20	113.01	
Engines and turbines.....	127.70	127.70	122.85	129.47	130.41	129.48	128.86	126.07	124.53	124.84	123.51	129.79	127.20	123.73	119.88	
Farm machinery and equipment.....	121.96	119.65	118.78	119.52	118.66	119.52	115.46	118.28	118.43	119.56	117.29	116.31	112.16	111.93	107.59	
Construction and related machinery.....	121.96	121.09	121.09	120.54	120.83	123.69	123.26	122.98	121.69	117.31	118.14	119.56	117.18	115.79	112.34	
Metalworking machinery and equipment.....	136.31	135.39	131.89	132.68	136.89	139.36	140.12	140.12	139.19	138.60	133.90	135.28	130.03	129.33	125.57	
Special industry machinery.....	117.78	116.53	115.60	114.33	113.63	114.70	114.44	113.05	113.58	112.63	110.62	114.48	110.99	109.72	106.77	
General industrial machinery.....	123.25	122.25	120.38	120.96	120.54	121.82	120.83	119.70	118.71	118.56	116.60	120.13	117.03	114.12	110.83	
Office, computing and accounting machines.....	123.37	122.36	122.13	120.42	120.36	120.36	117.49	116.51	116.11	116.87	113.87	115.42	119.19	116.81	113.15	
Service industry machines.....	108.26	107.86	107.71	107.94	108.21	107.90	106.19	106.75	106.08	106.23	104.12	106.45	103.57	103.12	100.12	
Miscellaneous machinery.....	115.99	116.53	114.09	115.29	115.02	117.18	116.80	115.29	114.70	113.74	113.21	114.28	111.99	111.51	109.13	
Average weekly hours																
Fabricated metal products.....	42.0	41.6	41.8	42.0	41.6	41.9	41.8	41.5	41.2	41.2	40.9	41.9	41.5	41.4	41.1	
Metal cans.....	42.2	42.1	42.5	44.7	43.9	43.3	43.0	42.6	42.3	42.1	42.6	42.3	42.3	42.3	42.1	
Cutlery, handtools, and general hardware.....	42.1	40.5	41.8	41.9	41.0	41.3	41.5	41.6	41.0	41.3	40.9	42.1	41.7	41.0	40.8	
Heating equipment and plumbing fixtures.....	41.2	41.1	39.7	40.7	40.5	40.6	40.4	39.7	39.9	40.0	39.5	40.5	40.4	40.3	39.9	
Fabricated structural metal products.....	41.3	41.4	41.2	41.8	41.7	41.7	41.4	41.1	41.0	40.7	40.1	41.3	41.2	41.1	40.7	
Screw machine products, bolts, etc.....	43.2	43.3	42.2	42.4	42.3	43.0	42.6	42.7	42.8	42.8	42.2	42.4	41.9	42.2	42.4	
Metal stampings.....	43.1	42.1	43.8	43.1	42.5	42.8	43.1	42.9	42.1	42.3	42.5	43.4	42.6	42.2	41.7	
Coating, engraving, and allied services.....	41.3	41.5	40.9	41.3	40.6	41.3	40.9	40.9	40.3	40.8	40.2	41.6	41.3	41.1	41.2	
Miscellaneous fabricated wire products.....	42.2	41.4	41.1	41.1	40.6	41.4	41.3	40.9	40.8	40.7	40.4	41.6	41.0	41.0	41.3	
Miscellaneous fabricated metal products.....	41.5	41.3	41.0	41.2	40.9	41.3	40.9	40.7	40.4	40.4	40.0	40.9	40.5	40.8	40.6	
Machinery.....	42.6	42.4	41.9	42.2	42.3	42.8	42.6	42.5	42.4	42.3	41.7	42.4	41.8	41.8	41.7	
Engines and turbines.....	40.8	40.8	39.5	41.1	41.4	41.5	41.3	40.8	40.3	40.4	40.1	41.6	40.9	40.7	40.5	
Farm machinery and equipment.....	42.2	41.4	41.1	41.5	41.2	41.5	40.8	41.5	41.7	42.1	41.3	41.1	40.2	40.7	40.6	
Construction and related machinery.....	42.2	41.9	41.9	42.0	42.1	42.8	42.8	42.7	42.4	41.6	41.6	42.1	41.7	41.5	41.3	
Metalworking machinery and equipment.....	44.4	44.1	43.1	43.5	44.3	45.1	45.3	45.2	44.9	45.0	43.9	44.5	43.2	43.4	43.3	
Special industry machinery.....	43.3	43.0	42.5	42.5	42.4	42.8	42.7	42.5	42.7	42.5	41.9	43.2	42.2	42.2	42.2	
General industrial machinery.....	42.5	42.3	41.8	42.0	42.0	42.3	42.1	42.0	41.8	41.6	41.2	42.3	41.5	41.2	41.2	
Office, computing and accounting machines.....	41.4	41.2	41.4	41.1	40.8	40.8	40.1	39.9	39.9	40.3	39.4	39.8	41.1	40.7	40.7	
Service industry machines.....	40.7	40.7	40.8	41.2	41.3	41.5	41.0	40.9	40.8	40.7	40.2	41.1	40.3	40.6	40.7	
Miscellaneous machinery.....	42.8	43.0	42.1	42.7	42.6	43.4	43.1	42.7	42.8	42.6	42.4	42.8	42.1	42.4	42.3	
Average hourly earnings																
Fabricated metal products.....	\$2.69	\$2.65	\$2.70	\$2.69	\$2.67	\$2.68	\$2.68	\$2.68	\$2.65	\$2.65	\$2.65	\$2.64	\$2.64	\$2.61	\$2.55	
Metal cans.....	3.04	3.06	3.11	3.12	3.11	3.09	3.08	3.08	3.04	3.06	3.09	3.06	3.06	3.03	3.00	
Cutlery, handtools, and general hardware.....	2.62	2.47	2.62	2.61	2.57	2.59	2.60	2.61	2.56	2.56	2.57	2.59	2.59	2.52	2.43	
Heating equipment and plumbing fixtures.....	2.58	2.57	2.57	2.57	2.56	2.57	2.57	2.56	2.55	2.58	2.53	2.54	2.54	2.52	2.47	
Fabricated structural metal products.....	2.68	2.68	2.67	2.67	2.65	2.66	2.66	2.66	2.65	2.64	2.64	2.64	2.63	2.61	2.57	
Screw machine products, bolts, etc.....	2.67	2.67	2.66	2.65	2.64	2.64	2.63	2.63	2.63	2.63	2.62	2.60	2.57	2.56	2.50	
Metal stampings.....	2.91	2.73	2.92	2.87	2.87	2.89	2.89	2.88	2.84	2.83	2.85	2.84	2.81	2.76	2.68	
Coating, engraving, and allied services.....	2.39	2.40	2.43	2.42	2.40	2.42	2.39	2.39	2.37	2.37	2.37	2.34	2.34	2.31	2.26	
Miscellaneous fabricated wire products.....	2.46	2.44	2.43	2.42	2.39	2.41	2.41	2.40	2.39	2.40	2.40	2.38	2.37	2.37	2.34	
Miscellaneous fabricated metal products.....	2.67	2.68	2.68	2.66	2.65	2.65	2.65	2.63	2.61	2.61	2.60	2.61	2.59	2.59	2.55	
Machinery.....	2.89	2.89	2.88	2.87	2.88	2.88	2.88	2.87	2.86	2.85	2.84	2.84	2.82	2.78	2.71	
Engines and turbines.....	3.13	3.13	3.11	3.15	3.15	3.12	3.12	3.09	3.09	3.09	3.08	3.12	3.11	3.04	2.96	
Farm machinery and equipment.....	2.89	2.89	2.89	2.88	2.88	2.88	2.83	2.85	2.84	2.84	2.84	2.83	2.79	2.75	2.65	
Construction and related machinery.....	2.89	2.89	2.89	2.87	2.87	2.89	2.88	2.88	2.87	2.82	2.84	2.84	2.81	2.79	2.72	
Metalworking machinery and equipment.....	3.07	3.07	3.06	3.05	3.09	3.09	3.12	3.10	3.10	3.08	3.05	3.04	3.01	2.98	2.90	
Special industry machinery.....	2.72	2.71	2.72	2.69	2.68	2.68	2.68	2.66	2.66	2.65	2.64	2.65	2.63	2.60	2.53	
General industrial machinery.....	2.90	2.89	2.88	2.88	2.87	2.88	2.87	2.85	2.84	2.85	2.83	2.84	2.82	2.77	2.69	
Office, computing and accounting machines.....	2.98	2.97	2.95	2.93	2.95	2.95	2.93	2.92	2.91	2.90	2.89	2.90	2.90	2.87	2.78	
Service industry machines.....	2.66	2.65	2.64	2.62	2.62	2.60	2.59	2.61	2.60	2.61	2.59	2.59	2.57	2.54	2.46	
Miscellaneous machinery.....	2.71	2.71	2.71	2.70	2.70	2.70	2.71	2.70	2.68	2.67	2.67	2.67	2.66	2.63	2.58	

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Revised series; see box, p. 98.

Industry	1964											1963		Annual average	
	Nov. ²	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962
Average weekly earnings															
Manufacturing—Continued															
Durable goods—Continued															
Electrical equipment and supplies	\$103.48	\$103.48	\$102.72	\$102.31	\$101.96	\$102.06	\$101.56	\$101.15	\$100.90	\$100.90	\$100.00	\$102.41	\$100.60	\$99.14	\$97.44
Electric distribution equipment	113.82	113.55	112.19	113.55	112.47	112.32	110.16	109.48	109.08	110.02	107.33	113.97	109.61	107.04	102.87
Electrical industrial apparatus	111.61	111.19	109.67	109.82	110.92	109.30	109.30	109.03	108.62	106.75	106.49	107.79	104.90	104.70	102.00
Household appliances	109.88	110.02	109.21	108.14	108.41	108.00	107.33	107.60	107.07	106.40	104.80	109.88	106.53	107.71	104.23
Electric lighting and wiring equipment	96.80	95.27	96.24	97.92	95.20	96.15	96.32	95.04	94.16	94.40	93.14	96.70	94.87	93.26	90.85
Radio and TV receiving sets	89.33	89.24	87.64	87.96	88.36	84.64	85.09	86.30	86.08	86.46	87.86	87.25	87.02	85.85	85.75
Communication equipment	114.12	115.92	113.71	112.20	109.60	112.48	111.38	110.70	110.30	109.76	109.35	110.56	109.08	107.33	106.97
Electronic components and accessories	86.83	86.83	86.40	85.57	84.93	85.39	85.39	84.99	84.77	84.96	83.67	84.38	84.19	82.76	82.00
Miscellaneous electrical equipment and supplies	111.37	107.18	110.43	103.49	107.87	109.21	108.68	108.27	106.27	108.40	111.90	113.25	110.81	107.01	106.24
Transportation equipment	134.83	124.75	133.67	129.38	128.54	132.06	129.67	129.36	126.68	126.99	127.82	133.61	132.68	126.72	122.22
Motor vehicles and equipment	127.51	143.99	137.70	135.26	140.92	137.17	135.99	131.25	132.93	134.20	144.26	142.65	132.68	127.67	127.67
Aircraft and parts	127.20	126.59	125.56	125.15	125.05	124.84	123.93	123.82	123.11	123.41	123.30	124.92	124.20	122.43	119.97
Ship and boat building and repairing	119.20	122.01	119.08	121.60	120.80	121.99	122.07	120.69	122.96	120.39	118.40	120.39	123.60	121.06	115.26
Railroad equipment	119.74	122.98	125.02	126.79	127.70	126.77	128.33	125.55	126.38	123.82	124.34	124.34	124.53	121.71	118.10
Other transportation equipment	97.16	93.79	95.04	91.76	96.41	95.37	93.34	92.03	91.13	87.64	92.62	89.33	91.84	86.22	86.22
Average weekly hours															
Electrical equipment and supplies	40.9	40.9	40.6	40.6	40.3	40.5	40.3	40.3	40.2	40.2	40.0	40.8	40.4	40.3	40.6
Electric distribution equipment	42.0	41.9	41.4	41.9	41.5	41.6	40.8	40.7	40.7	40.9	40.2	41.9	40.9	40.7	40.5
Electrical industrial apparatus	41.8	41.8	41.7	41.6	41.7	41.4	41.3	41.3	41.3	40.9	40.8	41.3	40.5	40.9	40.8
Household appliances	41.0	40.9	40.6	40.5	40.3	40.3	39.9	40.3	40.1	40.0	39.4	41.0	40.2	40.8	40.4
Electric lighting and wiring equipment	40.5	40.2	40.1	40.8	40.0	40.4	40.3	40.1	39.9	40.0	39.3	40.8	40.2	40.2	40.2
Radio and TV receiving sets	39.7	40.2	39.3	39.8	39.8	38.3	38.5	38.7	38.6	38.6	39.4	39.3	39.2	39.7	39.7
Communication equipment	41.2	41.4	41.2	40.8	40.0	40.9	40.8	40.7	40.7	40.5	40.5	41.1	40.7	40.5	41.3
Electronic components and accessories	40.2	40.2	40.0	39.8	39.5	39.9	39.9	39.9	39.8	39.7	39.1	39.8	39.9	39.6	40.0
Miscellaneous electrical equipment and supplies	41.4	40.6	40.9	39.5	40.1	40.6	40.4	40.4	39.8	40.6	41.6	42.1	41.5	41.0	41.5
Transportation equipment	42.4	40.9	42.3	41.6	41.6	42.6	42.1	42.0	41.4	41.5	41.5	43.1	42.8	42.1	42.0
Motor vehicles and equipment	41.3	41.1	40.9	40.9	41.0	41.2	40.9	41.0	40.9	41.0	41.1	41.5	41.4	41.5	41.8
Aircraft and parts	39.6	40.4	39.3	40.4	40.4	40.8	41.1	40.5	41.4	40.4	40.0	40.4	41.2	40.9	40.3
Ship and boat building and repairing	38.5	39.8	40.2	40.9	40.8	40.5	41.0	40.5	40.9	40.2	40.5	40.3	40.3	39.9	39.9
Railroad equipment	41.7	40.6	41.5	40.6	42.1	42.2	41.3	40.9	40.5	39.3	40.8	39.7	41.0	40.1	40.1
Other transportation equipment															
Average hourly earnings															
Electrical equipment and supplies	\$2.53	\$2.53	\$2.53	\$2.52	\$2.53	\$2.52	\$2.52	\$2.51	\$2.51	\$2.51	\$2.50	\$2.51	\$2.49	\$2.46	\$2.40
Electric distribution equipment	2.71	2.71	2.71	2.71	2.71	2.70	2.70	2.69	2.68	2.69	2.67	2.72	2.68	2.63	2.54
Electrical industrial apparatus	2.67	2.66	2.63	2.64	2.66	2.64	2.64	2.64	2.63	2.61	2.61	2.61	2.59	2.56	2.50
Household appliances	2.68	2.69	2.69	2.67	2.69	2.68	2.69	2.67	2.67	2.66	2.66	2.68	2.65	2.64	2.58
Electric lighting and wiring equipment	2.39	2.37	2.40	2.40	2.38	2.38	2.39	2.37	2.36	2.36	2.37	2.37	2.36	2.32	2.26
Radio and TV receiving sets	2.25	2.22	2.23	2.21	2.22	2.21	2.21	2.23	2.23	2.24	2.23	2.22	2.22	2.19	2.16
Communication equipment	2.77	2.80	2.76	2.75	2.74	2.75	2.73	2.72	2.71	2.71	2.70	2.69	2.68	2.65	2.59
Electronic components and accessories	2.16	2.16	2.16	2.15	2.15	2.14	2.14	2.13	2.13	2.14	2.14	2.12	2.11	2.09	2.05
Miscellaneous electrical equipment and supplies	2.69	2.64	2.70	2.62	2.69	2.69	2.69	2.68	2.67	2.67	2.69	2.69	2.67	2.61	2.56
Transportation equipment	3.18	3.05	3.16	3.11	3.09	3.10	3.08	3.08	3.06	3.06	3.08	3.10	3.10	3.01	2.91
Motor vehicles and equipment	3.11	3.28	3.24	3.19	3.21	3.19	3.19	3.17	3.14	3.15	3.18	3.22	3.22	3.10	2.99
Aircraft and parts	3.08	3.08	3.07	3.06	3.05	3.03	3.03	3.02	3.01	3.01	3.00	3.01	3.00	2.95	2.87
Ship and boat building and repairing	3.01	3.02	3.03	3.01	2.99	2.99	2.97	2.98	2.97	2.98	2.98	2.98	3.00	2.96	2.86
Railroad equipment	3.11	3.09	3.11	3.10	3.13	3.13	3.13	3.10	3.09	3.08	3.07	3.09	3.09	3.02	2.96
Other transportation equipment	2.33	2.31	2.29	2.26	2.26	2.26	2.26	2.26	2.25	2.25	2.23	2.27	2.25	2.24	2.15

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Revised series; see box, p. 98.

Industry	1964											1963		Annual average	
	Nov. ²	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962
Average weekly earnings															
Manufacturing—Continued															
Durable goods—Continued															
Instruments and related products.....	\$105.47	\$104.81	\$104.81	\$103.98	\$103.63	\$103.98	\$102.56	\$102.06	\$101.81	\$101.66	\$100.15	\$103.57	\$102.91	\$101.59	\$99.80
Engineering and scientific instruments.....	-----	120.47	121.60	120.93	119.07	120.77	117.91	118.03	117.22	117.22	115.31	120.06	119.36	118.24	115.64
Mechanical measuring and control devices.....	105.78	104.34	104.45	103.79	104.19	105.37	103.53	103.53	103.53	102.87	100.30	103.89	104.65	102.16	98.98
Optical and ophthalmic goods.....	95.17	95.82	95.87	94.53	92.43	94.66	93.98	92.51	92.51	92.96	92.21	95.15	94.05	93.86	89.62
Surgical, medical, and dental equipment.....	89.24	88.44	89.28	88.48	87.56	87.23	87.45	86.83	86.76	86.80	84.41	87.02	87.02	85.63	84.45
Photographic equipment and supplies.....	-----	124.39	121.25	120.56	122.09	120.10	119.65	118.49	116.69	117.96	116.57	119.55	118.14	115.77	114.68
Watches and clocks.....	-----	87.05	86.65	84.53	84.32	85.97	83.71	82.18	81.37	81.24	80.98	83.16	81.93	83.13	83.37
Miscellaneous manufacturing industries.....	83.62	83.41	81.35	82.80	81.74	82.58	81.95	82.76	82.97	82.56	80.26	82.99	81.59	80.39	78.61
Jewelry, silverware, and plated ware.....	97.06	95.53	89.02	89.65	88.18	90.09	90.27	90.09	89.65	87.96	84.97	94.73	92.29	88.70	84.82
Toys, amusement, and sporting goods.....	-----	75.03	73.53	75.22	73.53	73.72	72.96	74.11	74.50	73.73	71.80	72.39	73.14	72.76	71.37
Pens, pencils, office and art materials.....	-----	80.40	79.99	80.40	75.00	79.80	78.40	78.20	78.01	78.80	75.24	78.39	78.00	78.00	74.82
Costume jewelry, buttons, and notions.....	-----	76.81	74.69	75.46	75.64	76.80	77.20	77.41	77.16	77.18	73.15	76.57	75.01	73.84	71.68
Other manufacturing industries.....	90.50	89.82	88.70	89.24	88.75	89.20	87.91	89.20	89.65	88.58	86.85	89.24	87.82	86.58	84.82
Average weekly hours															
Instruments and related products.....	41.2	41.1	41.1	41.1	40.8	41.1	40.7	40.5	40.4	40.5	39.9	41.1	41.0	40.8	40.9
Engineering and scientific instruments.....	-----	41.4	41.5	41.7	41.2	41.5	40.8	40.7	40.7	40.7	39.9	41.4	41.3	41.2	41.3
Mechanical measuring and control devices.....	41.0	40.6	40.8	40.7	40.7	41.0	40.6	40.6	40.6	40.5	39.8	40.9	41.2	40.7	40.4
Optical and ophthalmic goods.....	41.2	41.3	41.5	41.1	40.9	41.7	41.4	41.3	41.3	41.5	40.8	42.1	41.8	41.9	41.3
Surgical, medical, and dental equipment.....	40.2	40.2	40.4	40.4	39.8	40.2	40.3	40.2	39.8	40.0	38.9	40.1	40.1	40.2	40.6
Photographic equipment and supplies.....	-----	42.6	42.1	42.3	42.1	41.7	41.4	41.0	40.8	41.1	40.9	41.8	41.6	41.2	41.7
Watches and clocks.....	-----	40.3	39.7	39.5	39.4	39.8	39.3	38.4	38.2	38.5	38.2	39.6	39.2	39.4	39.7
Miscellaneous manufacturing industries.....	40.2	40.1	39.3	40.0	39.3	39.7	39.4	39.6	39.7	39.5	38.4	39.9	39.8	39.6	39.7
Jewelry, silverware, and plated ware.....	42.2	41.9	40.1	40.2	39.9	40.4	40.3	40.4	40.2	39.8	38.8	42.1	41.2	40.5	40.2
Toys, amusement, and sporting goods.....	-----	39.7	38.7	39.8	38.7	38.8	38.4	38.6	38.6	38.2	37.2	38.1	38.7	38.7	39.0
Pens, pencils, office and art materials.....	-----	40.2	39.6	40.2	37.5	39.7	39.2	39.1	39.4	39.6	38.0	40.2	40.0	40.0	39.8
Costume jewelry, buttons, and notions.....	-----	39.8	38.9	39.3	39.6	40.0	40.0	39.9	40.4	40.2	38.1	40.3	39.9	39.7	39.6
Other manufacturing industries.....	40.4	40.1	39.6	40.2	39.8	40.0	39.6	40.0	40.2	39.9	39.3	40.2	40.1	39.9	40.2
Average hourly earnings															
Instruments and related products.....	\$2.56	\$2.55	\$2.55	\$2.53	\$2.54	\$2.53	\$2.52	\$2.52	\$2.52	\$2.51	\$2.51	\$2.52	\$2.51	\$2.49	\$2.44
Engineering and scientific instruments.....	-----	2.91	2.93	2.90	2.89	2.91	2.89	2.90	2.88	2.88	2.89	2.90	2.89	2.87	2.80
Mechanical measuring and control devices.....	2.58	2.57	2.56	2.55	2.56	2.57	2.55	2.55	2.55	2.54	2.52	2.54	2.54	2.51	2.45
Optical and ophthalmic goods.....	2.31	2.32	2.31	2.30	2.26	2.27	2.27	2.24	2.24	2.24	2.26	2.26	2.25	2.24	2.17
Surgical, medical, and dental equipment.....	2.22	2.20	2.21	2.19	2.20	2.17	2.17	2.16	2.18	2.17	2.17	2.17	2.17	2.13	2.08
Photographic equipment and supplies.....	-----	2.92	2.88	2.85	2.90	2.88	2.89	2.89	2.86	2.87	2.85	2.86	2.84	2.81	2.75
Watches and clocks.....	-----	2.16	2.18	2.14	2.14	2.16	2.13	2.14	2.13	2.11	2.12	2.10	2.09	2.11	2.10
Miscellaneous manufacturing industries.....	2.08	2.08	2.07	2.07	2.08	2.08	2.08	2.09	2.09	2.09	2.09	2.08	2.05	2.03	1.98
Jewelry, silverware, and plated ware.....	2.30	2.28	2.22	2.23	2.21	2.23	2.24	2.23	2.23	2.21	2.19	2.25	2.24	2.19	2.11
Toys, amusement, and sporting goods.....	-----	1.89	1.90	1.89	1.90	1.90	1.90	1.92	1.93	1.93	1.93	1.90	1.89	1.88	1.83
Pens, pencils, office and art materials.....	-----	2.00	2.02	2.00	2.00	2.01	2.00	2.00	1.98	1.99	1.98	1.95	1.95	1.95	1.88
Costume jewelry, buttons, and notions.....	-----	1.93	1.92	1.92	1.91	1.92	1.93	1.94	1.91	1.92	1.92	1.90	1.88	1.86	1.81
Other manufacturing industries.....	2.24	2.24	2.24	2.22	2.23	2.23	2.22	2.23	2.23	2.22	2.21	2.22	2.19	2.17	2.11

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Revised series; see box, p. 98.

Industry	1964											1963		Annual average	
	Nov. ²	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962
	Average weekly earnings														
Manufacturing—Continued															
Nondurable goods															
Food and kindred products.....	\$98.40	\$97.64	\$98.53	\$97.23	\$98.06	\$98.23	\$98.40	\$96.56	\$96.08	\$95.68	\$95.91	\$96.59	\$95.94	\$94.48	\$91.84
Meat products.....	111.19	108.12	105.00	105.25	104.04	107.36	105.32	103.28	103.06	101.24	105.11	108.20	107.95	101.68	98.66
Dairy products.....	104.58	103.66	107.75	103.46	104.25	103.03	102.55	100.74	100.98	101.46	100.91	100.32	99.66	98.75	96.05
Canned and preserved food, except meats.....	78.78	81.16	79.18	79.18	77.60	74.26	78.11	76.84	75.03	75.11	74.54	73.83	71.59	75.65	73.72
Grain mill products.....	109.76	110.53	112.24	108.96	108.91	111.80	107.04	104.54	104.06	105.03	108.09	106.72	108.38	105.02	101.92
Bakery products.....	97.36	98.09	100.61	98.25	98.33	98.57	96.80	95.44	94.80	95.04	93.62	95.34	95.04	93.90	91.71
Sugar.....	100.67	113.71	112.02	112.02	112.06	111.64	111.07	107.33	105.52	98.49	101.58	100.58	98.12	104.43	101.67
Confectionery and related products.....	82.19	81.60	81.59	81.80	80.55	79.76	80.17	79.76	78.19	78.99	76.58	77.81	77.81	78.41	76.61
Beverages.....	109.45	108.53	111.93	111.65	114.51	109.74	108.95	108.94	107.73	106.92	104.01	106.13	107.20	107.18	103.31
Miscellaneous food and kindred products.....	96.48	97.41	97.58	95.76	96.18	95.53	96.64	94.47	94.92	96.50	94.95	96.34	96.56	93.70	91.38
Tobacco manufactures.....	75.08	73.35	73.10	75.47	80.13	81.78	80.17	80.78	75.60	69.19	72.69	74.86	73.71	74.11	71.41
Cigarettes.....	92.67	92.12	97.58	96.08	96.08	98.29	93.85	94.56	87.66	75.37	91.26	93.67	96.82	92.20	89.54
Cigars.....	63.41	60.76	63.96	62.54	64.41	66.57	67.40	65.67	66.50	57.73	63.24	63.18	60.48	57.82	
Textile mill products.....	76.68	75.89	71.82	73.10	72.22	73.10	72.75	71.63	71.63	71.98	70.40	72.69	72.28	69.43	68.21
Cotton broad woven fabrics.....	79.67	78.14	72.90	73.68	72.80	73.68	73.92	72.38	72.21	73.08	72.31	73.78	73.35	68.30	66.75
Silk and synthetic broad woven fabrics.....	82.53	82.53	79.10	79.10	77.22	78.37	78.19	78.01	77.22	77.58	76.68	79.20	78.84	74.65	73.44
Weaving and finishing broad woolsens.....	77.93	78.85	74.86	77.23	78.73	78.91	77.56	76.41	74.19	75.26	75.30	75.81	71.94	75.40	77.17
Narrow fabrics and smallwares.....	75.40	73.89	72.62	73.02	72.98	73.51	73.51	73.16	71.91	72.57	69.74	73.46	72.51	71.34	70.93
Knitting.....	67.77	67.60	63.92	66.42	64.85	65.02	64.85	64.56	64.51	64.34	60.62	62.58	64.30	62.65	61.44
Finishing textiles, except wool, knit.....	85.40	83.78	77.61	79.10	77.74	83.42	82.45	80.48	82.64	83.66	78.74	84.44	83.76	79.78	78.07
Floor covering.....	80.15	77.41	76.80	74.62	74.62	73.71	74.39	74.88	74.64	72.18	77.65	78.74	78.74	75.18	73.04
Yarn and thread.....	70.90	69.81	66.00	67.39	66.91	67.07	66.17	65.04	64.88	65.37	64.40	66.33	66.08	63.59	62.22
Miscellaneous textile goods.....	84.87	85.28	85.08	84.46	83.43	86.28	83.42	81.60	81.39	80.99	80.79	83.38	82.78	80.95	78.91
Average weekly hours															
Food and kindred products.....	41.0	41.2	41.4	41.2	41.2	41.1	41.0	40.4	40.2	40.2	40.3	41.1	41.0	40.9	41.0
Meat products.....	42.6	42.4	41.5	41.6	40.8	42.1	41.3	40.5	40.1	39.7	40.9	42.6	42.5	41.0	40.6
Dairy products.....	42.0	41.8	43.1	42.4	42.9	42.4	42.2	41.8	41.9	42.1	41.7	41.8	41.7	42.2	42.5
Canned and preserved food, except meats.....	39.0	39.4	39.2	38.8	36.4	38.1	37.3	36.6	37.0	36.9	37.1	36.9	38.4	38.8	
Grain mill products.....	44.8	45.3	46.0	45.4	45.3	46.2	44.6	43.2	43.0	43.4	44.3	44.1	44.6	44.5	44.7
Bakery products.....	39.9	40.2	40.9	40.6	40.8	40.9	40.5	40.1	40.0	40.1	39.5	40.4	40.1	40.3	40.4
Sugar.....	41.6	41.5	41.8	41.2	41.1	41.5	41.6	40.2	40.9	40.2	42.5	44.7	44.4	42.8	42.9
Confectionery and related products.....	39.9	40.0	39.8	39.9	39.1	39.1	39.3	39.1	38.9	39.3	38.1	39.7	39.7	39.8	39.9
Beverages.....	39.8	39.9	41.0	41.2	42.1	41.1	40.5	40.2	39.9	39.6	39.1	39.6	40.0	40.6	40.2
Miscellaneous food, kindred products.....	42.5	43.1	42.8	42.0	42.0	41.9	42.2	41.8	42.0	42.7	42.2	43.2	43.3	42.4	42.7
Tobacco manufactures.....	38.5	40.3	39.3	38.9	39.7	39.3	39.6	37.8	35.3	36.9	39.4	39.0	41.2	39.4	39.1
Cigarettes.....	39.1	39.2	41.0	40.2	41.3	39.6	39.9	37.3	39.9	40.3	35.2	38.8	39.0	37.8	37.3
Cigars.....	38.2	36.6	38.3	37.9	38.8	40.1	40.6	39.8	40.3	40.3	35.2	38.8	39.0	37.8	37.3
Textile mill products.....	41.9	41.7	39.9	41.3	40.8	41.3	41.1	40.7	40.7	40.9	40.0	41.3	41.3	40.6	40.6
Cotton broad woven fabrics.....	43.3	42.7	40.5	42.1	41.6	42.1	42.0	41.6	41.5	42.0	41.8	42.4	42.4	40.9	40.7
Silk and synthetic broad woven fabrics.....	43.9	43.9	42.3	43.7	42.9	43.3	43.2	43.1	42.9	43.1	42.6	44.0	43.8	42.9	42.7
Weaving and finishing broad woolsens.....	40.8	41.5	39.4	41.3	42.1	42.2	41.7	41.3	40.1	40.9	40.7	41.2	39.1	41.2	42.4
Narrow fabrics and smallwares.....	41.2	40.6	39.9	40.9	41.0	41.3	41.3	41.1	40.4	41.0	39.4	41.5	41.2	41.0	41.0
Knitting.....	39.4	39.3	37.6	39.3	38.6	38.7	38.6	38.2	38.4	38.3	36.3	37.7	38.5	38.2	38.4
Finishing textiles, except wool, knit.....	42.7	42.1	39.8	41.2	40.7	43.0	42.5	41.7	42.6	42.9	40.8	43.3	43.2	42.4	42.8
Floor covering.....	43.8	42.3	42.2	41.0	40.8	40.5	41.1	41.6	41.7	40.1	42.9	43.5	42.0	41.5	41.5
Yarn and thread.....	42.2	41.8	40.0	41.6	41.3	41.4	41.1	40.4	40.3	40.6	40.0	41.2	41.3	40.5	40.4
Miscellaneous textile goods.....	41.4	41.6	41.3	41.4	41.3	42.5	41.5	40.8	40.9	40.7	40.6	41.9	41.6	41.3	41.1
Average hourly earnings															
Food and kindred products.....	\$2.40	\$2.37	\$2.38	\$2.36	\$2.38	\$2.39	\$2.40	\$2.39	\$2.39	\$2.38	\$2.38	\$2.35	\$2.34	\$2.31	\$2.24
Meat products.....	2.61	2.55	2.53	2.53	2.55	2.55	2.55	2.52	2.57	2.55	2.57	2.54	2.54	2.48	2.43
Dairy products.....	2.49	2.48	2.50	2.44	2.43	2.43	2.43	2.41	2.41	2.41	2.42	2.40	2.39	2.34	2.26
Canned and preserved food, except meats.....	2.02	2.06	2.02	2.00	2.04	2.05	2.06	2.05	2.03	2.02	1.99	1.94	1.94	1.97	1.90
Grain mill products.....	2.45	2.44	2.44	2.40	2.36	2.42	2.40	2.42	2.42	2.44	2.42	2.43	2.36	2.28	2.28
Bakery products.....	2.44	2.44	2.46	2.42	2.41	2.41	2.39	2.38	2.37	2.37	2.36	2.37	2.33	2.27	2.27
Sugar.....	2.42	2.42	2.74	2.68	2.72	2.69	2.67	2.67	2.58	2.45	2.39	2.25	2.21	2.44	2.37
Confectionery and related products.....	2.06	2.04	2.05	2.05	2.06	2.04	2.04	2.04	2.01	2.01	2.01	1.96	1.96	1.97	1.92
Beverages.....	2.75	2.72	2.73	2.71	2.72	2.67	2.69	2.71	2.70	2.70	2.66	2.68	2.68	2.64	2.57
Miscellaneous food, kindred products.....	2.27	2.26	2.28	2.28	2.29	2.28	2.29	2.26	2.26	2.26	2.25	2.23	2.23	2.21	2.14
Tobacco manufactures.....	1.95	1.82	1.86	1.94	2.06	2.06	2.04	2.04	2.00	1.96	1.97	1.90	1.89	1.92	1.85
Cigarettes.....	2.37	2.35	2.38	2.39	2.38	2.37	2.37	2.35	2.37	2.34	2.33	2.35	2.34	2.29	2.29
Cigars.....	1.66	1.66	1.67	1.65	1.66	1.66	1.66	1.65	1.65	1.64	1.63	1.62	1.60	1.55	
Textile mill products.....	1.83	1.82	1.80	1.77	1.77	1.77	1.76	1.76	1.76	1.76	1.76	1.76	1.75	1.71	1.68
Cotton broad woven fabrics.....	1.84	1.83	1.80	1.75	1.75	1.75	1.76	1.74	1.74	1.74	1.74	1.74	1.73	1.67	1.64
Silk and synthetic broad woven fabrics.....	1.88	1.88	1.87	1.81	1.80	1.81	1.81	1.81	1.80	1.80	1.80	1.80	1.80	1.74	1.72
Weaving and finishing broad woolsens.....	1.91	1.90	1.90	1.87	1.87	1.87	1.86	1.85	1.85	1.84	1.85	1.84	1.84	1.83	1.82
Narrow fabrics and smallwares.....	1.83	1.82	1.82	1.80	1.78	1.78	1.78	1.78	1.78	1.78	1.77	1.77	1.76	1.74	1.73
Knitting.....	1.72	1.72	1.70	1.69	1.68	1.68	1.68	1.69	1.68	1.68	1.67	1.66	1.67	1.64	1.60
Finishing textiles, except wool, knit.....	2.00	1.99	1.95	1.92	1.91	1.94	1.94	1.93	1.94	1.95	1.93	1.95	1.93	1.89	1.85
Floor covering.....	1.83	1.83	1.82	1.82	1.82	1.82	1.82	1.81	1.81	1.80	1.79	1.80	1.81	1.81	1.79
Yarn and thread.....	1.68	1.67	1.65	1.62	1.62	1.62	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.57	1.54
Miscellaneous textile goods.....	2.05	2.05	2.06	2.04											

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Revised series; see box, p. 98.

Industry	1964											1963		Annual average	
	Nov. ²	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962
	Average weekly earnings														
Manufacturing—Continued															
Nondurable goods—Continued															
Apparel and related products.....	\$65.16	\$64.80	\$63.00	\$66.06	\$64.25	\$64.07	\$63.54	\$64.08	\$64.79	\$64.61	\$60.34	\$63.37	\$63.01	\$62.45	\$61.18
Men's and boys' suits and coats.....	76.02	75.47	74.55	77.28	74.62	76.08	76.65	75.60	75.87	76.08	73.78	77.70	76.59	74.87	72.54
Men's and boys' furnishings.....	58.21	57.13	55.90	57.46	56.63	57.00	55.94	55.94	56.54	56.24	53.00	55.72	54.96	54.31	53.53
Women's, misses', and juniors' outerwear.....	66.47	67.54	64.52	69.95	68.46	65.43	66.15	67.86	69.34	68.75	61.82	65.13	64.08	65.66	64.79
Women's and children's undergarments.....	62.21	61.66	59.17	59.89	58.77	57.96	58.84	58.68	59.50	58.00	53.77	58.24	60.00	57.04	55.48
Hats, caps, and millinery.....	68.76	66.43	61.99	71.99	70.86	67.71	66.98	67.32	73.13	74.84	66.01	65.68	63.72	65.33	65.52
Girls' and children's outerwear.....	57.89	59.07	55.10	58.84	60.47	60.15	58.44	56.80	57.72	59.73	53.27	55.69	56.25	55.96	54.72
Fur goods and miscellaneous apparel.....	-----	71.05	66.40	67.16	65.15	67.16	65.88	63.72	66.07	64.44	62.61	67.12	69.73	64.80	64.98
Miscellaneous fabricated textile products.....	70.84	68.11	72.00	72.15	68.61	70.46	70.10	70.67	68.78	68.42	68.08	71.37	70.59	67.61	64.64
Paper and allied products.....	110.17	111.89	112.06	111.71	110.51	109.65	108.46	107.53	106.85	107.10	106.09	108.36	107.43	105.90	102.00
Paper and pulp.....	121.39	123.36	125.65	123.60	124.43	121.28	120.01	120.01	119.14	119.41	118.43	119.24	119.41	117.75	112.92
Paperboard.....	120.98	126.66	128.86	126.78	127.92	123.32	121.44	121.55	122.27	122.27	121.44	122.54	120.12	118.90	114.48
Converted paper and paperboard products.....	97.58	97.63	97.58	97.44	96.05	97.16	95.87	95.17	94.71	94.99	94.71	98.18	95.49	93.79	90.64
Paperboard containers and boxes.....	103.33	103.82	102.55	102.85	99.84	101.34	99.48	98.36	96.59	96.59	95.58	98.47	98.05	96.51	94.24
Printing, publishing, and allied industries.....	114.82	116.10	116.10	114.55	113.37	113.66	114.35	113.96	113.58	112.01	110.75	113.98	111.16	110.69	108.01
Newspaper publishing and printing.....	117.98	118.63	120.01	117.12	116.84	117.21	118.22	116.16	115.02	113.44	111.74	118.67	114.98	112.68	110.35
Periodical publishing and printing.....	-----	127.72	128.24	124.94	121.60	123.32	117.71	121.20	119.80	117.71	114.66	116.61	116.11	115.02	111.67
Books.....	-----	107.60	109.33	109.41	105.86	108.36	106.49	107.38	105.78	104.90	103.97	105.01	101.27	104.49	99.85
Commercial printing.....	116.13	118.70	118.50	117.11	115.24	114.85	116.03	115.64	116.03	114.07	113.10	114.65	112.81	112.61	110.15
Bookbinding and related industries.....	90.56	90.79	88.70	88.46	88.62	88.69	89.24	89.86	90.09	88.32	88.31	90.02	88.46	88.01	85.91
Other publishing and printing industries.....	115.80	115.58	115.58	116.52	115.53	115.12	116.19	117.26	118.34	117.18	115.50	117.81	113.28	113.96	110.88
Average weekly hours															
Apparel and related products.....	36.2	36.0	35.0	36.7	36.3	36.2	35.9	36.0	36.4	36.3	33.9	35.8	35.8	36.1	36.2
Men's and boys' suits and coats.....	36.2	35.6	35.5	36.8	36.4	36.4	36.5	36.0	36.3	36.4	35.3	37.0	36.3	36.7	37.2
Men's and boys' furnishings.....	37.8	37.1	36.3	37.8	37.5	37.5	36.8	36.8	37.2	37.0	35.1	36.9	36.4	37.2	37.7
Women's, misses', and juniors' outerwear.....	33.4	33.6	32.1	34.8	34.4	33.9	34.1	34.8	35.2	34.9	31.7	33.4	33.2	34.2	34.1
Women's and children's undergarments.....	37.7	37.6	36.3	37.2	36.5	36.0	36.1	36.0	36.5	35.8	33.4	36.4	37.5	36.8	36.5
Hats, caps, and millinery.....	-----	36.0	34.6	37.3	37.1	36.6	36.4	36.0	37.5	37.8	34.2	35.5	35.4	35.7	36.2
Girls' and children's outerwear.....	35.3	35.8	33.6	36.1	37.1	36.9	36.3	35.5	36.3	37.1	33.5	35.7	35.6	36.1	36.0
Fur goods and miscellaneous apparel.....	-----	37.2	35.7	36.9	35.6	36.3	36.2	35.6	36.3	36.2	34.4	35.7	36.7	36.0	36.1
Miscellaneous fabricated textile products.....	38.5	38.7	38.3	39.0	37.7	38.5	38.1	38.2	38.0	37.8	36.6	39.0	39.0	38.2	37.8
Paper and allied products.....	42.7	43.2	43.1	43.3	43.0	43.0	42.7	42.5	42.4	42.5	42.1	43.0	42.8	42.7	42.5
Paper and pulp.....	43.2	43.9	44.4	44.3	44.6	44.1	43.8	43.8	43.8	43.9	43.7	44.0	43.9	44.1	43.6
Paperboard.....	42.9	44.6	44.9	44.8	45.2	44.2	44.0	44.2	44.3	44.3	44.0	44.4	44.0	44.2	44.2
Converted paper and paperboard products.....	41.7	41.9	41.7	42.0	41.4	41.7	41.5	41.2	41.0	41.3	41.0	42.5	41.7	41.5	41.2
Paperboard containers and boxes.....	42.7	42.9	42.2	42.5	41.6	42.4	41.8	41.5	41.1	41.1	40.5	41.9	41.9	41.6	41.7
Printing, publishing, and allied industries.....	38.4	38.7	38.7	38.7	38.3	38.4	38.5	38.5	38.5	38.1	37.8	38.9	38.2	38.3	38.3
Newspaper publishing and printing.....	36.3	36.5	36.7	36.6	36.3	36.4	36.6	36.3	36.3	35.9	35.7	37.2	36.5	36.2	36.3
Periodical publishing and printing.....	-----	41.2	41.5	41.1	40.4	40.7	39.5	40.4	39.8	39.5	39.0	39.8	39.9	39.8	39.6
Books.....	-----	40.3	41.1	41.6	40.1	41.2	40.8	41.3	41.0	40.5	40.3	40.7	39.1	40.5	40.1
Commercial printing.....	39.1	39.7	39.5	39.3	38.8	38.8	39.2	39.2	39.2	38.8	38.6	39.4	38.9	39.1	38.7
Bookbinding and related industries.....	38.7	38.8	38.4	38.8	38.7	38.9	38.8	38.9	39.0	38.4	37.9	38.8	38.8	38.6	38.7
Other publishing and printing industries.....	38.6	38.4	38.4	39.1	38.9	38.5	38.6	38.7	38.8	38.8	38.5	39.4	38.4	38.5	38.5
Average hourly earnings															
Apparel and related products.....	\$1.80	\$1.80	\$1.80	\$1.80	\$1.77	\$1.77	\$1.77	\$1.78	\$1.78	\$1.78	\$1.78	\$1.77	\$1.76	\$1.73	\$1.69
Men's and boys' suits and coats.....	2.10	2.12	2.10	2.10	2.05	2.09	2.10	2.10	2.09	2.09	2.09	2.10	2.11	2.04	1.95
Men's and boys' furnishings.....	1.54	1.54	1.54	1.52	1.51	1.52	1.52	1.52	1.52	1.52	1.51	1.51	1.51	1.46	1.42
Women's, misses', and juniors' outerwear.....	1.99	2.01	2.01	2.01	1.99	1.93	1.94	1.95	1.97	1.97	1.95	1.95	1.93	1.92	1.90
Women's and children's undergarments.....	1.65	1.64	1.63	1.61	1.61	1.61	1.63	1.63	1.63	1.62	1.61	1.60	1.60	1.55	1.52
Hats, caps, and millinery.....	-----	1.91	1.92	1.93	1.91	1.85	1.84	1.87	1.95	1.98	1.93	1.85	1.80	1.83	1.81
Girls' and children's outerwear.....	1.64	1.65	1.64	1.63	1.63	1.63	1.61	1.60	1.59	1.61	1.59	1.56	1.58	1.55	1.52
Fur goods and miscellaneous apparel.....	-----	1.91	1.86	1.82	1.83	1.85	1.82	1.79	1.82	1.78	1.82	1.88	1.90	1.80	1.80
Miscellaneous fabricated textile products.....	1.84	1.76	1.88	1.85	1.82	1.83	1.84	1.85	1.81	1.81	1.86	1.83	1.81	1.77	1.71
Paper and allied products.....	2.58	2.59	2.60	2.58	2.57	2.55	2.54	2.53	2.52	2.52	2.52	2.52	2.51	2.48	2.40
Paper and pulp.....	2.81	2.81	2.83	2.79	2.79	2.75	2.74	2.72	2.72	2.72	2.71	2.71	2.72	2.67	2.59
Paperboard.....	2.82	2.84	2.87	2.83	2.83	2.79	2.76	2.75	2.76	2.76	2.76	2.76	2.73	2.69	2.59
Converted paper and paperboard products.....	2.34	2.33	2.34	2.32	2.32	2.33	2.31	2.31	2.31	2.30	2.31	2.31	2.29	2.26	2.20
Paperboard containers and boxes.....	2.42	2.42	2.43	2.42	2.40	2.39	2.38	2.37	2.35	2.35	2.36	2.35	2.34	2.32	2.26
Printing, publishing, and allied industries.....	2.99	3.00	3.00	2.96	2.96	2.96	2.97	2.96	2.95	2.94	2.93	2.93	2.91	2.89	2.82
Newspaper publishing and printing.....	3.25	3.25	3.27	3.20	3.21	3.22	3.23	3.20	3.16	3.16	3.13	3.19	3.15	3.11	3.04
Periodical publishing and printing.....	-----	3.10	3.09	3.04	3.01	3.03	2.98	3.00	3.01	2.98	2.94	2.93	2.91	2.89	2.82
Books.....	-----	2.67	2.66	2.63	2.64	2.63	2.61	2.60	2.58	2.59	2.58	2.58	2.59	2.58	2.49
Commercial printing.....	2.97	2.99	3.00	2.98	2.97	2.96	2.96	2.95	2.96	2.94	2.93	2.91	2.90	2.88	2.81
Bookbinding and related industries.....	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94
Other publishing and printing industries.....	3.00	3.01	3.01	2.98	2.97	2.99	3.01	3.03	3.05	3.02	3.00	2.99	2.95	2.96	2.88

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued
 Revised series; see box, p. 98.

Industry	1964											1963		Annual average	
	Nov. ²	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962
Manufacturing—Continued															
Average weekly earnings															
Nondurable goods—Continued															
Chemicals and allied products.....	\$118.01	\$117.45	\$120.41	\$116.47	\$116.20	\$116.34	\$116.20	\$114.40	\$114.40	\$113.99	\$113.85	\$115.51	\$114.13	\$112.88	\$110.24
Industrial chemicals.....	133.02	132.07	136.95	130.73	130.00	130.94	130.31	129.17	128.75	128.75	128.75	130.00	129.27	128.02	124.27
Plastics and synthetics, except glass.....	119.13	117.74	121.95	117.74	118.43	117.73	115.78	115.08	115.08	113.84	113.30	115.08	113.57	113.01	109.93
Drugs.....	104.49	104.23	103.83	101.63	100.58	102.21	102.11	101.81	101.15	102.11	101.40	101.75	100.60	100.53	98.40
Soap, cleaners, and toilet goods.....	107.06	108.14	110.03	108.00	107.47	109.61	107.60	107.06	106.39	106.39	106.27	107.83	106.86	106.08	103.89
Paints, varnishes, and allied products.....	108.65	109.06	110.54	108.50	110.88	109.25	110.62	110.77	108.47	107.01	104.78	106.45	105.67	105.22	101.59
Agricultural chemicals.....	94.95	95.57	96.60	94.66	94.92	93.91	100.76	95.64	97.61	95.05	93.48	94.79	93.26	93.53	88.39
Other chemical products.....	117.12	114.09	115.06	112.44	111.72	111.19	112.14	110.92	109.71	110.39	111.61	111.83	110.88	108.00	103.75
Petroleum refining and related industries.....	134.05	133.44	140.51	133.88	134.09	133.46	133.14	130.92	131.24	131.65	132.16	132.89	132.39	131.77	126.88
Petroleum refining.....	139.47	138.58	146.63	138.77	138.69	138.02	137.94	136.20	137.20	137.94	138.69	139.86	139.44	137.45	131.43
Other petroleum and coal products.....	113.97	115.80	118.88	116.10	117.39	116.87	114.62	108.71	107.02	105.34	102.82	103.48	105.66	108.28	107.75
Rubber and miscellaneous plastic products.....	106.91	106.50	108.26	107.26	103.22	105.25	104.74	102.25	101.59	101.09	101.25	104.67	102.50	100.78	100.04
Tires and inner tubes.....	149.02	151.55	154.50	152.60	139.06	145.61	141.88	132.99	130.80	127.79	130.54	141.19	137.53	131.30	130.47
Other rubber products.....	101.18	99.96	101.93	101.11	98.82	100.45	99.31	97.77	97.77	98.25	98.82	100.36	98.49	97.27	95.53
Miscellaneous plastic products.....	90.91	89.86	90.49	89.66	88.15	88.61	89.66	89.44	88.81	88.38	87.53	89.45	88.17	87.56	85.90
Leather and leather products.....	69.92	68.82	68.45	70.46	70.25	70.46	68.43	66.43	68.24	68.76	66.95	69.63	66.77	66.00	64.67
Leather tanning and finishing.....	95.41	94.83	95.76	95.30	93.73	95.58	95.12	93.79	91.60	90.97	90.35	94.79	92.57	91.13	87.42
Footwear, except rubber.....	66.75	64.97	65.87	68.17	68.50	68.00	66.02	63.54	66.02	66.50	65.25	67.12	63.51	63.44	62.66
Other leather products.....	68.74	69.09	64.94	67.58	65.80	67.23	65.10	64.77	66.33	66.47	63.53	66.64	66.29	64.30	62.58
Average weekly hours															
Chemicals and allied products.....	41.7	41.5	42.1	41.3	41.5	41.7	41.8	41.6	41.6	41.3	41.1	41.7	41.5	41.5	41.6
Industrial chemicals.....	41.7	41.4	42.4	41.5	41.4	41.7	41.5	41.4	41.4	41.4	41.4	41.4	41.8	41.7	41.7
Plastics and synthetics, except glass.....	42.7	42.2	43.4	42.2	42.6	42.5	42.1	42.0	42.0	41.7	41.5	42.0	41.6	41.7	41.8
Drugs.....	40.5	40.4	40.4	39.7	39.6	40.4	40.2	40.4	40.3	40.2	40.4	40.7	40.4	40.7	41.0
Soap, cleaners, and toilet goods.....	39.8	40.5	40.6	40.3	40.1	40.9	40.3	40.4	40.3	40.3	39.8	41.0	41.1	40.8	40.9
Paints, varnishes, and allied products.....	41.0	41.0	41.4	41.1	42.0	41.7	41.9	41.8	41.4	41.0	40.3	41.1	40.8	41.1	40.8
Agricultural chemicals.....	42.2	42.1	42.0	41.7	42.0	42.3	45.8	44.9	45.4	43.4	42.3	42.7	42.2	43.5	42.7
Other chemical products.....	42.9	42.1	42.3	41.8	42.0	41.8	42.0	41.7	41.4	41.5	41.8	42.2	42.0	41.7	41.5
Petroleum refining and related industries.....	41.5	41.7	43.1	42.1	42.3	42.1	42.0	41.3	41.4	41.4	41.3	41.4	41.5	41.5	41.4
Petroleum refining.....	40.9	41.0	42.5	41.3	41.4	41.2	41.3	40.9	41.2	41.3	41.4	41.4	41.5	41.4	41.2
Other petroleum and coal products.....	43.5	44.2	45.2	45.0	45.5	45.3	44.6	42.8	42.3	41.8	40.8	40.9	41.6	42.8	43.1
Rubber and miscellaneous plastic products.....	41.6	41.6	41.8	41.9	40.8	41.6	41.4	40.9	40.8	40.6	40.5	41.7	41.0	40.8	41.0
Tires and inner tubes.....	42.7	43.3	43.4	43.6	40.9	42.7	42.1	40.3	40.0	39.2	39.8	42.4	41.3	40.4	40.9
Other rubber products.....	40.8	40.8	41.1	41.1	40.5	41.0	40.7	40.4	40.4	40.6	40.5	41.3	40.7	40.7	41.0
Miscellaneous plastic products.....	41.7	41.6	41.7	41.7	41.0	41.6	41.7	41.6	41.5	41.3	40.9	41.8	41.2	41.3	41.1
Leather and leather products.....	38.0	37.4	37.2	38.5	38.6	38.5	37.6	36.5	37.7	38.2	37.4	38.9	37.3	37.5	37.6
Leather tanning and finishing.....	40.6	40.7	41.1	40.9	40.4	41.2	41.0	40.6	40.0	39.9	39.8	41.3	40.6	40.5	40.1
Footwear, except rubber.....	37.5	36.5	36.8	38.3	38.7	38.2	37.3	35.9	37.3	38.0	37.5	38.8	36.5	37.1	37.3
Other leather products.....	38.4	38.6	36.9	38.4	37.6	38.2	37.2	36.8	37.9	38.2	36.3	38.3	38.1	37.6	37.7
Average hourly earnings															
Chemicals and allied products.....	\$2.83	\$2.83	\$2.86	\$2.82	\$2.80	\$2.79	\$2.78	\$2.75	\$2.76	\$2.76	\$2.77	\$2.77	\$2.75	\$2.72	\$2.65
Industrial chemicals.....	3.19	3.19	3.23	3.15	3.14	3.14	3.14	3.12	3.11	3.11	3.11	3.11	3.10	3.07	2.98
Plastics and synthetics, except glass.....	2.79	2.79	2.81	2.79	2.78	2.77	2.75	2.74	2.74	2.73	2.73	2.74	2.73	2.71	2.63
Drugs.....	2.58	2.58	2.57	2.56	2.54	2.53	2.54	2.52	2.51	2.54	2.51	2.50	2.49	2.47	2.40
Soap, cleaners, and toilet goods.....	2.69	2.67	2.71	2.68	2.68	2.68	2.67	2.65	2.64	2.64	2.67	2.63	2.60	2.60	2.54
Paints, varnishes, and allied products.....	2.65	2.66	2.67	2.64	2.64	2.62	2.64	2.65	2.62	2.61	2.60	2.59	2.59	2.56	2.49
Agricultural chemicals.....	2.25	2.27	2.30	2.27	2.26	2.22	2.20	2.13	2.15	2.19	2.21	2.22	2.21	2.15	2.07
Other chemical products.....	2.73	2.71	2.72	2.69	2.66	2.66	2.67	2.66	2.65	2.66	2.67	2.65	2.64	2.59	2.50
Petroleum refining and related industries.....	3.23	3.20	3.26	3.18	3.17	3.17	3.17	3.17	3.17	3.18	3.20	3.21	3.19	3.16	3.05
Petroleum refining.....	3.41	3.38	3.45	3.36	3.35	3.35	3.34	3.33	3.33	3.34	3.35	3.37	3.36	3.32	3.19
Other petroleum and coal products.....	2.62	2.62	2.63	2.58	2.58	2.58	2.57	2.54	2.53	2.52	2.52	2.53	2.54	2.53	2.50
Rubber and miscellaneous plastic products.....	2.57	2.56	2.59	2.56	2.53	2.53	2.53	2.50	2.49	2.49	2.50	2.51	2.50	2.47	2.44
Tires and inner tubes.....	3.49	3.50	3.56	3.50	3.40	3.41	3.37	3.30	3.27	3.26	3.28	3.33	3.33	3.25	3.19
Other rubber products.....	2.48	2.45	2.48	2.46	2.44	2.45	2.44	2.42	2.42	2.42	2.44	2.43	2.42	2.39	2.33
Miscellaneous plastic products.....	2.18	2.16	2.17	2.15	2.15	2.13	2.15	2.15	2.14	2.14	2.14	2.14	2.14	2.12	2.09
Leather and leather products.....	1.84	1.84	1.84	1.83	1.82	1.83	1.82	1.82	1.81	1.80	1.79	1.79	1.79	1.76	1.72
Leather tanning and finishing.....	2.35	2.33	2.33	2.33	2.32	2.32	2.32	2.31	2.29	2.28	2.27	2.28	2.28	2.25	2.18
Footwear, except rubber.....	1.78	1.78	1.79	1.78	1.77	1.78	1.77	1.77	1.77	1.75	1.74	1.73	1.74	1.71	1.68
Other leather products.....	1.79	1.79	1.76	1.76	1.75	1.76	1.75	1.76	1.75	1.74	1.75	1.74	1.74	1.71	1.66

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Revised series; see box, p. 98.

Industry	1964											1963		Annual average	
	Nov. ²	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962
Average weekly earnings															
Transportation and public utilities:															
Railroad transportation:															
Class I railroads ³					\$122.71	\$122.71	\$117.87	\$119.78	\$118.13	\$120.68	\$120.06	\$119.54	\$118.71	\$118.40	\$115.87
Local and interurban passenger transit:															
Local and suburban transportation	\$105.42	\$104.92	\$105.50	106.75	106.64	105.65	103.49	98.98	101.43	103.49	102.66	102.83	101.88	100.11	100.11
Intercity and rural buslines	128.27	134.55	135.00	141.17	130.52	125.67	125.97	121.64	123.65	131.42	120.51	123.81	126.29	118.40	118.40
Motor freight transportation and storage	124.66	124.07	124.79	123.09	122.93	122.47	120.77	119.19	118.49	115.95	120.67	117.29	117.31	113.30	113.30
Pipeline transportation	144.14	143.44	143.03	141.59	137.42	141.36	141.25	141.92	141.75	142.88	141.51	139.47	138.38	132.76	132.76
Communication:															
Telephone communication	108.24	109.10	104.52	104.52	104.40	104.28	101.79	102.70	102.56	102.18	103.36	106.08	102.40	98.95	98.95
Telegraph communication ⁴	118.02	121.72	118.30	117.59	118.30	116.30	112.32	113.28	113.13	111.51	112.59	111.90	110.92	107.78	107.78
Radio and television broadcasting	143.68	144.40	141.37	143.20	139.12	138.48	138.41	136.89	136.42	135.68	137.86	134.85	133.96	127.20	127.20
Electric, gas, and sanitary services:															
Electric companies and systems	127.93	126.90	125.05	125.75	123.82	124.12	123.41	123.41	123.41	124.50	124.92	123.79	121.54	116.85	116.85
Gas companies and systems	129.27	129.90	128.03	128.33	127.51	126.68	125.25	125.66	124.94	125.25	125.55	123.41	122.36	118.24	118.24
Combined utility systems	121.35	118.08	116.40	115.90	114.52	114.21	113.68	114.37	114.77	116.48	117.16	117.16	113.57	108.53	108.53
Water, steam, and sanitary systems	137.69	136.53	133.17	135.71	132.68	134.72	133.25	132.84	133.25	135.66	136.18	135.34	131.65	126.59	126.59
Water, steam, and sanitary systems	101.02	102.17	100.67	102.30	100.36	99.63	99.22	98.98	98.98	99.05	100.43	100.26	98.29	95.06	95.06
Average weekly hours															
Transportation and public utilities:															
Railroad transportation:															
Class I railroads ³					44.3	44.3	42.4	43.4	42.8	43.1	43.5	43.0	42.7	42.9	42.6
Local and interurban passenger transit:															
Local and suburban transportation	42.0	41.8	42.2	42.7	43.0	42.6	41.9	40.9	41.4	41.9	41.9	41.8	42.1	42.6	42.6
Intercity and rural buslines	42.9	44.7	45.0	46.9	43.8	42.6	42.7	41.8	42.2	44.4	41.7	42.4	43.7	42.9	42.9
Motor freight transportation and storage	42.4	42.2	42.3	42.3	42.1	41.8	41.5	41.1	41.0	40.4	41.9	41.3	41.6	41.5	41.5
Pipeline transportation	41.3	41.1	41.1	41.4	40.3	41.7	41.3	40.9	40.5	41.9	40.9	40.9	40.7	40.6	40.6
Communication:															
Telephone communication	41.0	41.8	40.2	40.2	40.0	39.8	39.3	39.5	39.6	39.3	39.6	40.8	40.0	39.9	39.9
Telegraph communication ⁴	42.3	44.1	42.4	42.3	42.4	42.6	41.6	41.8	41.9	41.3	41.7	41.6	41.7	42.1	42.1
Radio and television broadcasting	39.8	40.0	39.6	40.0	39.3	38.9	39.1	39.0	39.2	39.1	39.5	39.2	39.4	38.9	38.9
Electric, gas, and sanitary services:															
Electric companies and systems	41.4	41.2	41.0	41.5	41.0	41.1	41.0	41.0	41.0	41.5	41.5	41.4	41.2	41.0	41.0
Gas companies and systems	41.3	41.5	41.3	41.8	41.4	41.4	41.2	41.2	41.1	41.2	41.3	41.0	41.2	41.2	41.2
Combined utility systems	41.7	41.0	40.7	41.1	40.9	40.5	40.6	40.7	40.7	41.6	41.4	41.4	41.0	40.8	40.8
Water, steam, and sanitary systems	41.1	41.0	40.6	41.5	40.7	41.2	41.0	41.0	41.0	42.0	41.9	41.9	41.4	41.1	41.1
Water, steam, and sanitary systems	41.4	41.7	41.6	42.1	41.3	41.0	41.0	40.9	40.9	41.1	41.5	41.6	41.3	40.8	40.8
Average hourly earnings															
Transportation and public utilities:															
Railroad transportation:															
Class I railroads ³					\$2.77	\$2.77	\$2.78	\$2.76	\$2.76	\$2.80	\$2.76	\$2.78	\$2.78	\$2.76	\$2.72
Local and interurban passenger transit:															
Local and suburban transportation	\$2.51	\$2.51	\$2.50	2.50	2.48	2.48	2.47	2.42	2.45	2.47	2.45	2.46	2.42	2.35	2.35
Intercity and rural buslines	2.99	3.01	3.00	3.01	2.98	2.95	2.95	2.91	2.93	2.96	2.89	2.92	2.89	2.76	2.76
Motor freight transportation and storage	2.94	2.94	2.95	2.91	2.92	2.93	2.91	2.90	2.89	2.87	2.88	2.84	2.82	2.73	2.73
Pipeline transportation	3.49	3.49	3.48	3.42	3.41	3.39	3.42	3.47	3.50	3.41	3.46	3.41	3.40	3.27	3.27
Communication:															
Telephone communication	2.64	2.61	2.60	2.60	2.61	2.62	2.59	2.60	2.59	2.60	2.61	2.60	2.56	2.48	2.48
Telegraph communication ⁴	2.79	2.76	2.79	2.78	2.79	2.73	2.70	2.71	2.70	2.70	2.70	2.69	2.66	2.56	2.56
Radio and television broadcasting	3.61	3.61	3.57	3.58	3.54	3.56	3.54	3.51	3.48	3.47	3.49	3.44	3.40	3.27	3.27
Electric, gas, and sanitary services:															
Electric companies and systems	3.09	3.08	3.05	3.03	3.02	3.02	3.01	3.01	3.01	3.00	3.01	2.99	2.95	2.85	2.85
Gas companies and systems	3.13	3.13	3.10	3.07	3.08	3.06	3.04	3.05	3.04	3.04	3.04	3.01	2.97	2.87	2.87
Combined utility systems	2.91	2.88	2.86	2.82	2.80	2.82	2.80	2.81	2.82	2.80	2.83	2.83	2.77	2.66	2.66
Water, steam, and sanitary systems	3.35	3.33	3.28	3.27	3.26	3.27	3.25	3.24	3.25	3.23	3.25	3.23	3.18	3.08	3.08
Water, steam, and sanitary systems	2.44	2.45	2.42	2.43	2.43	2.43	2.42	2.42	2.42	2.41	2.42	2.41	2.38	2.33	2.33

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Revised series; see box, p. 98.

Industry	1964												1963		Annual average	
	Nov. ²	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962	
Average weekly earnings																
Wholesale and retail trade ³	\$80.22	\$80.43	\$81.12	\$81.33	\$80.50	\$79.66	\$79.07	\$78.49	\$78.49	\$78.11	\$77.60	\$77.55	\$77.59	\$75.08		
Wholesale trade	102.97	103.12	102.82	103.07	102.82	102.97	101.91	101.25	100.75	99.70	101.43	100.69	99.47	96.22		
Motor vehicles and automotive equipment	97.86	97.44	96.83	96.83	96.60	96.56	95.72	95.91	94.85	95.26	96.79	96.14	94.66	92.82		
Drugs, chemicals, and allied products	106.78	106.23	106.75	105.30	104.78	104.12	104.00	102.94	102.94	103.06	103.31	102.66	101.05	97.84		
Dry goods and apparel	96.49	97.54	97.02	95.51	94.12	93.87	95.26	95.63	93.74	91.39	92.86	93.00	91.99	92.86		
Groceries and related products	97.06	98.59	97.76	98.75	97.39	96.70	96.05	95.17	94.53	94.53	95.34	94.62	93.38	92.86		
Electrical goods	113.70	111.50	111.11	111.11	110.70	111.65	111.10	109.33	107.33	106.80	109.74	106.52	103.83	101.59		
Hardware, plumbing, and heating goods	99.06	98.74	99.06	97.77	98.90	98.49	97.44	97.03	96.15	96.22	97.34	97.03	95.41	92.97		
Machinery, equipment, and supplies	112.89	112.34	111.79	111.92	110.29	111.66	109.34	109.08	108.54	106.92	109.74	109.34	108.24	104.14		
Retail trade ³	70.12	70.50	71.43	71.62	70.50	69.75	69.19	68.64	68.82	68.26	68.40	68.26	68.04	65.95		
General merchandise stores	56.95	57.63	58.10	57.75	57.27	56.44	55.60	55.42	55.60	55.09	56.68	54.06	54.48	52.59		
Department stores	61.12	62.35	63.14	62.45	61.72	61.18	60.14	59.63	60.30	59.10	59.84	57.94	58.65	57.10		
Limited price variety stores	42.34	42.08	42.51	42.51	41.21	40.30	40.25	40.06	39.99	39.42	40.66	39.88	39.98	38.91		
Food stores	68.06	69.60	69.97	70.17	68.80	67.18	66.84	66.50	66.69	66.54	66.62	66.59	66.15	64.78		
Grocery, meat, and vegetable stores	69.08	70.85	71.60	71.80	70.40	68.40	67.86	67.72	67.72	67.67	67.82	67.82	67.74	66.22		
Apparel and accessories stores	55.61	55.94	56.54	56.70	55.75	54.94	54.43	53.12	54.58	54.61	56.32	54.42	54.70	53.63		
Men's and boys' apparel stores	68.06	67.71	69.54	69.55	67.89	67.53	66.42	64.80	66.97	66.40	67.66	66.61	66.59	65.65		
Women's ready-to-wear stores	50.13	49.62	49.88	50.22	49.83	49.62	49.10	48.47	48.29	49.47	50.75	48.29	48.62	47.46		
Family clothing stores	54.28	54.62	55.27	55.73	53.74	54.10	53.44	52.96	54.08	53.46	54.95	54.19	53.94	52.65		
Shoe stores	54.50	57.10	56.78	56.61	56.05	53.90	53.52	51.27	54.94	53.44	56.24	54.21	55.58	55.61		
Average weekly hours																
Wholesale and retail trade ³	38.2	38.3	39.0	39.1	38.7	38.3	38.2	38.1	38.1	38.1	38.8	38.2	38.6	38.7		
Wholesale trade	40.7	40.6	40.8	40.9	40.8	40.7	40.6	40.5	40.3	40.2	40.9	40.6	40.6	40.6		
Motor vehicles and automotive equipment	42.0	42.0	42.1	42.1	42.0	41.8	41.8	41.7	41.6	41.6	41.9	41.8	41.7	42.0		
Drugs, chemicals, and allied products	40.6	40.7	40.9	40.5	40.3	40.2	40.0	39.9	39.9	40.1	40.2	40.1	40.1	40.1		
Dry goods and apparel	37.4	38.1	37.9	37.9	37.8	37.7	37.8	37.8	37.8	37.0	37.9	37.5	37.7	37.9		
Groceries and related products	41.3	41.6	41.6	42.2	41.8	41.5	41.4	41.2	41.1	41.1	42.0	41.5	41.5	41.6		
Electrical goods	40.9	40.4	40.7	41.0	41.0	41.2	41.3	41.1	40.2	40.3	41.1	40.5	40.4	40.8		
Hardware, plumbing, and heating goods	40.6	40.3	40.6	40.4	40.7	40.7	40.6	40.6	40.4	40.6	40.9	40.6	40.6	40.6		
Machinery, equipment, and supplies	41.2	41.0	41.1	41.3	41.0	40.9	40.8	40.7	40.5	40.5	41.1	40.8	41.0	41.0		
Retail trade ³	37.1	37.3	38.2	38.3	37.7	37.3	37.2	37.1	37.2	37.1	38.0	37.3	37.8	37.9		
General merchandise stores	33.9	34.1	35.0	35.0	34.5	34.0	33.9	34.0	33.9	33.8	36.1	34.0	34.7	34.6		
Department stores	33.4	33.7	34.5	34.5	34.1	33.8	33.6	33.5	33.5	33.2	35.2	33.3	34.1	34.4		
Limited price variety stores	31.6	31.4	32.7	32.7	31.7	31.0	31.2	31.3	31.0	30.8	33.6	31.9	32.5	32.7		
Food stores	34.2	34.8	35.7	35.8	35.1	34.1	34.1	34.1	34.2	34.3	34.7	34.5	35.0	35.4		
Grocery, meat, and vegetable stores	34.2	34.9	35.8	35.9	35.2	34.2	34.1	34.1	34.2	34.4	34.6	34.6	35.1	35.6		
Apparel and accessories stores	33.5	33.7	34.9	35.0	34.2	33.5	33.6	33.2	33.9	33.5	35.2	33.8	34.4	34.6		
Men's and boys' apparel stores	36.2	36.8	38.0	37.8	37.2	36.7	36.1	36.0	36.2	35.7	37.8	36.6	37.2	37.3		
Women's ready-to-wear stores	33.2	33.3	34.4	34.4	33.9	33.3	33.4	33.2	33.3	33.2	35.0	33.3	34.0	33.9		
Family clothing stores	33.1	33.1	33.7	34.4	33.8	33.6	33.4	33.1	33.8	33.0	35.0	34.3	34.8	35.1		
Shoe stores	31.5	31.9	34.0	34.1	32.4	30.8	31.3	30.7	32.7	32.0	32.7	31.7	32.5	33.3		
Average hourly earnings																
Wholesale and retail trade ³	\$2.10	\$2.10	\$2.08	\$2.08	\$2.08	\$2.08	\$2.07	\$2.06	\$2.06	\$2.05	\$2.00	\$2.03	\$2.01	\$1.94		
Wholesale trade	2.53	2.54	2.52	2.52	2.52	2.53	2.51	2.50	2.50	2.48	2.48	2.48	2.45	2.37		
Motor vehicles and automotive equipment	2.33	2.32	2.30	2.30	2.30	2.31	2.29	2.30	2.28	2.29	2.31	2.30	2.27	2.21		
Drugs, chemicals, and allied products	2.63	2.61	2.61	2.60	2.60	2.59	2.60	2.58	2.58	2.57	2.57	2.56	2.52	2.44		
Dry goods and apparel	2.58	2.56	2.56	2.52	2.49	2.49	2.52	2.53	2.48	2.47	2.45	2.48	2.44	2.45		
Groceries and related products	2.35	2.37	2.35	2.34	2.33	2.33	2.32	2.31	2.30	2.30	2.27	2.28	2.25	2.16		
Electrical goods	2.78	2.76	2.73	2.71	2.70	2.71	2.69	2.66	2.67	2.65	2.67	2.63	2.57	2.49		
Hardware, plumbing, and heating goods	2.44	2.45	2.44	2.42	2.43	2.42	2.40	2.39	2.38	2.37	2.38	2.39	2.35	2.29		
Machinery, equipment, and supplies	2.74	2.74	2.72	2.71	2.69	2.73	2.68	2.68	2.68	2.64	2.67	2.68	2.64	2.54		
Retail trade ³	1.89	1.89	1.87	1.87	1.87	1.87	1.86	1.85	1.85	1.84	1.80	1.83	1.80	1.74		
General merchandise stores	1.68	1.69	1.66	1.66	1.66	1.66	1.64	1.63	1.64	1.63	1.57	1.59	1.57	1.52		
Department stores	1.83	1.85	1.83	1.81	1.81	1.81	1.79	1.78	1.80	1.78	1.70	1.74	1.72	1.66		
Limited price variety stores	1.34	1.34	1.30	1.30	1.30	1.30	1.29	1.28	1.29	1.28	1.21	1.25	1.23	1.19		
Food stores	1.99	2.00	1.96	1.96	1.96	1.97	1.96	1.95	1.95	1.94	1.92	1.93	1.89	1.83		
Grocery, meat, and vegetable stores	2.02	2.03	2.00	2.00	2.00	2.00	1.99	1.98	1.97	1.96	1.96	1.96	1.93	1.86		
Apparel and accessories stores	1.66	1.66	1.62	1.62	1.63	1.64	1.62	1.60	1.61	1.63	1.60	1.61	1.59	1.55		
Men's and boys' apparel stores	1.88	1.84	1.83	1.84	1.83	1.84	1.84	1.80	1.85	1.86	1.79	1.82	1.79	1.76		
Women's ready-to-wear stores	1.51	1.49	1.45	1.46	1.47	1.49	1.47	1.46	1.45	1.49	1.45	1.45	1.43	1.40		
Family clothing stores	1.64	1.65	1.64	1.62	1.59	1.61	1.60	1.60	1.60	1.62	1.57	1.58	1.55	1.50		
Shoe stores	1.73	1.79	1.67	1.66	1.73	1.75	1.71	1.67	1.68	1.67	1.72	1.71	1.71	1.67		

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued
Revised series; see box, p. 98.

Industry	1964											1963		Annual average	
	Nov. ²	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962
	Average weekly earnings														
Wholesale and retail trade ⁴ —Continued															
Retail trade ⁴ —Continued															
Furniture and appliance stores.....	\$86.22	\$86.00	\$86.46	\$85.86	\$84.63	\$84.42	\$83.81	\$83.62	\$83.42	\$83.81	\$87.15	\$84.66	\$82.62	\$80.75	
Other retail trade.....	80.97	80.36	81.32	81.51	80.73	80.34	79.73	79.13	78.31	78.12	79.27	78.91	78.25	75.76	
Motor vehicle dealers.....	99.65	98.10	100.97	102.31	102.75	101.87	99.88	98.11	95.92	95.27	97.01	98.97	97.01	93.08	
Other vehicle and accessory dealers.....	85.02	84.97	86.83	88.80	86.88	85.22	84.10	83.47	83.03	84.78	84.55	82.16	82.53	80.08	
Drug stores.....	59.95	61.35	61.75	61.59	60.06	59.79	59.26	59.62	59.95	59.95	60.02	59.37	58.93	57.41	
Finance, insurance, and real estate:															
Banking.....	77.00	76.43	76.50	76.88	75.89	76.26	76.30	76.47	77.46	76.70	76.13	75.72	74.97	72.17	
Security dealers and exchanges ⁶	121.27	116.72	119.04	118.64	118.30	122.50	122.94	121.23	123.41	121.82	127.42	128.13	121.53	117.08	
Insurance carriers ⁶	92.52	92.15	92.15	91.94	91.92	91.97	91.55	91.49	92.06	91.29	97.60	96.79	96.21	93.45	
Life insurance ⁶	92.76	92.61	92.68	92.64	92.70	93.10	92.08	92.15	92.66	92.54	103.38	102.14	101.59	99.08	
Accident and health insurance.....	81.61	80.63	81.03	80.40	80.23	81.03	81.01	81.59	80.71	81.39	83.52	82.84	82.24	78.37	
Fire, marine, and casualty insurance ⁶	94.81	94.23	94.15	93.99	93.97	93.27	93.49	93.17	94.40	92.67	92.85	92.63	91.92	88.60	
Services and miscellaneous:															
Hotels and lodging places:															
Hotels, tourist courts, and motels ⁷	49.66	48.26	47.67	48.34	48.00	49.02	48.89	48.36	48.09	48.11	47.86	48.11	47.58	46.14	
Personal services:															
Laundries, cleaning and dyeing plants ⁸	57.48	56.21	55.73	55.73	56.16	56.59	55.48	54.81	54.00	53.58	52.13	51.99	51.87	50.57	
Motion picture:															
Motion picture filming and distributing.....	140.88	130.79	142.85	136.80	138.45	132.76	132.92	130.88	131.20	131.60	135.13	134.16	131.55	123.03	
	Average weekly hours														
Wholesale and retail trade ⁴ —Continued															
Retail trade ⁴ —Continued															
Furniture and appliance stores.....	40.1	40.0	40.4	40.5	40.3	40.2	40.1	40.2	40.3	40.1	41.5	40.7	40.7	41.2	
Other retail trade.....	41.1	41.0	41.7	41.8	41.4	41.2	41.1	41.0	41.0	40.9	41.5	41.1	41.4	41.4	
Motor vehicle dealers.....	43.9	43.6	43.9	44.1	44.1	44.1	44.0	43.8	43.6	43.7	43.7	43.6	43.7	43.7	
Other vehicle and accessory dealers.....	43.6	43.8	44.3	44.4	44.1	43.7	43.8	43.7	43.7	43.7	44.5	43.7	43.9	44.0	
Drug stores.....	35.9	36.3	37.2	37.1	36.4	35.8	35.7	35.7	35.9	35.9	36.6	36.2	36.6	36.8	
Finance, insurance, and real estate:															
Banking.....	37.2	37.1	37.5	37.5	37.2	37.2	37.4	37.3	37.6	37.6	37.5	37.3	37.3	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 ⁷	38.2	38.0	39.4	39.3	38.4	38.6	38.8	39.0	39.1	38.8	38.6	38.8	39.0	39.1	
Personal services:															
Laundries, cleaning and dyeing plants ⁸	39.1	38.5	38.7	38.7	39.0	39.3	38.8	38.6	38.3	38.0	38.9	38.8	39.0	38.9	
Motion pictures:															
Motion picture filming and distributing.....															
	Average hourly earnings														
Wholesale and retail trade ⁴ —Continued															
Retail trade ⁴ —Continued															
Furniture and appliance stores.....	\$2.15	\$2.15	\$2.14	\$2.12	\$2.10	\$2.10	\$2.09	\$2.08	\$2.07	\$2.09	\$2.10	\$2.08	\$2.03	\$1.96	
Other retail trade.....	1.97	1.96	1.95	1.95	1.95	1.95	1.94	1.93	1.91	1.91	1.91	1.92	1.89	1.83	
Motor vehicle dealers.....	2.27	2.25	2.30	2.32	2.33	2.31	2.27	2.24	2.20	2.18	2.22	2.27	2.22	2.13	
Other vehicle and accessory dealers.....	1.95	1.94	1.96	2.00	1.97	1.95	1.92	1.91	1.90	1.94	1.90	1.88	1.88	1.82	
Drug stores.....	1.67	1.69	1.66	1.66	1.65	1.67	1.66	1.67	1.67	1.67	1.64	1.64	1.61	1.56	
Finance, insurance, and real estate:															
Banking.....	2.07	2.06	2.04	2.05	2.04	2.05	2.04	2.05	2.06	2.04	2.03	2.03	2.01	1.94	
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 ⁷	1.30	1.27	1.21	1.23	1.25	1.27	1.26	1.24	1.23	1.24	1.24	1.24	1.22	1.18	
Personal services:															
Laundries, cleaning and dyeing plants ⁸	1.47	1.46	1.44	1.44	1.44	1.44	1.43	1.42	1.41	1.41	1.34	1.34	1.33	1.30	
Motion pictures:															
Motion picture filming and distributing.....															

¹ For comparability of data with those published in issues prior to January 1965, see footnote 1, table A-2. For employees covered, see footnote 1, table A-3. ² Preliminary.

³ 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).

⁴ Data relate to nonsupervisory employees except messengers.

⁵ Excludes eating and drinking places.

⁶ Beginning January 1964, data exclude earnings of nonoffice salesmen and are not necessarily comparable with series for prior years.

⁷ Money payments only, additional value of board, room, uniforms, and tips not included.

⁸ Beginning January 1964, data relate to nonsupervisory workers and are not comparable with the production worker levels of prior years.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics for all series except that for Class 1 railroads. (See footnote 3.)

TABLE C-2. Average weekly hours, seasonally adjusted, of production workers in selected industries¹

Revised series; see box, p. 98.

Industry division and group	1964											1963	
	Nov. ²	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.
Mining.....	42.3	42.1	41.0	41.6	41.8	41.5	41.7	41.5	41.6	41.6	41.5	41.8	41.4
Contract construction.....	37.7	37.1	35.6	37.0	36.8	37.3	37.3	37.2	37.4	37.6	35.2	37.4	37.1
Manufacturing.....	40.9	40.5	40.5	40.8	40.6	40.6	40.6	40.7	40.6	40.7	40.2	40.7	40.5
Durable goods.....	41.6	41.3	41.4	41.5	41.3	41.4	41.3	41.4	41.2	41.3	41.1	41.3	41.2
Ordnance and accessories.....	40.8	40.7	40.0	40.4	40.4	40.6	40.2	40.3	40.3	40.3	40.7	40.9	40.5
Lumber and wood products, except furniture.....	40.5	39.8	39.4	40.4	40.3	39.9	40.2	40.2	40.3	40.2	39.1	40.6	40.1
Furniture and fixtures.....	41.7	41.2	40.5	41.2	41.0	41.1	41.2	41.2	41.2	41.3	40.1	41.2	41.0
Stone, clay, and glass products.....	41.6	41.4	41.1	41.3	41.5	41.4	41.6	41.7	41.6	41.7	40.8	41.5	41.4
Primary metal industries.....	41.9	41.9	42.8	42.2	41.5	41.5	41.5	41.2	41.4	41.2	41.2	41.1	41.1
Fabricated metal products.....	42.0	41.4	41.3	41.7	41.6	41.4	41.7	41.8	41.6	41.8	41.5	41.7	41.5
Machinery.....	42.9	42.6	42.0	42.5	42.4	42.4	42.3	42.2	42.4	42.4	41.8	42.2	42.1
Electrical equipment and supplies.....	40.8	40.7	40.3	40.6	40.6	40.3	40.4	40.5	40.4	40.4	40.2	40.4	40.3
Transportation equipment.....	41.6	40.5	42.3	42.6	41.7	42.6	41.9	42.1	41.8	42.0	41.9	42.0	42.0
Instruments and related products.....	40.9	40.9	40.9	41.0	41.0	40.9	40.8	40.7	40.7	40.8	40.1	40.8	40.7
Miscellaneous manufacturing industries.....	39.9	39.7	39.1	40.0	39.8	39.5	39.5	39.8	39.7	39.6	38.7	39.6	39.5
Nondurable goods.....	40.0	39.8	39.4	39.7	39.5	39.6	39.7	39.8	39.7	39.8	39.1	39.7	39.7
Food and kindred products.....	40.9	40.9	40.7	40.8	40.6	40.9	41.0	41.1	40.8	40.9	40.8	41.0	40.9
Tobacco manufactures.....	38.7	38.9	37.0	38.4	39.6	39.0	39.7	39.9	39.4	37.3	37.8	38.5	39.2
Textile mill products.....	41.5	41.5	40.0	41.2	40.8	40.9	41.0	41.0	40.9	41.2	40.7	41.1	40.9
Apparel and related products.....	36.3	36.1	34.9	35.9	36.0	36.0	36.0	36.2	36.1	36.4	34.7	36.1	35.9
Paper and allied products.....	42.7	42.9	42.7	43.0	42.9	42.7	42.9	42.8	42.7	42.9	42.6	42.7	42.8
Printing, publishing, and allied industries.....	38.4	38.6	38.5	38.6	38.4	38.4	38.5	38.7	38.4	38.3	38.1	38.5	38.2
Chemicals and allied products.....	41.7	41.6	42.1	41.3	41.4	41.4	41.6	41.6	41.6	41.5	41.3	41.5	41.5
Petroleum refining and related industries.....	41.5	41.6	42.5	42.1	41.6	41.6	41.9	41.6	42.1	42.3	41.3	41.7	41.5
Rubber and miscellaneous plastic products.....	41.6	41.6	41.3	41.8	40.7	41.2	41.4	41.2	41.2	41.1	40.9	41.2	41.0
Leather and leather products.....	38.4	38.4	37.7	37.9	37.9	37.9	38.1	37.8	37.8	37.9	36.6	38.1	37.7
Wholesale and retail trade ³		38.4	38.2	38.5	38.6	38.4	38.4	38.4	38.4	38.4	38.4	38.6	38.5
Wholesale trade.....		40.6	40.5	40.7	40.7	40.7	40.7	40.7	40.7	40.6	40.4	40.7	40.6
Retail trade ³		37.4	37.3	37.5	37.7	37.5	37.5	37.4	37.4	37.5	37.3	37.7	37.7

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 group¹

Revised series; see box, p. 98.

Major industry group	1964											1963		Annual average	
	Nov. ²	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962
Manufacturing.....	\$2.46	\$2.43	\$2.46	\$2.43	\$2.44	\$2.44	\$2.44	\$2.44	\$2.43	\$2.43	\$2.43	\$2.42	\$2.40	\$2.37	\$2.31
Durable goods.....	2.63	2.59	2.63	2.60	2.61	2.61	2.61	2.61	2.60	2.60	2.60	2.59	2.57	2.54	2.48
Ordnance and accessories.....		2.98	2.96	2.96	2.95	2.94	2.93	2.91	2.92	2.91	2.90	2.88	2.88	2.82	2.75
Lumber and wood products, except furniture.....		2.09	2.11	2.09	2.08	2.06	2.05	2.03	1.99	2.00	2.00	2.00	2.01	1.96	1.91
Furniture and fixtures.....		1.98	1.98	1.96	1.97	1.96	1.95	1.97	1.96	1.96	1.96	1.95	1.94	1.93	1.89
Stone, clay, and glass products.....		2.45	2.46	2.44	2.43	2.43	2.42	2.42	2.41	2.41	2.41	2.40	2.39	2.37	2.31
Primary metal industries.....		3.01	3.04	2.99	2.99	2.99	2.99	2.99	2.97	2.97	2.96	2.96	2.95	2.95	2.90
Fabricated metal products.....		2.54	2.59	2.57	2.57	2.58	2.58	2.58	2.56	2.56	2.56	2.55	2.54	2.51	2.46
Machinery.....		2.76	2.76	2.74	2.75	2.75	2.75	2.74	2.74	2.73	2.73	2.72	2.71	2.68	2.61
Electrical equipment and supplies.....		2.45	2.45	2.44	2.46	2.46	2.46	2.45	2.45	2.45	2.44	2.44	2.42	2.40	2.34
Transportation equipment.....		2.93	2.99	2.97	2.97	2.96	2.96	2.95	2.95	2.95	2.95	2.95	2.95	2.89	2.80
Instruments and related products.....		2.47	2.47	2.46	2.47	2.46	2.46	2.45	2.45	2.45	2.45	2.44	2.43	2.42	2.37
Miscellaneous manufacturing industries.....		2.01	2.01	2.00	2.02	2.02	2.02	2.03	2.03	2.03	2.03	2.02	1.99	1.98	1.92
Nondurable goods.....	2.23	2.22	2.23	2.20	2.21	2.21	2.21	2.21	2.20	2.20	2.21	2.19	2.18	2.15	2.09
Food and kindred products.....		2.27	2.26	2.25	2.27	2.29	2.30	2.30	2.29	2.29	2.29	2.26	2.24	2.22	2.15
Tobacco manufactures.....		1.79	1.82	1.89	2.00	2.00	2.00	1.99	1.97	1.92	1.95	1.87	1.86	1.89	1.83
Textile mill products.....		1.74	1.72	1.70	1.70	1.70	1.70	1.70	1.69	1.69	1.69	1.69	1.68	1.65	1.62
Apparel and related products.....		1.76	1.77	1.76	1.75	1.74	1.74	1.74	1.75	1.75	1.75	1.74	1.73	1.70	1.66
Paper and allied products.....		2.44	2.45	2.43	2.44	2.42	2.41	2.41	2.40	2.40	2.40	2.39	2.38	2.36	2.29
Printing, publishing, and allied industries.....	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
Chemicals and allied products.....		2.73	2.75	2.73	2.72	2.71	2.68	2.66	2.66	2.68	2.69	2.69	2.67	2.64	2.57
Petroleum refining and related industries.....		3.11	3.14	3.08	3.06	3.07	3.08	3.09	3.10	3.11	3.12	3.13	3.10	3.07	2.97
Rubber and miscellaneous plastic products.....		2.44	2.47	2.44	2.44	2.43	2.42	2.41	2.41	2.41	2.42	2.42	2.41	2.38	2.35
Leather and leather products.....		1.79	1.80	1.78	1.77	1.79	1.79	1.78	1.78	1.76	1.75	1.75	1.76	1.73	1.69

¹ For comparability of data with those published in issues prior to January 1965, 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 weekly overtime hours of production workers in manufacturing, by industry¹

Revised series; see box, p. 98.

Industry	1964											1963		Annual average	
	Nov. ²	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962
Manufacturing.....	3.3	3.2	3.5	3.3	3.0	3.2	3.0	2.9	2.8	2.7	2.7	3.1	3.0	2.8	2.8
Durable goods.....	3.5	3.3	3.7	3.5	3.1	3.4	3.2	3.1	2.9	2.8	2.9	3.3	3.2	2.9	2.8
Nondurable goods.....	3.0	3.1	3.2	3.1	2.9	2.9	2.8	2.7	2.6	2.6	2.5	2.8	2.8	2.7	2.7
<i>Durable goods</i>															
Ordnance and accessories.....	1.9	2.0	1.8	1.6	1.9	1.7	1.7	1.7	1.5	1.6	1.9	2.6	2.3	2.4	2.2
Ammunition, except for small arms.....	1.9	1.7	1.6	1.6	1.6	1.7	1.5	1.7	1.4	1.6	2.2	2.8	2.6	2.5	1.9
Sighting and fire control equipment.....	1.2	1.2	1.7	1.6	2.2	.9	.9	1.1	1.3	1.1	1.7	1.2	1.6	2.9	2.9
Other ordnance and accessories.....	2.0	2.6	2.1	1.6	2.4	2.2	1.9	1.7	1.7	1.5	2.3	1.8	2.3	2.3	2.5
Lumber and wood products, except furniture.....	3.5	3.4	4.0	3.4	3.5	3.5	3.5	3.2	3.2	3.1	2.9	3.2	3.3	3.4	3.2
Sawmills and planing mills.....	3.6	3.3	3.8	3.5	3.5	3.5	3.4	3.1	3.1	3.0	2.7	3.2	3.3	3.4	3.1
Millwork, plywood, and related products.....	3.4	3.5	4.0	3.3	3.9	3.9	3.6	3.8	3.7	3.1	3.6	3.6	3.5	3.5	3.3
Wooden containers.....	3.0	2.4	3.3	3.3	3.2	3.0	2.8	2.4	2.1	2.1	2.6	2.5	3.0	2.9	2.9
Miscellaneous wood products.....	3.2	3.3	3.8	3.2	3.4	3.2	3.1	2.8	2.7	2.6	2.8	3.0	2.9	2.9	2.9
Furniture and fixtures.....	3.8	3.5	3.6	3.0	3.2	2.8	2.9	2.9	2.8	2.5	3.6	3.4	3.0	2.9	2.9
Household furniture.....	3.9	3.5	3.6	3.0	3.3	2.9	3.1	3.1	3.0	2.8	4.0	3.6	3.2	3.0	3.0
Office furniture.....	2.8	3.2	3.3	2.5	2.4	2.1	1.7	1.9	2.0	1.7	2.5	2.0	2.2	2.1	2.1
Partitions; office and store fixtures.....	3.6	3.0	3.2	3.0	2.8	1.4	1.9	2.0	1.5	1.3	1.8	2.2	2.2	3.0	3.0
Other furniture and fixtures.....	3.6	4.0	4.2	3.1	3.0	2.9	2.5	2.5	2.3	2.1	3.0	3.2	2.8	2.6	2.6
Stone, clay, and glass products.....	4.3	4.1	4.3	4.1	4.0	4.0	3.6	3.3	3.2	3.0	3.3	3.8	3.6	3.4	3.4
Flat glass.....	4.0	5.2	3.4	2.9	3.2	3.4	2.5	2.7	3.4	3.4	3.4	4.5	2.4	1.7	1.7
Glass and glassware, pressed or blown.....	4.0	4.0	3.9	3.8	3.2	3.5	3.4	3.5	3.4	3.4	3.0	3.1	3.3	3.5	3.5
Cement, hydraulic.....	2.1	2.4	2.4	2.3	2.3	2.1	1.9	2.0	1.7	1.9	1.8	1.8	2.0	1.8	1.8
Structural clay products.....	3.7	3.7	3.5	3.6	3.6	3.5	3.5	3.0	2.7	2.4	2.8	3.5	3.2	2.9	2.9
Pottery and related products.....	2.5	1.9	2.0	2.1	2.1	2.2	2.0	1.8	1.7	1.7	2.3	2.2	2.0	1.8	1.8
Concrete, gypsum, and plaster products.....	6.5	5.5	6.7	6.4	6.4	6.2	5.4	4.4	4.1	3.5	4.3	5.6	5.6	5.4	5.4
Other stone and mineral products.....	3.4	3.6	3.7	3.2	3.4	3.6	3.2	3.0	2.9	2.8	3.0	3.1	3.0	2.7	2.7
Primary metal industries.....	3.2	4.3	3.3	3.0	3.2	3.0	2.8	2.8	2.6	2.9	2.8	2.5	2.7	2.3	2.3
Blast furnace and basic steel products.....	2.5	4.1	2.5	2.3	2.2	2.0	1.8	1.7	1.6	1.7	1.4	1.2	1.9	1.4	1.4
Iron and steel foundries.....	4.2	4.9	4.7	4.4	5.1	4.7	4.7	4.6	4.5	4.7	4.7	4.2	3.7	2.9	2.9
Nonferrous smelting and refining.....	3.5	4.0	3.2	3.0	3.1	2.9	2.5	2.9	2.8	3.2	2.9	2.7	3.0	2.7	2.7
Nonferrous rolling, drawing, and extruding.....	3.5	4.5	4.1	3.7	4.2	3.9	3.6	3.6	3.5	4.0	4.2	3.9	3.7	3.6	3.6
Nonferrous foundries.....	3.3	3.4	3.2	3.0	3.2	3.1	3.2	3.0	3.0	3.1	3.4	3.1	3.0	2.9	2.9
Miscellaneous primary metal industries.....	4.5	4.1	4.0	3.4	4.1	3.8	4.0	3.7	3.4	3.6	3.8	3.5	3.3	3.2	3.2
Fabricated metal products.....	3.5	3.8	3.8	3.4	3.5	3.2	3.1	2.9	2.8	2.9	3.3	3.2	3.0	2.9	2.9
Metal cans.....	3.2	4.1	5.2	4.8	4.2	3.6	3.5	3.0	3.3	4.1	3.0	3.4	3.4	3.4	3.5
Cutlery, handtools, and general hardware.....	2.8	3.7	3.7	2.9	3.0	3.2	3.2	2.5	2.7	3.0	3.4	3.5	2.7	2.5	2.5
Heating equipment and plumbing fixtures.....	2.8	2.3	2.7	2.5	2.4	2.2	1.8	1.8	1.7	1.9	2.1	2.2	2.1	1.9	1.9
Fabricated structural metal products.....	3.3	3.5	3.5	3.3	3.2	2.7	2.6	2.5	2.3	2.2	3.0	2.9	2.8	2.5	2.5
Screw machine products, bolts, etc.....	4.7	4.0	4.2	3.9	4.2	3.9	4.0	4.1	4.1	3.9	3.6	3.4	3.6	4.0	4.0
Metal stampings.....	4.1	5.5	4.9	4.1	4.4	4.4	4.2	3.5	3.6	3.9	4.4	4.1	3.7	3.5	3.5
Coating, engraving, and allied services.....	4.1	3.8	3.9	3.3	3.7	3.4	3.1	3.5	3.1	3.5	3.6	3.8	3.4	3.3	3.3
Miscellaneous fabricated wire products.....	3.5	3.1	3.4	3.0	3.1	3.0	2.8	2.9	2.7	2.6	3.1	3.3	3.0	3.0	3.0
Miscellaneous fabricated metal products.....	2.9	2.9	2.9	2.5	2.7	2.6	2.5	2.3	2.3	2.3	2.7	2.5	2.6	2.6	2.6
Machinery.....	3.9	3.8	3.8	3.8	4.1	3.9	3.9	3.8	3.7	3.5	3.7	3.4	3.2	3.1	3.1
Engines and turbines.....	3.1	3.1	3.2	3.8	3.5	3.3	2.6	2.4	2.7	2.4	3.2	2.7	2.5	2.2	2.2
Farm machinery and equipment.....	2.5	2.5	2.5	2.3	2.7	2.4	2.6	3.0	3.2	2.8	2.5	1.8	2.2	2.1	2.1
Construction and related machinery.....	3.6	3.5	3.5	3.4	3.9	3.7	4.0	3.6	3.1	3.2	3.1	3.0	2.7	2.6	2.6
Metalworking machinery and equipment.....	5.6	5.1	5.3	5.7	6.3	6.4	6.4	6.4	6.2	5.6	5.6	5.0	4.8	4.7	4.7
Special industry machinery.....	4.4	4.1	4.0	3.9	4.1	3.9	3.7	3.8	3.6	3.5	4.2	3.6	3.5	3.5	3.5
General industrial machinery.....	3.6	3.7	3.8	3.3	3.6	3.4	3.3	3.1	3.1	2.9	3.4	3.1	2.7	2.8	2.8
Office, computing, and accounting machines.....	2.5	2.4	1.9	1.9	1.8	1.4	1.3	1.3	1.4	1.2	1.9	2.2	1.7	1.5	1.5
Service industry machines.....	2.4	2.6	2.5	2.6	2.7	2.3	2.2	2.1	2.0	1.9	2.1	1.8	2.1	2.0	2.0
Miscellaneous machinery.....	4.6	4.4	4.9	4.6	5.0	4.8	4.7	4.5	4.3	4.4	4.7	4.3	4.1	4.1	4.1
Electrical equipment and supplies.....	2.6	2.6	2.5	2.1	2.2	2.0	2.0	1.9	1.8	2.0	2.3	2.1	2.0	2.2	2.2
Electric distribution equipment.....	3.2	3.0	3.0	2.9	2.9	2.1	1.9	1.7	2.0	1.9	2.9	2.4	2.2	2.0	2.0
Electrical industrial apparatus.....	3.2	3.0	3.0	3.0	2.9	2.9	2.7	2.8	2.4	2.7	2.7	2.4	2.3	2.2	2.2
Household appliances.....	2.6	2.5	2.1	2.0	2.0	1.9	2.0	1.8	1.4	1.4	2.3	2.1	2.1	1.9	1.9
Electric lighting and wiring equipment.....	2.1	2.5	2.6	2.0	2.0	1.9	1.8	1.7	1.9	2.0	2.4	2.1	2.0	1.9	1.9
Radio and TV receiving sets.....	2.2	2.0	2.1	1.9	1.2	1.3	1.2	1.2	1.3	1.5	1.7	1.6	1.7	1.9	1.9
Communication equipment.....	2.8	2.7	2.3	1.6	2.3	1.8	1.8	1.7	1.6	1.8	2.1	1.9	1.9	2.5	2.5
Electronic components and accessories.....	2.3	2.3	2.4	1.8	2.0	1.8	2.0	1.8	1.8	2.0	1.7	2.1	1.8	2.0	2.0
Miscellaneous electrical equipment and supplies.....	2.4	3.3	2.2	1.9	2.2	2.3	2.3	2.0	2.6	3.2	3.5	2.8	2.6	3.2	3.2
Transportation equipment.....	3.3	4.8	4.1	3.6	4.1	3.6	3.6	3.0	3.2	3.6	4.6	4.6	3.6	3.5	3.5
Motor vehicles and equipment.....	4.0	6.4	5.5	4.4	5.4	4.6	4.5	3.4	3.9	4.6	6.3	6.1	4.4	4.2	4.2
Aircraft and parts.....	2.6	2.6	2.5	2.4	2.3	2.1	2.3	2.2	2.4	2.5	2.7	2.7	2.6	2.9	2.9
Ship and boat building and repairing.....	2.9	2.9	3.0	2.9	3.0	3.1	3.2	3.6	3.0	2.7	2.9	3.5	3.1	2.8	2.8
Railroad equipment.....	2.0	2.5	2.3	2.6	2.9	2.8	3.0	2.4	2.4	1.9	2.1	2.0	2.1	2.0	2.0
Other transportation equipment.....	3.7	3.5	3.5	2.8	3.8	3.8	3.2	2.9	2.4	2.3	3.0	2.5	3.1	2.5	2.5
Instruments and related products.....	2.8	2.7	2.6	2.2	2.4	2.3	2.3	2.1	2.1	2.1	2.5	2.5	2.4	2.4	2.4
Engineering and scientific instruments.....	2.9	3.1	3.2	2.2	2.6	2.1	2.1	2.0	2.0	2.6	3.1	2.9	2.5	2.5	2.5
Mechanical measuring and control devices.....	2.7	2.5	2.5	2.2	2.4	2.3	2.3	2.3	2.3	2.1	2.3	2.7	2.3	2.2	2.2
Optical and ophthalmic goods.....	2.7	2.6	2.2	1.9	2.5	2.5	2.3	2.2	2.2	2.0	2.7	2.5	2.4	2.2	2.2
Surgical, medical, and dental equipment.....	1.9	2.3	2.1	1.8	2.0	1.9	2.0	1.7	1.8	1.6	2.1	2.1	2.1	2.3	2.3
Photographic equipment and supplies.....	4.0	3.4	3.3	3.2	3.0	3.1	3.2	2.6	2.7	2.6	2.8	2.9	2.8	2.9	2.9
Watches and clocks.....	2.3	2.5	1.6	1.2	1.4	1.5	1.0	1.2	1.1	1.5	2.2	1.7	1.9	1.9	1.9

See footnotes at end of table.

TABLE C-4. Average weekly overtime hours of production workers in manufacturing, by industry¹—Continued

Revised series; see box, p. 98.

Industry	1964											1963		Annual average	
	Nov. ²	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962
Manufacturing—Continued															
<i>Durable goods—Continued</i>															
Miscellaneous manufacturing industries.....		2.9	2.4	2.5	2.0	2.3	2.2	2.4	2.3	2.2	1.9	2.4	2.5	2.2	2.3
Jewelry, silverware, and plated ware.....	4.7	2.6	3.0	2.3	3.1	3.0	3.1	2.9	2.7	2.1	4.4	4.0	3.0	3.0	
Toys, amusement and sporting goods.....	2.7	2.4	2.3	1.5	1.8	1.9	1.8	1.8	1.7	1.3	1.3	2.0	1.8	1.9	
Pens, pencils, office and art materials.....	2.1	2.1	2.2	1.6	1.7	1.5	1.6	1.3	1.6	1.5	2.6	2.0	2.1	2.0	
Costume jewelry, buttons, and notions.....	2.7	2.1	2.4	1.9	2.5	2.5	2.6	2.7	2.8	2.1	2.6	2.5	2.3	2.2	
Other manufacturing industries.....	2.7	2.6	2.6	2.4	2.4	2.2	2.7	2.4	2.2	2.2	2.4	2.6	2.3	2.5	
<i>Nondurable goods</i>															
Food and kindred products.....	3.8	4.2	3.8	3.8	3.8	3.6	3.2	3.1	3.2	3.3	3.4	3.5	3.4	3.4	
Meat products.....	5.1	4.4	4.4	3.8	4.5	4.0	3.7	3.5	3.0	3.9	4.9	4.9	3.8	3.6	
Dairy products.....	3.2	4.0	3.5	3.9	3.7	3.7	3.3	3.3	3.3	3.2	2.9	2.8	2.6	3.1	
Canned and preserved food, except meats.....	2.8	3.7	3.0	3.0	2.5	2.4	2.0	2.0	2.3	2.1	2.0	1.8	2.4	2.6	
Grain mill products.....	6.9	7.7	7.1	6.9	7.4	6.4	5.3	5.0	5.3	6.2	5.5	6.2	6.3	6.3	
Bakery products.....	3.0	3.7	3.3	3.4	3.5	3.2	2.9	2.8	3.1	2.8	2.9	2.9	3.0	3.1	
Sugar.....	4.0	4.7	3.5	3.5	2.9	2.8	2.4	3.1	3.3	4.3	2.9	3.3	3.6	3.7	
Confectionery and related products.....	2.6	2.7	2.3	1.8	1.7	1.8	1.8	1.8	2.3	2.0	2.6	2.7	2.5	2.5	
Beverages.....	2.8	3.6	3.5	4.3	3.8	3.4	3.1	3.0	2.8	2.3	2.6	2.9	3.1	2.8	
Miscellaneous food and kindred products.....	4.5	4.3	4.0	3.7	3.7	3.9	3.7	3.7	4.3	4.2	3.9	4.2	3.9	3.9	
Tobacco manufactures.....	1.5	1.7	1.9	2.3	2.2	1.7	2.1	1.3	1.2	.8	1.3	1.4	1.1	1.0	
Cigarettes.....	1.7	1.2	2.5	3.3	2.4	1.4	1.8	.5	.7	.5	1.2	1.6	1.2	.9	
Cigars.....	1.5	1.8	2.3	1.6	2.5	2.7	3.1	2.6	2.1	1.1	1.5	1.7	1.1	.9	
Textile mill products.....	4.0	3.9	3.7	3.3	3.7	3.5	3.3	3.3	3.3	3.2	3.5	3.7	3.2	3.2	
Cotton broad woven fabrics.....	4.6	5.1	4.1	3.6	4.2	4.3	3.8	3.7	4.0	4.0	4.0	4.3	3.4	3.2	
Silk and synthetic broad woven fabrics.....	5.3	6.0	5.1	4.4	4.7	4.8	4.5	4.6	4.6	4.6	4.9	5.2	4.3	4.3	
Weaving and finishing broad woollens.....	3.5	3.3	3.5	4.0	4.0	3.6	3.2	2.6	2.8	3.1	3.1	2.4	3.4	4.2	
Narrow fabrics and smallwares.....	3.7	2.7	3.4	2.8	2.9	2.9	3.0	2.9	2.9	2.8	3.2	3.4	3.1	3.3	
Knitting.....	2.7	2.0	2.5	2.2	2.2	2.0	2.0	2.0	1.8	1.4	1.7	2.2	2.0	2.2	
Finishing textiles, except wool and knit.....	4.2	3.9	3.8	3.7	4.6	4.1	4.2	4.5	4.4	3.6	4.6	4.7	4.1	4.2	
Floor covering.....	5.6	5.3	4.3	4.0	3.5	3.1	3.5	4.4	3.8	3.6	5.0	5.0	4.4	4.1	
Yarn and thread.....	4.1	3.9	3.7	3.4	3.7	3.5	3.1	3.1	3.1	3.0	3.2	3.6	3.1	3.2	
Miscellaneous textile goods.....	3.7	3.5	3.9	3.8	4.3	3.7	3.1	3.1	3.0	3.3	3.9	3.8	3.5	3.5	
Apparel and related products.....	1.3	1.2	1.5	1.2	1.3	1.2	1.3	1.4	1.2	1.0	1.2	1.2	1.3	1.3	
Men's and boys' suits and coats.....	1.2	.9	1.1	.5	1.0	1.0	1.0	1.1	1.1	1.0	.9	.9	1.0	1.2	
Men's and boys' furnishings.....	1.1	1.0	1.3	1.1	1.2	1.0	1.2	1.1	.9	.7	1.0	.9	1.1	1.3	
Women's, misses', juniors' outerwear.....	1.1	.9	1.4	1.3	1.2	1.2	1.4	1.6	1.5	1.1	1.0	1.1	1.3	1.4	
Women's and children's undergarments.....	1.9	1.9	1.7	1.3	1.2	1.2	1.2	1.3	1.2	.9	1.4	1.8	1.4	1.3	
Hats, caps, and millinery.....	1.3	1.1	1.6	1.5	.9	1.0	1.2	2.1	2.2	1.1	1.1	1.0	1.4	1.5	
Girls' and children's outerwear.....	1.1	.8	1.4	1.6	1.6	1.2	1.0	1.3	1.5	1.2	.9	1.2	1.2	1.2	
Fur goods and miscellaneous apparel.....	1.8	1.0	1.1	.8	.9	.8	.8	1.0	1.0	.7	1.2	1.5	1.1	1.2	
Miscellaneous fabricated textile products.....	2.1	2.3	2.2	1.7	1.9	1.9	1.8	1.5	1.3	1.6	2.2	2.1	1.8	1.7	
Paper and allied products.....	5.2	5.3	5.0	4.9	4.7	4.4	4.3	4.3	4.3	4.3	4.5	4.6	4.5	4.4	
Paper and pulp.....	5.8	6.3	5.8	6.0	5.6	5.4	5.5	5.4	5.5	5.5	5.3	5.5	5.4	5.2	
Paperboard.....	6.3	7.4	6.8	6.9	6.1	5.9	5.5	5.9	5.8	5.9	5.9	5.9	5.9	5.9	
Converted paper and paperboard products.....	3.7	3.6	3.6	3.4	3.3	3.1	3.0	2.9	3.0	3.2	3.6	3.3	3.2	3.1	
Paperboard containers and boxes.....	5.1	4.8	4.6	4.0	4.2	3.9	3.6	3.4	3.4	3.2	3.7	3.9	3.8	3.9	
Printing, publishing, and allied industries.....	3.2	3.2	3.0	2.7	2.8	2.9	2.9	2.8	2.5	2.5	3.2	2.7	2.7	2.8	
Newspaper publishing and printing.....	2.7	2.5	2.4	2.3	2.5	2.7	2.4	2.2	2.0	1.8	3.2	2.4	2.3	2.5	
Periodical publishing and printing.....	5.3	5.3	4.8	3.7	3.5	3.0	3.9	3.8	3.5	3.2	3.2	3.6	3.2	3.1	
Books.....	3.8	4.3	4.6	3.5	4.2	4.1	4.3	3.7	3.2	3.4	3.6	2.7	3.5	3.4	
Commercial printing.....	3.5	3.6	3.2	2.8	2.7	3.0	3.0	3.1	2.8	2.8	3.3	2.9	3.0	3.0	
Bookbinding and related industries.....	2.7	2.4	2.5	2.3	2.5	2.5	2.5	2.6	2.2	2.3	2.5	2.5	2.2	2.4	
Other publishing and printing industries.....	2.4	2.8	2.8	2.6	2.7	2.6	2.7	2.5	2.5	2.5	3.0	2.4	2.5	2.6	
Chemicals and allied products.....	2.8	3.2	2.7	2.6	2.6	2.8	2.8	2.7	2.4	2.4	2.4	2.4	2.5	2.5	
Industrial chemicals.....	2.7	3.3	2.7	2.6	2.6	2.5	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.5	
Plastics and synthetics, except glass.....	3.0	3.4	2.8	2.7	2.9	2.5	2.5	2.4	2.2	2.1	2.2	2.1	2.3	2.3	
Drugs.....	2.3	2.1	1.9	1.6	1.6	1.8	2.2	2.0	2.1	1.9	1.9	2.0	2.2	2.4	
Soap, cleaners, and toilet goods.....	2.7	3.2	2.7	2.2	2.6	2.1	2.0	2.2	2.2	2.2	2.6	2.5	2.5	2.7	
Paints, varnishes, and allied products.....	2.3	2.9	2.8	3.1	2.7	2.7	2.8	2.4	2.2	1.7	1.9	1.9	2.3	2.1	
Agricultural chemicals.....	3.3	3.4	3.2	3.2	3.4	7.6	6.9	7.1	4.3	3.9	3.7	3.5	4.7	4.1	
Other chemical products.....	3.1	3.6	3.2	2.9	3.0	2.9	2.8	2.7	2.6	2.9	2.8	2.8	2.7	2.6	
Petroleum refining and related industries.....	2.5	3.3	2.7	2.9	2.8	2.5	2.0	2.0	2.0	1.9	2.1	2.3	2.3	2.3	
Petroleum refining.....	1.6	2.4	1.7	1.9	1.8	1.7	1.5	1.6	1.6	1.7	1.8	1.9	1.8	1.6	
Other petroleum and coal products.....	5.7	6.4	6.0	6.4	6.3	5.6	4.2	3.6	3.6	2.9	3.4	3.7	4.6	4.8	
Rubber, miscellaneous plastic products.....	4.0	4.2	4.2	3.1	3.6	3.6	2.9	2.7	2.6	2.8	3.2	3.2	3.0	3.1	
Tires and inner tubes.....	5.8	6.1	5.9	3.7	4.8	4.6	2.7	3.0	2.0	2.2	3.6	3.7	3.0	3.3	
Other rubber products.....	3.0	3.3	3.3	2.5	2.8	2.6	2.3	2.2	2.4	2.7	2.8	2.8	2.6	2.9	
Miscellaneous plastic products.....	4.0	4.1	4.1	3.5	3.7	4.0	3.6	3.1	3.1	3.2	3.4	3.3	3.3	3.2	
Leather and leather products.....	1.7	1.7	2.0	1.9	1.7	1.4	1.2	1.5	1.8	1.6	1.8	1.5	1.4	1.4	
Leather tanning and finishing.....	3.1	2.9	3.1	2.9	3.3	3.1	2.8	2.4	2.7	2.6	3.2	2.9	2.8	2.6	
Footwear, except rubber.....	1.3	1.5	1.8	1.9	1.5	1.2	1.0	1.4	1.6	1.6	1.6	1.1	1.2	1.1	
Other leather products.....	2.3	1.8	2.0	1.5	1.7	1.3	1.3	1.6	1.9	1.3	1.9	1.9	1.6	1.8	

¹ For comparability of data with those published in issues prior to January 1963, 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 which includes the 12th 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 activities ¹

[1957-59=100]

Revised series; see box p. 98.

Activity	1964											1963		Annual average	
	Nov. ²	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962
Man-hours															
Total.....	106.8	106.7	108.1	108.1	105.7	106.2	103.2	100.6	98.5	97.3	95.0	100.7	102.5	100.9	99.7
Mining.....	85.1	85.7	83.2	84.9	84.1	85.8	82.6	80.4	77.7	78.1	78.5	81.9	82.1	82.1	83.3
Contract construction.....	112.5	121.5	116.5	126.6	122.8	118.6	110.3	99.4	89.8	85.3	79.1	93.2	105.8	103.2	99.1
Manufacturing.....	106.9	105.0	107.8	105.9	103.7	105.0	103.0	101.8	101.1	100.5	98.8	103.0	101.4	101.4	100.6
<i>Durable goods</i>															
Durable goods.....	109.1	104.9	109.8	105.7	105.4	107.4	105.4	104.4	102.8	101.9	100.7	104.5	104.0	102.0	100.2
Ordnance and accessories.....	128.9	127.5	127.2	125.4	126.1	130.3	131.6	135.1	135.7	137.5	144.5	147.7	145.1	145.0	148.3
Lumber and wood products, except furniture.....	95.5	97.9	99.2	102.4	101.1	101.2	96.4	92.2	89.6	89.4	86.7	93.1	94.8	93.8	93.5
Furniture and fixtures.....	116.4	117.2	114.5	114.8	109.4	110.4	106.1	107.3	106.6	105.8	102.2	110.5	109.7	106.3	104.7
Stone, clay, and glass products.....	107.9	109.8	110.6	111.8	110.6	110.6	107.5	103.8	99.1	96.7	93.9	99.7	105.1	102.3	100.0
Primary metal industries.....	107.5	106.5	111.2	106.8	105.8	106.9	105.2	103.7	102.0	100.5	99.0	98.9	96.1	98.4	95.5
Fabricated metal products.....	112.2	108.1	113.6	110.9	107.2	109.9	107.7	106.7	104.9	104.2	103.3	107.2	106.7	103.5	100.6
Machinery.....	113.9	113.6	112.9	111.3	111.9	114.2	112.8	112.1	111.1	108.4	107.2	108.4	105.0	104.4	102.1
Electrical equipment and supplies.....	118.8	118.3	116.8	113.4	110.8	111.3	109.6	109.7	109.5	110.0	110.4	114.2	113.2	112.5	114.8
Transportation equipment.....	99.5	78.2	100.5	85.6	93.1	97.5	97.3	97.3	95.4	95.3	95.5	100.2	99.1	93.7	89.2
Instruments and related products.....	106.4	105.7	106.6	105.7	103.6	104.8	102.8	102.6	102.7	102.6	101.1	105.4	105.6	103.9	102.6
Miscellaneous manufacturing industries.....	114.0	114.5	110.5	108.1	100.6	104.7	100.8	99.6	98.0	96.3	90.7	99.8	107.3	100.7	101.6
<i>Nondurable goods</i>															
Nondurable goods.....	104.0	105.2	105.3	106.1	101.5	101.9	99.8	98.5	98.9	98.6	96.3	101.1	101.6	100.7	101.2
Food and kindred products.....	94.8	100.0	104.2	102.9	95.5	91.6	88.0	85.5	84.4	85.2	86.9	92.5	95.5	94.1	95.5
Tobacco manufactures.....	99.5	115.2	108.8	97.3	76.9	79.2	78.2	79.2	79.5	78.3	84.5	98.1	101.4	89.5	92.7
Textile mill products.....	100.8	99.8	95.6	98.6	95.6	98.6	97.1	95.9	95.8	96.0	93.1	96.8	97.7	95.5	97.4
Apparel and related products.....	113.1	112.8	109.6	114.9	107.8	110.2	107.5	107.5	110.8	110.2	99.7	106.7	107.6	108.0	106.6
Paper and allied products.....	108.6	110.2	110.4	110.2	108.0	109.3	106.6	105.8	104.9	104.7	104.1	107.7	107.3	106.3	105.5
Printing, publishing, and allied industries.....	107.9	108.6	108.4	107.2	105.5	106.3	106.3	105.9	105.8	104.2	103.1	107.6	105.0	104.0	104.7
Chemicals and allied products.....	105.5	105.1	107.9	106.0	106.0	107.1	107.4	107.0	106.0	103.8	102.9	104.8	104.4	105.1	104.0
Petroleum refining and related industries.....	78.1	79.5	83.6	82.4	82.8	82.7	81.0	78.7	79.0	79.0	78.5	80.0	81.8	82.9	86.2
Rubber and miscellaneous plastic products.....	125.8	125.5	126.9	124.1	117.0	120.3	119.3	116.6	116.5	115.4	114.3	118.6	117.6	115.7	114.2
Leather and leather products.....	98.9	96.0	95.9	100.9	99.0	98.6	93.7	90.4	94.8	96.3	93.0	98.1	94.2	94.9	98.2
Payrolls															
Mining.....	99.0	95.6	96.7	94.8	96.8	93.1	90.1	86.6	87.6	88.6	92.2	91.3	90.9	90.2	
Contract construction.....	155.4	147.8	158.8	153.3	146.5	136.6	124.1	111.6	106.7	100.0	116.6	128.7	124.6	116.1	
Manufacturing.....	129.3	125.5	130.9	126.4	124.1	125.8	123.3	121.7	120.2	119.2	117.5	122.3	121.3	117.9	113.8

¹ For comparability of data with those published in issues prior to January 1965, 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 manufacturing ¹
[In current and 1957-59 dollars] ¹ Revised series; see box p. 98.

Item	1964											1963		Annual average	
	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	1963	1962
<i>Manufacturing</i>															
Gross average weekly earnings:															
Current dollars.....	\$102.97	\$104.60	\$103.07	\$102.97	\$103.48	\$102.97	\$102.47	\$101.40	\$101.15	\$100.30	\$102.66	\$100.85	\$100.78	\$99.63	\$96.56
1957-59 dollars.....	94.90	96.49	95.26	95.08	95.81	95.52	95.06	94.15	94.01	93.13	95.41	93.90	94.01	93.37	91.61
Spendable average weekly earnings:															
Worker with no dependents:															
Current dollars.....	84.40	85.69	84.48	84.40	84.80	84.40	84.10	83.16	82.97	82.30	82.14	80.75	80.70	79.82	77.86
1957-59 dollars.....	77.79	79.05	78.08	77.93	78.52	78.29	77.93	77.21	77.11	76.42	76.34	75.19	75.28	74.81	73.87
Worker with 3 dependents:															
Current dollars.....	92.18	93.53	92.26	92.18	92.60	92.18	91.77	90.89	90.68	89.98	90.06	88.58	88.52	87.58	85.53
1957-59 dollars.....	84.96	86.28	85.27	85.12	85.74	85.51	85.13	84.39	84.28	83.55	83.70	82.48	82.57	82.08	81.15

¹ For comparability of data with those published in issues prior to January 1965, 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—U.S. city average for urban wage earners and clerical workers (including single workers) all items, groups, subgroups, and special groups of items

[1957-59=100 unless otherwise specified]

Group	1964: New series ²											1963		Annual average	
	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962
All items	108.7	108.5	108.4	108.3	108.3	108.0	107.8	107.8	107.7	107.6	107.7	107.6	107.4	106.7	105.4
All items (1947-49=100)	133.4	133.1	133.0	132.8	132.9	132.5	132.3	132.3	132.1	132.0	132.1	132.0	131.8	131.0	129.3
Food	106.8	106.9	107.2	106.9	107.2	106.2	105.5	105.7	105.7	106.0	105.8	105.4	105.1	105.1	103.6
Food at home	105.1	105.3	105.6	105.3	105.7	104.4	103.7	103.9	104.0	104.4	104.2	103.7	103.4	103.5	102.2
Cereals and bakery products	110.7	110.4	109.9	109.6	109.2	109.2	108.9	108.8	108.8	109.0	109.0	109.0	109.1	109.1	107.6
Meats, poultry, and fish	99.5	100.6	101.4	99.2	98.9	96.8	96.6	97.0	97.2	98.3	98.3	99.2	99.7	100.2	101.7
Dairy products	105.3	105.3	104.6	104.4	104.3	104.0	103.9	104.1	104.5	104.8	105.0	105.0	104.8	103.8	104.1
Fruits and vegetables	113.0	111.7	112.2	117.3	122.3	120.2	115.7	115.7	115.1	113.9	112.4	109.8	108.2	111.0	105.0
Other foods at home ³	102.3	102.7	103.5	101.9	101.0	100.3	100.5	101.1	100.9	101.7	101.8	100.2	99.5	97.8	96.1
Food away from home	115.9	115.7	115.5	115.3	115.2	115.1	115.0	114.9	114.7	114.4	114.3	114.3	114.0	113.2	110.7
Housing	107.7	107.6	107.4	107.2	107.1	107.1	106.9	107.0	107.1	106.9	106.9	106.9	106.6	106.0	104.8
Shelter ⁴	109.3	109.2	109.0	108.8	108.6	108.4	108.2	108.2	108.4	108.3	108.1	108.0	107.7	106.9	105.6
Rent	108.3	108.2	107.9	107.9	107.8	107.8	107.7	107.7	107.5	107.5	107.3	107.3	107.2	106.8	105.7
Homeownership ⁵	109.8	109.6	109.5	109.2	108.9	108.7	108.4	108.6	108.9	108.8	108.5	108.4	108.0	107.0	105.6
Fuel and utilities ⁶	107.5	107.4	107.2	107.1	107.0	107.1	107.2	107.4	107.3	106.8	106.7	106.6	107.5	107.0	106.1
Fuel oil and coal ⁷	103.7	102.9	101.5	100.9	100.0	101.4	102.1	103.3	106.1	106.6	106.6	106.8	105.4	104.0	102.1
Gas and electricity	108.1	108.2	108.2	108.2	107.9	108.1	108.0	108.0	107.1	106.2	108.1	108.1	108.0	107.9	107.9
Household furnishings and operation ⁸	102.9	102.8	102.8	102.6	102.8	102.9	102.9	102.9	102.8	102.7	102.7	102.9	102.7	102.4	101.5
Apparel and upkeep ⁹	106.4	106.2	105.9	105.3	105.5	105.7	105.7	105.6	105.3	105.1	105.0	106.1	106.1	104.8	103.6
Men's and boys'	107.0	106.7	106.6	106.0	106.0	106.3	106.2	105.9	105.2	105.0	105.2	106.2	106.1	104.7	103.3
Women's and girls'	103.2	102.9	102.4	101.3	101.9	102.2	102.3	102.2	102.1	101.8	101.4	103.3	103.5	101.7	100.9
Footwear	111.6	111.4	110.9	110.8	110.8	111.0	111.0	110.9	110.7	110.7	110.7	111.2	111.1	110.5	109.3
Transportation	110.0	109.4	108.9	109.3	109.4	109.2	109.1	109.0	108.9	108.6	109.4	108.9	109.1	107.8	107.2
Private	108.6	108.0	107.4	107.9	107.9	107.8	107.7	107.6	107.4	107.2	108.0	107.5	107.8	106.4	105.9
Public	119.5	119.3	119.3	119.1	119.0	118.9	118.6	118.4	118.3	118.4	118.3	118.3	117.6	116.9	115.4
Health and recreation	114.2	114.0	113.9	113.8	113.7	113.5	113.5	113.4	113.1	112.9	112.7	112.7	112.4	111.4	109.4
Medical care	120.2	119.9	119.7	119.8	119.5	119.3	119.1	119.0	118.7	118.5	118.2	117.9	117.9	117.0	114.2
Personal care	109.7	109.7	109.5	109.4	109.3	109.1	108.9	108.7	108.7	108.4	108.5	108.8	108.4	107.9	106.5
Reading and recreation	114.9	114.5	114.3	114.2	114.1	114.0	114.1	114.0	113.6	113.3	113.1	113.1	112.8	111.5	109.6
Other goods and services ¹⁰	109.1	109.1	109.0	108.9	108.9	108.7	108.7	108.6	108.5	108.4	108.3	108.3	108.3	107.1	105.3
Special groups:															
All items less shelter	108.5	108.3	108.2	108.1	108.2	107.9	107.7	107.7	107.5	107.5	107.6	107.5	107.4	106.7	105.4
All items less food	109.5	109.2	109.0	108.9	108.8	108.8	108.7	108.6	108.6	108.4	108.4	108.4	108.4	107.4	106.1
Commodities ¹¹	105.6	105.5	105.4	105.2	105.3	105.0	104.8	104.9	104.8	104.8	104.9	104.9	104.7	104.1	103.2
Nondurables ¹²	106.4	106.4	106.4	106.1	106.3	105.8	105.5	105.6	105.6	105.6	105.7	105.6	105.4	104.9	103.6
Durables ^{11 13}	103.5	103.1	102.8	102.8	102.9	102.9	102.8	102.9	102.9	102.9	102.9	103.0	103.1	102.1	101.8
Services ^{11 14 15}	116.0	115.7	115.5	115.4	115.3	115.1	114.9	114.8	114.5	114.3	114.2	114.1	113.9	113.0	110.9
Commodities less food ¹¹	104.8	104.6	104.3	104.2	104.3	104.3	104.3	104.3	104.3	104.1	104.3	104.5	104.5	103.5	102.8
Nondurables less food	106.1	106.0	105.8	105.6	105.6	105.6	105.7	105.6	105.6	105.3	105.6	105.9	105.8	104.8	103.8
Apparel commodities	105.7	105.4	105.1	104.4	104.7	104.9	104.9	104.7	104.5	104.2	104.2	105.4	105.4	104.0	103.0
Apparel less footwear	104.5	104.2	103.9	103.1	103.4	103.7	103.7	103.5	103.2	102.9	102.8	104.2	104.3	102.8	101.8
Nondurables less food and apparel	106.3	106.3	106.2	106.3	106.1	106.0	106.1	106.1	106.2	106.0	106.5	106.2	106.0	105.3	104.2
New cars	102.5	101.3	98.7	99.9	100.6	100.8	101.2	101.6	101.8	102.2	103.3	102.1	103.2	101.5	102.1
Used cars	122.9	121.9	121.9	122.2	122.7	122.7	122.6	120.9	119.6	119.0	119.6	120.3	121.0	116.6	115.2
Household durables ¹⁶	98.0	98.0	98.2	98.1	98.3	98.5	98.7	98.7	98.7	98.6	98.7	98.9	98.8	98.5	98.8
Housefurnishings	98.3	98.2	98.3	98.1	98.4	98.6	98.7	98.7	98.6	98.4	98.5	98.8	98.8	98.5	98.9
Services less rent ^{11 14}	117.9	117.6	117.4	117.2	117.0	116.8	116.6	116.5	116.3	116.0	116.0	115.8	115.5	114.5	112.1
Household services less rent ¹¹	115.5	115.4	115.3	115.0	114.8	114.7	114.4	114.4	114.3	113.9	114.1	114.0	113.8	113.0	110.6
Transportation services	116.2	115.3	115.1	115.0	114.9	114.7	114.6	114.4	114.1	114.2	114.1	113.7	113.3	112.4	111.2
Medical care services	124.4	124.0	123.7	123.7	123.4	123.1	122.9	122.7	122.3	122.1	121.7	121.3	121.3	120.3	116.8
Other services ^{11 17}	119.6	119.3	119.0	118.8	118.6	118.4	118.3	118.2	117.7	117.4	117.1	117.1	116.6	115.3	112.6

¹ The CPI measures the average change in prices of goods and services purchased by urban wage-earner and clerical-worker families.

² Beginning January 1964, the Consumer Price Index structure has been revised to reflect buying patterns of wage earners and clerical workers in the 1960's. The "new series" indexes shown here are based on expenditures of all urban wage-earner and clerical-worker consumers, including single workers living alone, as well as families of two or more persons. Separate indexes for families only (excluding single persons) for the U.S. city average are available on request. The "old series" indexes were discontinued after June 1964.

³ Includes eggs, fats and oils, sugar and sweets, nonalcoholic beverages, and prepared and partially prepared foods.

⁴ Also includes hotel and motel room rates not shown separately.

⁵ Includes home purchase, mortgage interest, taxes, insurance, and maintenance and repairs.

⁶ Also includes telephone, water, and sewerage service not shown separately.

⁷ Called "Solid and petroleum fuels" prior to 1964.

⁸ Includes housefurnishings and housekeeping supplies and services.

⁹ Includes dry cleaning and laundry of apparel, infants' wear, sewing materials, jewelry, and miscellaneous apparel, not shown separately.

¹⁰ Includes tobacco, alcoholic beverages, and funeral, legal, and bank service charges.

¹¹ Recalculated group—indexes prior to January 1964 have been recomputed.

¹² Includes foods, paint, furnace filters, shrubbery, fuel oil, coal, household textiles, housekeeping supplies, apparel, gasoline and motor oil, drugs and pharmaceuticals, toilet goods, nondurable recreational goods, newspapers, magazines, books, tobacco, and alcoholic beverages.

¹³ Includes home purchase, which was classified under services prior to 1964, building materials, furniture and bedding, floor coverings, household appliances, dinnerware, tableware, cleaning equipment, power tools, lamps, venetian blinds, hardware, automobiles, tires, radios, television sets, tape recorders, durable toys, and sports equipment.

¹⁴ Excludes home purchase costs which were classified under this heading prior to 1964.

¹⁵ Includes rent, mortgage interest, taxes and insurance on real property, home maintenance and repair services, gas, electricity, telephone, water, sewerage service, household help, postage, laundry and dry cleaning, furniture and apparel repair and upkeep, moving, auto repairs, auto insurance, registration and license fees, parking and garage rent, local transit, taxicab, airplane, train, and bus fares, professional medical services, hospital services, health insurance, barber and beauty shop services, movies, fees for sports, television repairs, and funeral, bank, and legal services.

¹⁶ Called "Durables less cars" prior to 1964. Does not include auto parts, durable toys, and sports equipment.

¹⁷ Includes the services components of apparel, personal care, reading and recreation, and other goods and services. Not comparable with series published prior to 1964.

TABLE D-2. Consumer Price Index—U.S. and selected areas for urban wage earners and clerical workers (including single workers)¹

[1957-59=100 unless otherwise specified]

Area ²	1964: New series ³ (except as noted)											1963		Annual average		1947-49=100
	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962	Nov. 1964
	All Items															
U.S. city average ⁴	108.7	108.5	108.4	108.2	108.3	108.0	107.8	107.8	107.7	107.6	107.7	107.6	107.4	106.7	105.4	133.4
Atlanta, Ga.....	(⁵)	(⁵)	107.2	(⁵)	(⁵)	106.3	(⁵)	(⁵)	106.6	(⁵)	(⁵)	105.8	(⁵)	105.1	104.1	(⁵)
Baltimore, Md.....	(⁵)	(⁵)	107.9	(⁵)	(⁵)	108.0	(⁵)	(⁵)	107.5	(⁵)	(⁵)	107.5	(⁵)	106.8	105.2	(⁵)
Boston, Mass.....	(⁵)	111.6	(⁵)	(⁵)	111.2	(⁵)	(⁵)	110.6	(⁵)	(⁵)	110.1	(⁵)	(⁵)	109.5	107.4	(⁵)
Buffalo, N.Y. (Nov. 1963=100).....	102.1	(⁵)	(⁵)	101.3	(⁵)	(⁵)	100.7	(⁵)	(⁵)	100.1	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
Chicago, Ill.—Northwestern Ind.....	106.6	106.4	106.3	106.3	106.6	106.2	105.9	105.7	105.7	105.7	105.8	106.1	105.8	105.3	104.6	134.4
Cincinnati, Ohio—Kentucky ⁶	(⁵)	(⁵)	107.0	(⁵)	(⁵)	106.1	(⁵)	(⁵)	105.6	(⁵)	(⁵)	105.1	(⁵)	104.7	103.6	(⁵)
Cleveland, Ohio.....	105.9	(⁵)	(⁵)	105.2	(⁵)	(⁵)	104.5	(⁵)	(⁵)	105.2	(⁵)	(⁵)	105.0	104.7	103.5	131.5
Dallas, Tex. (Nov. 1963=100).....	100.7	(⁵)	(⁵)	99.9	(⁵)	(⁵)	100.3	(⁵)	100.3	(⁵)	99.7	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
Detroit, Mich.....	104.6	104.9	104.6	104.3	104.2	103.6	103.2	103.8	103.6	103.1	103.7	103.6	103.7	103.2	102.2	129.0
Honolulu, Hawaii (Dec. 1963=100).....	(⁵)	(⁵)	100.5	(⁵)	(⁵)	99.9	(⁵)	(⁵)	100.5	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
Houston, Tex. ⁵	107.3	(⁵)	(⁵)	107.3	(⁵)	(⁵)	106.9	(⁵)	(⁵)	107.2	(⁵)	(⁵)	(⁵)	106.7	105.7	104.6
Kansas City, Mo.—Kansas ⁶	(⁵)	110.1	(⁵)	(⁵)	109.5	(⁵)	(⁵)	109.0	(⁵)	108.5	(⁵)	108.5	(⁵)	107.2	106.1	(⁵)
Los Angeles—Long Beach, Calif.....	111.3	111.0	110.0	110.2	109.9	110.0	109.9	109.9	109.7	109.0	109.6	108.7	109.3	108.2	106.6	138.8
Milwaukee, Wis. ⁷	106.8	(⁵)	(⁵)	106.3	(⁵)	(⁵)	105.6	(⁵)	100.3	(⁵)	105.2	(⁵)	105.2	104.9	103.9	134.7
Minneapolis—St. Paul, Minn. ⁸	(⁵)	108.6	(⁵)	(⁵)	108.1	(⁵)	(⁵)	107.3	(⁵)	(⁵)	107.5	(⁵)	(⁵)	107.0	105.5	(⁵)
New York, N.Y.—Northeastern N.J.....	111.0	110.9	110.9	110.5	110.5	110.2	110.2	110.1	110.0	110.1	109.7	109.9	109.7	108.7	106.4	133.8
Philadelphia, Pa.—N.J.....	109.5	109.3	109.0	108.6	108.8	108.5	108.4	108.4	108.7	108.6	108.5	108.3	108.3	107.2	105.2	134.5
Pittsburgh, Pa.....	(⁵)	108.9	(⁵)	(⁵)	108.8	(⁵)	(⁵)	108.1	(⁵)	(⁵)	107.7	(⁵)	(⁵)	107.1	105.9	(⁵)
Portland, Ore.—Wash. ⁹	(⁵)	109.5	(⁵)	(⁵)	109.1	(⁵)	(⁵)	108.6	(⁵)	107.6	(⁵)	(⁵)	(⁵)	106.6	104.6	(⁵)
St. Louis, Mo.—Ill.....	(⁵)	(⁵)	108.7	(⁵)	(⁵)	107.7	(⁵)	(⁵)	107.5	(⁵)	(⁵)	107.3	(⁵)	106.2	105.1	(⁵)
San Francisco—Oakland, Calif.....	(⁵)	(⁵)	111.0	(⁵)	(⁵)	110.6	(⁵)	(⁵)	109.9	(⁵)	(⁵)	109.9	(⁵)	108.9	107.4	(⁵)
Scranton, Pa. ⁸	109.9	(⁵)	(⁵)	110.0	(⁵)	(⁵)	108.7	(⁵)	(⁵)	108.8	(⁵)	(⁵)	107.9	107.3	105.9	131.1
Seattle, Wash.....	110.1	(⁵)	(⁵)	110.3	(⁵)	(⁵)	109.1	(⁵)	(⁵)	109.4	(⁵)	(⁵)	109.3	108.2	106.5	138.4
Washington, D.C.—Md.—Va.....	108.9	(⁵)	(⁵)	108.7	(⁵)	(⁵)	107.5	(⁵)	(⁵)	107.3	(⁵)	(⁵)	107.1	106.4	104.6	131.1
Food																
U.S. city average ⁴	106.8	106.9	107.2	106.9	107.2	106.2	105.5	105.7	105.7	106.0	105.8	105.4	105.1	105.1	103.6	-----
Atlanta, Ga.....	105.6	105.7	106.1	105.4	104.9	103.9	103.9	103.9	104.0	104.0	104.4	103.8	103.7	103.8	103.0	-----
Baltimore, Md.....	106.8	107.0	107.1	106.6	107.1	(⁵)	(⁵)	106.1	106.2	106.3	105.9	105.7	104.4	104.7	103.3	-----
Boston, Mass.....	111.0	110.8	110.8	111.1	111.0	109.2	109.1	108.5	108.8	108.5	108.4	108.4	108.0	107.4	104.6	-----
Buffalo, N.Y. (Nov. 1963=100).....	101.7	101.8	102.4	102.2	102.6	101.9	100.9	101.1	101.1	100.8	100.4	-----	-----	-----	-----	-----
Chicago, Ill.—Northwestern Ind.....	106.9	106.9	107.0	106.3	106.8	105.7	104.8	105.1	105.1	105.7	105.8	106.1	105.8	105.7	104.6	-----
Cincinnati, Ohio—Kentucky ⁶	104.5	105.4	106.2	105.5	105.7	105.1	108.9	108.3	108.4	108.2	102.9	102.7	102.5	102.9	101.9	-----
Cleveland, Ohio.....	102.2	102.4	103.0	102.5	102.3	101.3	101.0	101.5	101.5	102.1	102.3	101.9	101.6	101.8	101.0	-----
Dallas, Tex. (Nov. 1963=100).....	101.3	101.1	101.0	100.9	100.5	100.0	99.5	100.1	100.1	100.1	100.0	-----	-----	-----	-----	-----
Detroit, Mich.....	102.2	102.5	102.4	102.4	103.0	101.8	101.0	101.4	101.1	101.4	101.4	100.8	100.9	101.5	101.1	-----
Honolulu, Hawaii (Dec. 1963=100).....	101.3	101.1	100.8	101.1	100.8	100.7	100.6	100.8	100.5	100.3	99.8	-----	-----	-----	-----	-----
Houston, Tex. ⁵	106.1	106.8	105.8	105.8	105.8	104.9	104.6	105.2	105.1	105.5	105.6	105.5	105.0	103.8	102.9	-----
Kansas City, Mo.—Kansas ⁶	108.0	108.2	108.2	108.4	108.2	106.6	106.3	106.5	106.7	106.0	105.9	105.3	105.2	104.3	103.3	-----
Los Angeles—Long Beach, Calif.....	108.8	109.6	108.3	108.1	108.3	107.6	107.4	107.9	107.3	108.0	108.1	107.8	107.6	107.1	105.5	-----
Milwaukee, Wis. ⁷	104.9	-----	-----	105.6	-----	-----	104.9	-----	-----	104.3	-----	-----	104.8	104.9	104.2	-----
Minneapolis—St. Paul, Minn. ⁸	105.0	105.2	105.7	104.6	105.7	104.7	104.2	108.7	108.3	103.8	104.0	108.4	103.0	102.5	101.8	-----
New York, N.Y.—Northeastern N.J.....	109.0	109.2	109.6	108.9	109.2	108.0	107.5	107.5	107.5	108.1	108.1	107.8	107.4	107.1	104.9	-----
Philadelphia, Pa.—N.J.....	105.5	105.7	105.9	105.4	105.8	104.9	104.5	104.5	104.3	105.5	105.2	104.3	103.9	104.2	103.1	-----
Pittsburgh, Pa.....	104.9	105.1	106.2	105.5	105.9	104.3	103.5	104.1	104.8	104.3	103.8	103.3	102.9	103.6	102.4	-----
Portland, Ore.—Wash. ⁹	107.5	107.6	108.1	107.7	108.1	106.9	106.4	106.8	106.0	106.5	106.2	105.6	105.4	105.2	103.6	-----
St. Louis, Mo.—Ill.....	108.5	108.9	109.1	108.7	108.5	107.6	106.6	106.7	106.1	106.1	106.1	105.9	105.1	104.9	103.0	-----
San Francisco—Oakland, Calif.....	107.8	107.8	107.6	107.3	108.3	107.2	107.0	107.7	108.0	108.0	107.3	106.5	107.0	106.8	105.4	-----
Scranton, Pa. ⁸	105.6	105.8	106.8	106.8	107.4	105.2	104.7	104.5	104.7	105.0	104.9	104.7	103.8	104.1	103.1	-----
Seattle, Wash.....	108.7	108.7	109.3	109.1	109.2	108.5	107.9	108.7	108.4	108.7	108.2	107.9	107.4	107.3	105.7	-----
Washington, D.C.—Md.—Va.....	106.3	106.7	108.0	107.5	107.5	105.3	104.9	105.2	105.0	104.9	104.6	103.9	104.0	104.2	102.0	-----

¹ See footnote 1, table D-1. Indexes measure time-to-time changes in prices. They do not indicate whether it costs more to live in one area than in another.

² The areas listed include, for the new series, not only the central city but the entire urban portion of the Standard Metropolitan Statistical Area, as defined for the 1960 Census of Population; except that the Standard Consolidated Area is used for New York and Chicago. For the old series "area" refers to the "urbanized area."

³ See footnote 2, table D-1.

⁴ Average of 50 "cities" (metropolitan areas and nonmetropolitan urban places).

⁵ All items indexes are computed monthly for 5 areas and once every 3 months on a rotating cycle for other areas.

⁶ Old series. Indexes for Cincinnati, Houston, Kansas City, and Minneapolis will be published on the old series basis through 1964 and the first part of 1965, and will be added to the new series national index in 1966.

⁷ Old series. The present index for Milwaukee, calculated by special arrangement with the City of Milwaukee, is now published on the old series basis, and will also be added to the new series national index in 1966.

⁸ Old series. Contrary to original plans, indexes for Portland and Scranton will be published on the old series basis temporarily.

⁹ Insufficient data due to work stoppage in food stores.

TABLE D-3. Indexes of wholesale prices,¹ by group and subgroup of commodities[1957-59=100, unless otherwise specified]²

Commodity group	1964											1963		Annual average	
	Nov. ³	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962
All commodities.....	100.7	100.8	100.7	100.3	100.4	100.0	100.1	100.3	100.4	100.5	101.0	100.3	100.7	100.3	100.6
Farm products and processed foods.....	97.8	98.2	99.3	97.7	98.1	97.1	96.8	97.8	98.2	98.1	99.7	97.2	99.7	98.7	99.6
Farm products.....	94.0	93.8	95.7	93.6	94.1	93.2	93.7	94.4	95.2	94.5	96.3	93.3	96.2	95.7	97.7
Fresh and dried fruits and vegetables.....	108.0	⁴ 98.2	101.5	97.9	108.9	113.1	107.4	105.9	104.9	97.9	95.9	94.8	96.1	96.1	97.7
Grains.....	88.0	88.9	90.2	85.7	85.7	89.8	103.2	103.3	99.1	102.0	103.9	101.8	100.3	101.9	98.8
Livestock and live poultry.....	83.6	85.8	90.9	88.4	87.7	82.3	81.2	82.4	83.8	82.8	84.7	79.9	87.9	88.8	96.2
Plant and animal fibers.....	93.9	93.8	94.4	96.0	99.4	101.2	101.3	102.1	102.1	101.7	101.5	101.4	99.8	100.6	98.4
Fluid milk.....	105.5	⁴ 104.5	103.6	101.8	100.5	98.8	98.4	99.6	101.2	102.3	102.8	103.4	103.2	100.6	101.2
Eggs.....	91.6	97.7	96.9	98.6	87.3	88.5	76.9	79.5	90.5	89.7	106.3	99.8	102.4	94.0	95.2
Hay, haysseeds, and oilseeds.....	115.6	111.0	108.8	105.8	105.6	105.1	104.9	107.4	110.7	113.9	115.5	114.6	117.5	113.0	105.4
Other farm products.....	98.4	99.3	96.8	98.5	98.3	98.7	99.4	99.5	100.7	96.4	99.0	90.6	90.7	89.3	91.8
Processed foods.....	100.9	101.7	102.2	101.0	101.2	100.2	99.4	100.4	100.5	100.9	102.5	100.4	102.5	101.1	101.2
Cereal and bakery products.....	108.3	108.2	108.1	108.3	108.6	107.9	107.5	107.8	106.8	107.4	107.0	106.9	107.3	107.3	107.6
Meats, poultry, and fish.....	89.8	⁴ 93.2	96.1	93.3	93.3	90.2	86.9	88.3	88.7	88.9	91.8	87.7	91.7	93.3	99.1
Dairy products and ice cream.....	109.5	108.9	108.7	107.3	107.0	107.1	106.6	107.1	107.3	107.5	108.0	108.1	107.9	107.5	106.9
Canned and frozen fruits and vegetables.....	102.2	102.9	102.2	102.3	105.3	106.1	106.3	107.3	107.5	107.4	107.2	106.8	106.4	103.9	98.0
Sugar and confectionery.....	104.7	105.8	105.1	106.4	106.6	108.0	111.9	115.5	117.3	122.9	130.3	124.9	131.2	118.4	102.2
Packaged beverage materials.....	98.2	98.2	98.2	98.2	98.4	98.3	98.3	98.1	98.1	94.6	90.6	85.7	84.1	81.2	81.7
Animal fats and oils.....	107.3	⁴ 109.8	97.7	93.5	90.8	90.7	89.2	90.0	89.3	91.0	88.2	88.4	93.5	83.9	88.4
Crude vegetable oils.....	106.2	⁴ 96.1	87.7	82.3	80.4	78.5	79.0	75.1	75.1	73.7	74.4	76.7	84.0	82.0	84.5
Refined vegetable oils.....	99.0	91.2	84.0	79.4	79.2	76.5	77.0	77.1	75.9	74.8	74.8	77.4	84.1	84.2	93.1
Vegetable oil end products.....	94.4	⁴ 90.4	⁴ 88.6	⁴ 87.9	⁴ 87.9	⁴ 87.6	⁴ 87.6	⁴ 87.7	⁴ 87.9	⁴ 88.3	⁴ 88.2	⁴ 88.2	⁴ 87.7	⁴ 88.2	97.3
Miscellaneous processed foods.....	110.3	109.1	109.3	108.9	108.8	108.4	108.9	110.0	107.7	106.6	107.4	107.4	107.8	104.3	101.8
All commodities except farm products.....	101.5	101.6	101.3	101.1	101.1	100.9	100.8	101.0	101.0	101.2	101.5	101.1	101.2	100.8	100.9
All commodities except farm and foods.....	101.6	101.5	101.1	101.1	101.1	100.9	101.1	101.1	101.1	101.2	101.3	101.2	100.9	100.7	100.8
Textile products and apparel.....	101.4	101.4	101.2	101.2	101.1	101.0	101.2	101.1	101.2	101.2	101.2	101.2	101.1	100.5	100.6
Cotton products.....	99.1	99.0	98.9	98.6	98.3	98.7	99.6	100.5	101.1	101.2	101.3	101.5	101.3	100.3	101.7
Wool products.....	103.3	103.1	102.9	103.0	102.6	102.8	102.8	103.2	103.3	103.3	103.2	102.8	101.6	100.9	99.1
Manmade fiber textile products.....	96.5	96.1	95.7	95.8	96.2	96.2	96.0	95.5	95.5	95.1	94.7	94.6	94.0	93.9	93.9
Silk products.....	117.8	116.6	117.0	117.0	117.0	117.0	116.4	116.6	116.8	121.6	126.3	130.5	139.9	125.9	105.5
Apparel.....	103.2	⁴ 103.3	103.3	103.3	103.3	102.8	102.7	102.3	102.3	102.3	102.3	102.3	102.3	101.9	101.5
Miscellaneous textile products.....	118.3	⁴ 120.7	120.7	119.8	117.2	117.3	116.2	115.8	115.8	116.7	117.6	115.3	118.3	117.1	122.4
Hides, skins, leather, and leather products.....	105.3	⁴ 106.0	105.4	105.6	105.4	104.8	104.7	104.5	102.5	102.5	102.7	103.0	103.5	104.2	107.4
Hides and skins.....	90.4	95.4	95.5	96.0	92.6	90.3	85.7	88.1	75.7	74.0	76.1	76.3	82.7	84.0	106.2
Leather.....	103.8	104.8	104.0	104.5	104.7	103.3	104.5	102.0	99.6	99.7	99.5	99.5	99.7	101.9	108.5
Footwear.....	109.0	⁴ 109.1	108.4	108.3	108.3	108.3	108.3	108.2	108.2	108.3	108.2	108.2	108.2	108.3	108.6
Other leather products.....	103.6	⁴ 103.6	103.3	103.3	103.9	103.2	103.4	103.8	101.4	101.9	101.9	103.3	103.2	104.0	104.3
Fuel and related products, and power.....	97.5	⁴ 96.7	95.2	96.4	96.7	96.3	96.4	96.1	97.0	99.0	99.5	99.3	97.9	99.8	100.2
Coal.....	98.0	97.7	97.3	96.6	96.1	95.3	95.1	95.0	97.1	98.1	98.3	98.3	98.3	96.9	96.8
Coke.....	107.3	107.3	107.3	107.3	107.3	107.3	107.3	106.1	103.6	103.6	103.6	103.6	103.6	103.6	103.6
Gas fuels ⁵	121.9	⁴ 120.4	118.4	121.2	120.2	116.0	116.6	120.4	123.2	126.8	124.8	124.8	122.3	122.8	119.2
Electric power ⁶	101.4	101.5	101.5	101.4	100.6	100.9	101.3	101.3	99.4	101.3	101.3	101.3	101.3	102.0	102.8
Petroleum products, refined.....	93.3	91.9	89.5	91.4	92.5	92.3	92.2	91.1	92.9	95.3	96.6	96.1	93.8	97.2	98.2
Chemicals and allied products.....	97.1	96.9	96.6	96.5	96.6	96.5	96.7	96.6	96.5	96.4	96.3	96.2	96.3	96.3	97.5
Industrial chemicals.....	94.1	94.3	93.9	93.9	94.3	94.3	94.5	94.4	94.4	94.2	94.3	94.3	94.2	94.8	96.3
Prepared paint.....	104.9	104.8	104.8	104.8	104.1	103.9	104.8	104.8	104.8	104.6	105.1	105.1	104.9	103.8	103.8
Paint materials.....	91.3	90.5	89.9	89.8	90.7	90.8	91.8	91.6	91.8	91.5	91.2	91.0	91.1	91.1	95.6
Drugs and pharmaceuticals.....	94.7	94.6	94.6	94.7	94.8	94.6	95.5	95.4	95.2	95.3	95.4	95.0	95.0	95.1	96.0
Fats and oils inedible.....	112.6	107.7	106.2	101.3	95.9	93.2	88.6	87.3	85.8	83.2	83.1	85.0	90.2	80.3	76.3
Mixed fertilizer.....	104.4	104.3	104.4	103.4	103.5	103.6	103.6	103.9	103.8	103.8	103.6	103.5	103.7	103.6	103.8
Fertilizer materials.....	101.0	99.6	99.1	100.2	101.1	100.2	100.2	100.2	100.2	100.2	99.4	98.4	98.4	99.9	101.9
Other chemicals and allied products.....	99.6	99.8	99.6	99.6	99.6	99.5	99.4	99.3	99.1	99.1	99.2	99.1	99.0	99.0	99.4
Rubber and rubber products.....	92.2	92.1	91.9	91.8	91.8	91.6	92.6	93.1	93.9	93.6	93.7	93.8	94.2	93.8	93.3
Rubber.....	92.1	91.3	90.4	89.9	90.0	90.6	90.7	91.3	91.2	89.5	89.4	89.9	91.6	91.9	93.6
Tires and tubes.....	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	89.2	91.3	91.3	91.4	91.7	90.1	87.1
Miscellaneous rubber products.....	96.5	96.5	96.4	96.4	96.4	95.7	97.9	97.8	97.7	97.6	97.9	97.9	97.9	98.3	99.4
Lumber and wood products.....	99.6	100.3	100.6	100.9	101.2	101.4	101.8	101.8	101.0	99.9	99.0	99.1	99.2	98.6	96.5
Lumber.....	99.2	100.4	100.7	101.1	101.5	101.8	102.2	102.0	101.4	100.3	99.2	99.2	99.3	98.9	96.5
Millwork.....	109.0	109.0	109.1	109.1	109.1	109.0	108.9	108.8	107.4	106.9	106.7	106.3	106.2	104.0	101.8
Flywood.....	90.7	91.2	91.8	91.8	92.3	92.6	94.2	94.9	94.6	92.2	91.1	92.4	92.5	93.5	92.4
Pulp, paper, and allied products.....	98.9	99.1	98.7	98.7	98.7	98.7	98.7	99.1	99.3	99.9	99.8	99.4	99.4	99.2	100.0
Woodpulp.....	96.8	97.5	95.5	95.5	95.5	95.5	95.5	96.2	96.1	96.1	96.1	94.4	94.4	91.7	93.2
Wastepaper.....	92.5	92.2	92.2	93.3	93.4	93.5	90.8	90.2	91.9	91.1	91.1	90.8	91.0	92.2	97.5
Paper.....	104.0	104.0	103.7	103.7	103.7	103.7	103.7	103.6	103.5	103.1	103.1	102.9	102.9	102.4	102.6
Paperboard.....	96.4	96.4	96.4	96.4	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.6	94.7	93.1
Converted paper and paperboard products.....	97.9	98.1	97.6	97.6	97.5	97.6	97.6	98.6	98.9	100.1	100.0	99.5	99.4	99.7	101.0
Building paper and board.....	93.9	⁴ 94.3	⁴ 94.5	⁴ 94.1	⁴ 94.4	94.4	94.4	93.5	93.7	95.0	95.2	95.2	9		

TABLE D-3. Indexes of wholesale prices,¹ by group and subgroup of commodities—Continued[1957-59=100, unless otherwise specified]²

Commodity group	1964											1963		Annual average	
	Nov. ³	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962
All commodities except farm and foods—Continued															
Metals and metal products.....	104.3	103.8	103.0	103.0	102.5	102.3	102.1	102.2	102.0	101.8	101.7	101.3	101.0	100.1	100.0
Iron and steel.....	100.9	100.7	100.5	101.2	100.7	100.4	100.3	100.2	100.2	100.2	100.2	100.0	99.9	99.1	99.3
Nonferrous metals.....	112.0	110.4	107.0	105.8	104.4	104.0	103.9	104.0	102.8	101.7	101.4	101.0	100.2	99.1	99.2
Metal containers.....	105.6	105.6	105.6	105.6	105.6	105.6	105.6	105.6	105.6	105.6	104.6	104.6	104.6	104.7	103.7
Hardware.....	104.5	104.8	104.9	104.9	104.9	104.8	104.8	104.8	104.8	104.6	104.6	104.3	104.4	104.1	104.0
Plumbing fixtures and brass fittings.....	104.0	103.9	103.0	102.9	101.3	100.5	100.5	100.3	100.3	100.4	100.5	100.6	100.6	100.5	100.1
Heating equipment.....	91.8	91.8	91.7	91.7	91.9	92.4	92.0	92.1	92.1	91.8	92.0	92.7	92.8	92.9	93.2
Fabricated structural metal products.....	99.7	99.6	99.6	99.4	99.3	99.2	98.7	98.9	98.7	99.1	99.0	98.8	98.8	98.2	98.2
Fabricated nonstructural metal products.....	108.2	108.2	108.2	108.0	108.0	108.4	108.2	108.9	109.0	109.4	109.3	108.2	107.1	105.1	103.9
Machinery and motive products.....	103.2	103.0	102.9	102.9	103.1	103.0	103.3	102.9	102.7	102.5	102.5	102.6	102.5	102.2	102.3
Agricultural machinery and equipment.....	113.6	112.9	113.0	113.1	112.9	112.7	112.7	112.7	112.6	112.5	112.1	111.9	111.4	111.1	109.5
Construction machinery and equipment.....	113.2	112.4	112.4	112.3	112.3	112.3	112.3	112.2	112.0	111.8	111.8	111.2	110.9	109.6	107.8
Metalworking machinery and equipment.....	114.0	114.0	113.6	113.3	113.3	112.4	111.8	111.4	111.2	111.0	110.8	110.8	110.5	109.8	109.3
General purpose machinery and equipment.....	105.0	104.8	103.8	103.7	104.4	104.5	104.8	104.7	104.8	104.6	104.6	104.6	104.4	103.8	103.3
Miscellaneous machinery.....	105.1	105.1	104.9	104.7	104.7	104.5	104.4	104.4	104.4	104.3	104.1	103.7	103.7	103.5	103.2
Special industry machinery and equipment.....	106.3	106.0	106.0	106.0	106.0	105.9	105.8	105.8	105.8	105.2	105.2	105.0	104.7	104.0	101.9
Electrical machinery and equipment.....	96.6	96.5	96.6	96.6	96.5	96.5	97.7	97.7	97.0	96.9	96.9	97.7	97.7	97.4	98.4
Motor vehicles.....	100.7	100.7	100.5	100.7	100.9	100.9	101.2	99.9	99.9	99.8	99.8	99.9	99.9	100.0	100.8
Transportation ⁶ equipment railroad rolling stock.....	100.6	100.6	100.6	100.6	100.6	100.1	100.1	100.1	100.5	100.5	100.5	100.5	100.5	100.5	100.5
Furniture and other household durables.....	98.4	98.5	98.6	98.6	98.6	98.5	98.6	98.6	98.5	98.5	98.5	98.0	98.1	98.1	98.8
Household furniture.....	105.6	105.5	105.3	105.3	105.2	105.1	105.3	105.2	105.0	105.0	105.0	104.7	104.8	104.6	103.8
Commercial furniture.....	103.2	103.2	103.2	103.2	103.2	103.2	103.1	103.1	103.1	103.1	103.1	103.1	103.1	102.7	102.3
Floor coverings.....	99.0	99.0	99.0	99.0	99.0	98.6	99.8	100.1	100.1	100.1	100.1	98.0	97.9	96.6	97.0
Household appliances.....	90.8	91.2	91.3	91.3	91.2	91.2	91.6	91.6	91.7	91.8	91.5	91.1	91.2	91.8	94.0
Television, radio receivers, and phonographs.....	87.2	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.2	87.2	87.2	87.3	87.8	88.6	91.1
Other household durable goods.....	104.3	104.3	104.4	104.4	104.4	104.4	104.3	104.1	103.7	103.7	103.5	103.3	103.4	103.2	103.1
Nonmetallic mineral products.....	101.8	101.8	101.8	101.7	101.5	101.4	101.3	101.3	101.1	101.2	101.1	101.3	101.2	101.3	101.8
Flat glass.....	103.1	103.1	103.1	103.1	102.4	102.4	102.4	102.8	101.7	101.0	101.0	101.0	101.0	98.3	97.0
Concrete ingredients.....	102.8	102.8	102.8	102.8	102.7	102.8	102.7	102.8	102.7	102.7	102.7	103.1	102.9	103.0	103.2
Concrete products.....	101.1	101.1	101.1	100.8	100.9	100.8	100.6	100.6	100.7	101.0	101.2	101.4	101.4	101.7	102.6
Structural clay products.....	104.9	104.8	104.6	104.5	104.4	104.5	104.5	104.5	103.9	103.8	103.5	103.5	103.5	103.6	103.5
Gypsum products.....	108.6	108.6	108.6	108.6	108.6	108.6	108.6	108.6	108.6	108.6	106.1	106.1	106.1	105.4	105.0
Prepared asphalt roofing.....	91.2	91.2	91.2	91.2	88.9	86.4	86.4	86.4	86.4	87.4	87.4	87.4	87.4	90.0	94.8
Other nonmetallic minerals.....	101.5	101.5	101.5	101.8	101.7	101.3	101.3	101.3	101.3	101.3	101.3	101.4	101.4	101.4	102.2
Tobacco products and bottled beverages.....	107.5	107.6	107.5	107.5	107.3	107.4	107.3	107.1	107.1	107.1	107.6	107.5	107.5	106.1	104.1
Tobacco products.....	106.1	106.1	106.1	106.0	106.0	106.0	106.0	106.0	106.0	105.9	105.9	105.9	105.9	104.5	102.1
Alcoholic beverages.....	100.5	100.8	100.8	100.8	100.3	100.3	100.5	100.7	100.7	101.0	101.0	101.0	100.9	101.0	101.0
Nonalcoholic beverages.....	128.1	128.1	127.3	127.4	127.4	127.4	126.6	125.3	125.3	125.3	127.7	127.7	127.7	122.6	116.9
Miscellaneous products.....	108.5	110.1	109.2	107.3	107.5	106.7	107.2	109.5	109.8	110.9	112.6	112.2	110.9	110.4	107.3
Toys, sporting goods, small arms, ammunition.....	100.9	101.1	101.2	101.0	101.0	100.9	100.8	100.8	101.1	100.9	100.9	101.1	101.0	101.0	100.8
Manufactured animal feeds.....	112.4	115.3	113.7	110.2	110.7	109.6	110.5	114.8	115.3	117.4	120.4	119.7	117.2	116.4	110.7
Notions and accessories.....	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	98.8	98.7
Jewelry, watches, and photographic equipment.....	103.9	103.9	103.6	103.9	103.9	102.9	103.2	103.2	103.2	103.3	103.6	103.6	103.6	103.7	104.2
Other miscellaneous products.....	103.4	103.1	103.1	102.5	102.5	102.4	102.4	102.4	102.4	101.7	101.7	101.4	101.4	101.4	101.3

¹ As of January 1961, new weights reflecting 1958 values were introduced into the index. See "Weight Revisions in the Wholesale Price Index 1890-1960," *Monthly Labor Review*, February 1962, pp. 175-182.

² As of January 1962, the indexes were converted from the former base of 1947-49=100 to the new base of 1957-59=100. Technical details and earlier

data on the 1957-59 base furnished upon request to the Bureau.

³ Preliminary.

⁴ Revised.

⁵ January 1958=100.

⁶ January 1961=100.

TABLE D-4. Indexes of wholesale prices for special commodity groupings¹[1957-59=100, unless otherwise specified]²

Commodity group	1964											1963		Annual average	
	Nov. ³	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962
All foods.....	101.1	101.3	101.9	100.7	101.3	100.8	99.2	100.1	100.5	100.3	102.1	99.9	101.9	100.4	100.6
All fish.....	108.9	111.6	109.7	105.4	106.6	105.6	105.4	103.1	104.1	109.0	109.8	107.5	106.1	112.0	119.2
All commodities except farm products.....	101.5	101.6	101.3	101.1	101.1	100.9	100.8	101.0	101.0	101.2	101.5	101.1	101.2	100.8	100.9
Textile products, excluding hard fiber products.....	98.9	98.7	98.4	98.3	98.3	98.5	98.9	99.2	99.0	99.4	99.4	99.4	99.1	98.3	98.8
Bituminous coal—domestic sizes.....	99.0	98.3	97.7	95.4	93.9	92.4	92.0	92.1	97.9	100.6	101.1	101.0	100.9	98.4	98.3
Refined petroleum products.....	93.3	91.9	89.5	91.4	92.5	92.3	92.2	91.1	92.9	95.3	96.6	96.1	93.8	97.2	98.2
East Coast markets.....	92.9	91.8	91.8	91.8	91.8	91.8	92.3	93.4	95.1	97.8	97.8	97.8	95.1	96.7	99.4
Midcontinent markets.....	96.2	91.0	81.7	83.1	90.2	88.8	90.2	84.5	88.5	89.7	94.5	93.0	85.4	96.6	98.2
Gulf Coast markets.....	91.8	91.8	91.3	94.3	94.3	94.3	94.3	94.9	95.4	96.5	96.7	96.1	96.1	97.6	98.6
Pacific Coast markets.....	89.2	88.2	88.2	89.7	88.2	88.2	84.1	84.1	84.1	87.7	87.7	89.2	89.2	89.7	90.9
Midwest markets ⁴	88.9	87.7	84.6	85.8	85.8	85.8	86.4	84.5	88.3	93.7	95.5	94.6	90.8	94.2	94.2
Soaps.....	109.7	109.4	107.6	106.8	106.8	106.5	106.5	106.0	105.4	105.4	105.4	105.4	105.4	104.3	102.6
Synthetic detergents.....	99.8	99.8	99.8	99.8	99.8	99.8	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.5	99.7
Pharmaceutical preparations.....	96.9	96.7	96.7	96.8	96.8	96.8	97.7	97.5	97.4	97.5	97.4	97.1	96.9	96.7	97.3
Ethical preparations ⁵	94.8	94.7	94.7	94.8	94.8	94.8	96.2	96.2	96.2	96.2	96.2	96.2	95.8	95.7	96.9
Anti-infectives ⁶	83.4	83.4	83.4	83.4	83.4	83.4	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.4	93.1
Anti-arthritis ⁶	100.6	100.6	100.6	100.6	100.6	100.6	100.6	100.6	100.6	100.6	100.6	100.6	100.6	100.6	100.6
Sedatives and hypnotics ⁶	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.0	112.5
Ataractics ⁶	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	100.0
Anti-spasmodics and anti-cholinergics ⁶	100.2	100.2	100.2	100.2	100.2	100.2	100.2	100.2	100.2	100.2	100.2	100.2	100.2	100.1	100.0
Cardiovasculars and anti-hypertensives ⁶	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	99.9	100.5
Diabetics ⁶	103.8	103.8	103.8	103.8	103.8	103.8	103.8	103.8	103.8	103.8	103.8	103.8	103.8	103.8	104.0
Hormones ⁶	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	100.1	99.6
Diuretics ⁶	100.6	100.6	100.6	100.6	100.6	100.6	100.6	100.6	100.6	100.6	100.6	100.6	100.6	100.0	100.0
Dermatologicals ⁶	108.7	108.7	108.7	108.7	108.7	108.7	108.7	108.7	108.7	108.7	108.7	108.7	108.7	103.3	100.7
Hematitics ⁶	108.8	108.8	108.8	108.8	108.8	108.8	108.8	108.8	108.8	108.8	108.8	108.8	108.8	108.8	108.5
Analgesics ⁶	101.8	101.8	101.8	101.8	101.8	101.8	101.8	101.8	101.8	101.8	101.8	101.8	101.8	101.8	101.8
Anti-obesity preparations ⁶	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	100.0
Cough and cold preparations ⁶	104.3	100.6	100.6	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	96.8	96.8	100.0
Vitamins ⁶	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	88.1
Proprietary preparations ⁶	103.7	103.5	103.4	103.4	103.5	102.7	103.4	102.7	102.2	102.7	102.6	102.1	101.6	101.5	100.5
Vitamins ⁶	100.3	100.3	100.3	100.3	100.3	100.3	100.3	100.3	100.3	100.3	100.3	100.3	100.3	100.3	100.1
Cough and cold preparations ⁶	101.5	101.5	100.9	101.5	101.5	101.5	101.5	100.5	100.5	100.5	99.9	99.2	99.2	99.6	100.0
Laxatives and elimination aids ⁶	106.6	105.4	105.4	105.4	105.4	105.4	105.4	105.4	105.4	104.7	104.7	104.7	104.4	103.8	101.1
Internal analgesics ⁶	102.3	102.3	102.3	102.3	102.3	102.3	102.3	102.3	102.3	102.3	102.3	102.3	102.3	101.8	101.2
Tonics and alteratives ⁶	100.2	100.2	100.2	100.2	100.2	100.2	100.2	100.2	100.2	100.2	100.2	100.2	100.0	100.0	100.0
External analgesics ⁶	103.3	103.3	103.3	103.3	102.8	102.8	102.8	102.8	102.8	102.8	102.8	102.8	102.3	102.3	100.8
Antiseptics ⁶	110.6	110.6	110.6	110.6	110.6	105.2	110.6	106.8	103.5	106.8	106.8	104.9	104.9	103.5	100.4
Antacids ⁶	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	98.9	99.7	99.6
Lumber and wood products (excluding millwork).....	97.4	98.4	98.7	99.1	99.4	99.8	100.4	100.4	99.8	98.5	97.4	97.6	97.8	97.7	95.6
Softwood lumber.....	97.2	98.7	99.1	99.7	100.1	100.6	101.1	100.9	100.4	99.2	97.7	97.8	97.9	98.0	95.9
Pulp, paper, and allied products (excluding building paper and board).....	99.2	99.3	98.9	98.9	98.9	98.9	98.8	99.4	99.6	100.1	100.0	99.6	99.6	99.3	100.1
Special metals and metal products ⁶	103.7	103.4	102.8	102.8	102.5	102.4	102.3	102.1	101.9	101.7	101.6	101.4	101.1	100.5	100.5
Steel mill products.....	102.4	102.4	102.3	102.9	102.9	103.0	103.1	103.1	103.2	103.2	103.1	103.1	103.1	102.0	101.4
Machinery and equipment.....	104.2	103.9	103.8	103.8	103.8	103.7	104.1	104.1	103.8	103.6	103.5	103.7	103.5	103.1	102.9
Agricultural machinery (including tractors).....	115.1	114.3	114.5	114.5	114.3	114.1	114.1	114.0	113.9	113.8	113.4	113.2	112.6	112.2	110.5
Metalworking machinery.....	113.8	113.9	113.5	113.1	113.1	112.5	111.9	111.4	111.4	111.1	110.8	110.8	110.4	109.4	108.8
All tractors.....	115.5	114.3	114.3	114.3	114.1	114.1	114.0	114.0	114.0	113.9	113.9	113.2	112.6	111.3	109.4
Industrial valves.....	106.6	106.0	106.0	106.0	107.9	107.9	107.9	107.9	107.9	107.9	107.6	107.8	107.8	107.5	107.4
Industrial fittings.....	93.0	93.0	93.0	93.0	93.5	92.4	94.8	94.8	94.8	94.8	96.5	96.5	96.5	93.7	93.0
Antifriction bearings and components.....	89.8	89.5	86.8	86.7	89.2	90.6	91.8	91.3	91.3	90.8	90.8	90.8	90.8	90.8	90.8
Abrasive grinding wheels.....	95.5	95.5	95.5	96.2	96.2	96.2	96.2	96.2	96.8	96.8	96.5	96.5	96.3	96.7	98.5
Construction materials.....	99.7	99.8	99.7	99.7	99.7	99.7	99.7	99.7	99.4	99.1	98.8	98.8	98.8	98.5	98.3

¹ See footnote 1, table D-3.² See footnote 2, table D-3.³ Preliminary.⁴ Revised.⁵ New series. January 1961=100.⁶ Metals and metal products, agricultural machinery and equipment, and motor vehicles.

TABLE D-5. Indexes of wholesale prices,¹ by stage of processing and durability of product[1957-59=100]²

Commodity group	1964											1963		Annual average	
	Nov. ³	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1963	1962
All commodities.....	100.7	100.8	100.7	100.3	100.4	100.0	100.1	100.3	100.4	100.5	101.0	100.3	100.7	100.3	100.6
<i>Stage of processing</i>															
Crude materials for further processing.....	94.0	94.3	95.7	94.1	93.8	92.4	93.5	94.2	94.3	94.0	95.1	92.6	95.1	95.0	97.1
Crude foodstuffs and feedstuffs.....	91.1	91.8	94.4	91.7	91.5	89.6	91.3	92.1	92.5	92.2	94.0	90.1	94.2	94.0	96.8
Crude nonfood materials except fuel.....	99.1	98.5	97.7	97.9	97.5	97.5	97.3	97.9	97.1	96.6	96.6	96.3	96.1	96.2	97.4
Crude nonfood materials, except fuel, for manufacturing.....	98.8	98.2	97.2	97.5	97.1	97.1	96.9	97.6	96.6	96.1	96.1	95.7	95.5	95.6	96.9
Crude nonfood materials, except fuel, for construction.....	102.8	102.8	102.8	102.8	102.8	102.8	102.8	102.8	102.7	102.7	102.7	103.1	103.0	103.0	103.2
Crude fuel.....	103.4	102.7	101.9	102.3	101.7	99.8	99.9	101.0	103.2	105.1	104.5	104.6	103.7	103.0	101.8
Crude fuel for manufacturing.....	103.3	102.7	101.8	102.2	101.6	99.8	99.8	101.0	103.1	104.9	104.4	104.4	103.6	103.0	101.8
Crude fuel for nonmanufacturing.....	103.7	103.0	102.1	102.6	101.9	100.0	100.0	101.3	103.6	105.5	104.9	104.9	104.1	103.3	102.0
Intermediate materials, supplies, and components.....	101.1	101.1	100.6	100.4	100.5	100.3	100.6	100.9	100.9	101.2	101.3	101.1	101.0	100.5	100.2
Intermediate materials and components for manufacturing.....	101.0	100.8	100.2	100.1	100.0	100.0	100.2	100.4	100.4	100.4	100.6	100.2	100.4	99.4	99.2
Intermediate materials for food manufacturing.....	105.4	104.8	103.8	103.1	103.1	102.7	103.6	105.3	105.5	107.2	110.2	107.1	110.6	105.5	100.5
Intermediate materials for nondurable manufacturing.....	98.2	98.0	97.6	97.5	97.6	97.6	97.8	97.8	97.8	97.6	97.6	97.5	97.4	97.1	98.0
Intermediate materials for durable manufacturing.....	103.3	103.2	102.5	102.5	102.4	102.3	102.3	102.4	102.3	101.9	101.8	101.6	101.4	100.5	100.4
Components for manufacturing.....	100.3	100.0	99.4	99.3	99.3	99.4	99.9	99.9	99.9	99.4	99.5	99.6	99.6	98.8	98.8
Materials and components for construction.....	100.7	100.7	100.6	100.6	100.6	100.6	100.7	100.7	100.4	100.3	100.1	100.1	100.0	99.6	99.3
Processed fuels and lubricants.....	98.6	97.9	96.6	97.8	98.0	97.8	97.8	97.1	97.4	99.3	99.8	99.7	98.3	100.3	101.2
Processed fuels and lubricants for manufacturing.....	100.3	99.7	98.6	99.6	99.6	99.4	99.5	99.1	99.1	100.9	101.2	101.1	100.0	101.7	102.3
Processed fuels and lubricants for nonmanufacturing.....	95.8	94.9	93.1	94.7	95.3	95.1	95.1	93.9	94.6	96.7	97.3	97.3	95.5	98.1	99.4
Containers, nonreturnable.....	98.8	99.0	98.7	98.7	98.4	98.3	98.3	99.0	99.1	99.9	99.6	100.4	100.6	101.0	102.2
Supplies.....	104.4	105.2	104.6	103.6	103.8	103.4	104.2	105.6	105.6	106.6	107.4	107.0	106.3	106.1	104.5
Supplies for manufacturing.....	105.6	105.7	105.6	105.7	105.8	105.0	105.6	105.7	105.2	105.4	105.3	105.3	105.4	105.4	105.7
Supplies for nonmanufacturing.....	103.3	104.4	103.7	102.2	102.4	102.2	103.0	105.0	105.1	106.5	107.7	107.1	106.0	105.8	103.5
Manufactured animal feeds.....	106.0	108.7	107.2	103.9	104.3	103.3	104.1	108.2	108.6	110.8	113.6	112.9	110.6	109.7	104.1
Other supplies.....	99.9	100.0	99.7	99.4	99.4	99.7	100.5	101.1	101.1	102.0	102.1	101.6	101.4	101.4	101.3
Finished goods (goods to users, including raw foods and fuels).....	102.1	102.1	102.1	101.9	102.1	101.7	101.3	101.3	101.5	101.6	102.1	101.4	101.8	101.4	101.7
Consumer finished goods.....	101.1	101.2	101.3	100.9	101.2	100.8	100.2	100.3	100.7	100.8	101.5	100.6	101.1	100.7	101.2
Consumer foods.....	100.9	101.4	102.2	100.9	101.4	100.7	98.9	99.7	100.2	99.9	101.4	99.4	101.0	100.1	101.3
Consumer crude foods.....	103.1	100.2	101.1	99.1	101.3	102.8	96.9	97.1	100.1	97.5	100.9	98.8	100.2	97.0	98.6
Consumer processed foods.....	100.5	101.5	102.4	101.2	101.4	100.3	99.2	100.1	100.2	100.2	101.5	99.4	101.2	100.6	101.7
Consumer other nondurable goods.....	101.8	101.6	101.0	101.4	101.5	101.2	101.3	101.1	101.5	102.1	102.4	102.2	101.7	101.9	101.6
Consumer durable goods.....	99.9	100.0	99.9	99.9	100.1	100.0	100.1	99.7	99.6	99.6	99.5	99.5	99.6	99.5	100.0
Producer finished goods.....	104.5	104.3	104.2	104.3	104.3	104.1	104.3	103.9	103.8	103.7	103.5	103.6	103.4	103.1	102.9
Producer finished goods for manufacturing.....	106.7	106.6	106.3	106.4	106.4	106.2	106.2	106.0	105.9	105.7	105.6	105.6	105.5	105.0	104.4
Producer finished goods for nonmanufacturing.....	102.4	102.1	102.0	102.2	102.2	102.1	102.3	101.8	101.6	101.7	101.5	101.5	101.3	101.2	101.4
<i>Durability of product</i>															
Total durable goods.....	102.9	102.8	102.4	102.5	102.4	102.3	102.4	102.2	102.0	101.8	101.7	101.6	101.5	101.0	101.0
Total nondurable goods.....	99.1	99.2	99.4	98.7	98.9	98.4	98.4	98.9	99.2	99.5	100.3	99.2	100.0	99.6	100.1
Total manufactures.....	101.4	101.4	101.2	101.0	101.1	100.8	100.8	100.9	100.9	101.1	101.3	100.9	100.9	100.6	100.8
Durable manufactures.....	102.9	102.8	102.5	102.5	102.5	102.4	102.6	102.4	102.2	102.1	101.9	101.9	101.8	101.3	101.3
Nondurable manufactures.....	99.8	100.0	99.8	99.5	99.7	99.1	99.0	99.4	99.6	100.0	100.5	99.9	100.1	99.8	100.1
Total raw or slightly processed goods.....	97.6	97.5	98.4	97.1	97.0	96.4	96.6	97.5	97.9	97.8	99.4	97.1	99.2	98.5	99.5
Durable raw or slightly processed goods.....	104.2	102.6	100.7	101.1	96.8	95.6	95.1	96.2	93.1	92.1	92.1	91.2	90.5	89.6	89.2
Nondurable raw or slightly processed goods.....	97.2	97.2	98.3	96.9	97.0	96.4	96.7	97.6	98.2	98.2	99.8	97.4	99.7	99.1	100.1

¹ See footnote 1, table D-3.² See footnote 2, table D-3.³ Preliminary.⁴ Revised.NOTE: For description of the series by stage of processing, see "New BLS Economic Sector Indexes of Wholesale Prices," *Monthly Labor Review*, December 1955, pp. 1448-1453; and by durability of product and data beginning with 1947, see *Wholesale Prices and Price Indexes, 1957*, BLS Bulletin 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.....	3,367	-----	1,450,000	-----	16,300,000	.14
1962.....	3,614	-----	1,230,000	-----	18,600,000	.16
1963.....	3,362	-----	941,000	-----	16,100,000	.13
1963: November.....	223	467	79,900	152,000	1,410,000	.15
December.....	132	336	27,300	82,400	977,000	.10
1964: January ²	210	370	60,000	100,000	1,010,000	.10
February ²	225	375	80,000	125,000	1,130,000	.12
March ²	220	360	65,000	100,000	800,000	.08
April ²	300	450	122,000	163,000	1,100,000	.10
May ²	410	570	176,000	218,000	2,180,000	.21
June ²	360	585	134,000	227,000	1,930,000	.18
July ²	420	660	133,000	194,000	1,710,000	.15
August ²	340	595	83,000	147,000	1,350,000	.13
September ²	275	515	342,000	409,000	2,320,000	.22
October ²	340	580	199,000	524,000	6,540,000	.60
November ²	275	510	137,000	228,000	1,750,000	.18

¹ The data include all known strikes or lockouts involving 6 workers or more 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.

F.—Work Injuries

TABLE F-1. Injury-frequency rates¹ for selected manufacturing industriesRevised industry classifications.²

Industry	1964 ³					1963 ³					Annual average
	Third quarter				2d quarter	1st quarter	4th quarter	3d quarter	2d quarter	1st quarter	
	July	Aug.	Sept.	Quarter							
Manufacturing.....	13.5	13.5	12.7	13.2	12.6	11.9	11.9	13.0	11.9	11.6	12.1
Ordnance and accessories.....	2.6	1.6	1.6	1.9	1.9	2.5	2.2	2.2	2.3	2.8	2.3
Ammunition, except for small arms.....	1.9	1.7	1.6	1.7	1.7	2.3	1.9	2.0	2.3	2.8	2.2
Sighting and fire control equipment.....				1.9	2.4	3.5	2.1	1.9	2.0	2.5	2.2
Small arms.....				6.6	8.5	6.6	6.5	6.9	6.5	10.2	7.6
Small arms ammunition.....						2.5	3.6	1.6	3.1	1.7	2.6
Food and kindred products.....	24.5	26.0	24.9	25.1	23.5	22.6	21.1	24.6	21.2	21.1	22.1
Meat products.....	40.4	38.8	36.6	38.6	36.9	37.3	31.6	36.1	30.8	29.7	32.0
Dairy products.....	26.9	24.3	28.3	26.5	26.6	23.5	23.1	27.9	26.6	25.3	25.7
Canned and preserved foods, except meats.....	24.6	29.4	27.4	27.3	20.7	19.8	20.9	27.0	20.3	19.8	22.7
Grain mill products.....	16.3	17.1	18.9	17.4	16.6	14.9	15.3	17.3	16.7	14.6	16.0
Bakery products.....	15.7	13.9	14.6	14.7	18.2	14.1	13.9	15.2	14.3	16.0	14.9
Sugar.....	20.8	28.1	27.2	25.3	27.2	25.5	24.4	26.3	17.7	15.4	21.3
Confectionery and related products.....	13.2	12.2	17.1	14.2	10.9	14.0	14.0	14.7	12.3	11.6	13.2
Beverages.....	24.5	29.4	20.6	24.9	21.8	20.4	20.1	26.2	22.9	21.9	22.8
Miscellaneous food and kindred products.....	21.2	26.0	29.9	25.8	21.7	23.9	22.1	22.9	19.9	24.2	22.3
Textile mill products.....	9.9	9.2	8.4	9.1	8.5	8.3	8.6	9.9	8.6	8.4	8.9
Cotton broad woven fabrics.....	6.2	7.1	5.1	6.1	5.8	5.6	5.2	6.6	5.5	4.8	5.5
Silk and synthetic broad woven fabrics.....	7.1	4.9	7.7	6.5	6.9	8.8	9.3	6.4	7.8	7.6	7.8
Weaving, dyeing, and finishing broad woollens.....	13.3	12.8	19.6	15.2	11.9	12.4	11.8	13.1	12.7	11.4	12.2
Narrow fabrics and smallwares.....	15.2	13.9	7.5	11.9	10.6	12.0	13.4	11.8	11.4	11.9	12.1
Knitting mills.....	8.7	10.9	7.5	9.0	8.1	6.8	5.4	8.8	7.8	8.3	7.6
Dyeing and finishing textiles, except wool and knit.....	14.3	11.9	15.7	14.0	11.9	9.7	15.1	17.8	13.2	12.9	14.7
Yarn and thread mills.....	14.5	10.0	9.2	11.1	10.9	8.9	12.3	12.7	9.5	9.4	11.0
Miscellaneous textile goods.....	17.2	12.6	14.6	14.8	12.0	16.6	16.0	19.4	16.3	18.3	17.4
Apparel and related products.....	8.2	6.8	7.3	7.4	7.3	7.4	7.2	7.9	6.5	6.1	6.9
Men's and boys' suits and coats.....	8.3	6.6	7.0	7.2	7.7	8.3	7.3	5.7	6.3	7.4	6.7
Men's and boys' furnishings.....	8.7	6.0	7.4	7.3	7.9	7.7	7.4	8.8	7.1	6.8	7.5
Women's, misses', and juniors' outerwear.....	5.5	4.5	3.7	4.6	4.6	5.0	4.1	4.9	3.9	3.3	4.0
Women's and children's undergarments.....	4.5	8.5	3.1	5.5	5.8	6.4	6.8	5.3	7.8	2.9	5.4
Girls' and children's outerwear.....				8.1	5.6	4.0	6.7	8.5	4.9	8.6	7.2
Miscellaneous apparel and accessories.....				11.6	11.6	9.9	6.1	13.1	7.4	7.3	8.5
Miscellaneous fabricated textile products.....	10.6	10.5	13.1	11.5	8.7	8.5	10.6	11.1	6.8	7.0	8.9
Lumber and wood products, except furniture.....	40.9	37.7	35.7	38.1	35.3	32.5	37.0	37.8	35.7	34.2	36.2
Logging camps and logging contractors.....	58.6	40.3	49.4	49.7	50.9	47.5	60.5	53.0	49.4	49.7	53.4
Sawmills and planing mills.....	43.5	38.8	36.7	39.7	39.0	35.2	41.3	42.5	41.4	37.5	40.7
Millwork, plywood, and related products.....	28.7	29.5	26.7	28.3	23.9	24.0	25.6	26.9	25.7	27.0	26.3
Wooden containers.....	34.6	48.9	35.5	39.5	36.7	30.2	31.4	37.2	31.0	27.4	31.8
Miscellaneous wood products.....	41.9	32.8	33.4	35.9	31.8	29.5	29.0	25.8	29.3	25.6	27.5
Furniture and fixtures.....	21.4	19.8	21.1	20.8	18.6	19.3	19.5	21.9	17.8	17.8	19.2
Household furniture.....	21.3	18.4	20.9	20.1	19.6	20.0	19.1	20.3	17.7	18.7	19.0
Office furniture.....	15.0	11.9	23.5	17.1	14.7	15.3	18.1	24.3	17.4	12.0	17.8
Public building and related furniture.....				24.9	17.3	16.8	20.5	27.6	12.7	17.0	19.6
Partitions; office and store fixtures.....	21.8	29.3	17.5	22.7	22.0	20.4	21.7	23.9	22.1	19.7	21.8
Paper and allied products.....	11.9	12.8	11.9	12.2	13.1	12.9	12.3	12.9	12.4	12.6	12.6
Pulp mills.....											15.1
Paper mills, except building paper.....	8.4	10.0	8.9	9.1	9.2	9.3	9.2	9.5	9.3	9.5	9.4
Paperboard mills.....	10.6	13.3	8.8	10.8	11.1	12.9	13.2	12.7	11.4	11.9	12.2
Converted paper and paperboard products.....	13.5	13.5	18.8	15.4	15.9	14.8	12.4	13.9	14.7	14.0	13.8
Paperboard containers and boxes.....	14.7	13.1	13.3	13.7	15.9	14.7	13.4	15.1	13.4	14.7	14.2
Building paper and building board mills.....	16.4	11.1	9.2	12.2	17.5	15.1	11.4	11.3	11.8	10.5	11.3
Printing, publishing, and allied industries.....	9.6	7.9	9.0	8.8	9.2	10.4	8.9	10.0	9.6	11.3	10.0
Newspapers: publishing and printing.....	6.5	6.3	7.8	6.8	8.9	10.2	9.4	7.4	9.3	11.7	9.4
Periodicals: publishing and printing.....	5.1	4.2	5.1	4.8	4.9	9.3	6.2	7.2	5.6	9.4	7.1
Books.....	12.3	8.6	6.1	8.9	13.2	8.9	7.6	8.1	7.5	8.5	7.9
Miscellaneous publishing.....											7.2
Commercial printing.....	11.9	9.5	11.0	10.9	9.3	11.6	9.9	13.2	11.6	13.4	12.0
Manifold business forms.....				11.3	12.7	10.2	8.9	11.9	8.4	9.8	9.8
Greeting cards.....				11.4	9.2	8.3	11.4	14.8	11.0	13.9	12.7
Chemicals and allied products.....	7.7	8.5	6.9	7.7	7.9	7.1	7.6	8.2	8.2	8.4	8.0
Industrial chemicals.....	4.0	5.3	4.6	4.6	4.5	4.5	4.6	5.2	4.8	5.5	5.0
Plastics and synthetic materials.....	4.3	5.3	3.8	4.4	4.8	4.6	4.4	4.9	6.1	4.8	5.1
Drugs.....	7.1	5.6	4.4	5.7	6.3	5.1	5.9	7.6	6.5	5.9	6.5
Soap, cleaners, and toilet goods.....	14.7	11.7	11.4	12.5	11.4	14.0	14.7	13.8	13.4	15.1	14.3
Paints, varnishes, and allied products.....	11.1	15.7	12.5	13.0	14.6	11.7	10.3	13.2	13.7	13.7	12.7
Agricultural chemicals.....				21.0	24.7	12.4	13.2	10.2	17.8	12.7	13.8
Miscellaneous chemical products.....	14.7	19.1	14.1	16.0	10.4	10.8	13.4	10.5	9.2	12.6	11.4
Petroleum refining and related industries.....											15.3
Paving and roofing materials.....											10.3
Rubber and miscellaneous plastics products.....	12.8	13.3	10.2	12.1	11.0	9.7	10.3	11.9	9.9	9.6	10.3
Tires and inner tubes.....	9.1	6.4	5.2	6.8	5.7	5.8	5.1	7.3	5.4	5.1	5.7
Rubber footwear.....				2.6	4.8	2.3	2.9	5.4	3.1	5.2	4.2
Fabricated rubber products, not elsewhere classified.....	13.6	15.9	10.0	13.1	11.2	10.3	10.3	10.9	9.7	9.5	10.0
Miscellaneous plastics products.....	14.7	17.0	16.6	16.2	17.6	13.2	16.8	16.6	16.3	14.7	16.2

See footnotes at end of table.

TABLE F-1. Injury-frequency rates¹ for selected manufacturing industries—ContinuedRevised industry classifications.²

Industry	1964 ³						1963 ³				Annual average
	Thrd quarter				2d quarter	1st quarter	4th quarter	3d quarter	2d quarter	1st quarter	
	July	Aug.	Sept.	Quarter							
Leather and leather products	15.8	12.7	16.4	14.8	13.9	14.6	11.4	13.3	13.0	13.3	12.7
Leather tanning and finishing	31.1	30.1	30.0	30.4	32.4	32.2	25.3	31.2	29.7	30.8	29.2
Boot and shoe cut stock and findings									9.0	10.0	23.4
Footwear, except rubber	12.9	9.3	12.8	11.7	10.0	11.4	8.6	9.6	16.2	15.7	16.9
Stone, clay, and glass products	16.5	18.8	17.4	17.5	18.3	14.6	16.8	19.4	8.9	7.2	8.5
Flat glass	7.9	7.8	12.2	9.3	11.6	5.8	8.8	9.1	6.9	8.5	6.9
Glass and glassware, pressed or blown	6.6	8.1	8.6	7.8	7.1	6.3	8.5	8.1	6.8	6.9	7.1
Glass products, made of purchased glass	8.2	10.7	7.4	8.8	4.0	4.1	6.9	6.8	6.9	7.1	27.7
Structural clay products	24.4	28.1	30.3	27.5	31.6	25.1	29.0	32.4	26.2	23.2	18.0
Pottery and related products	19.8	19.5	20.4	19.9	23.3	18.4	17.8	21.6	15.5	17.3	30.2
Concrete, gypsum, and plaster products	31.3	35.7	26.4	31.2	29.9	29.4	27.7	36.3	26.9	29.4	11.5
Miscellaneous nonmetallic mineral products	11.1	14.5	10.2	11.9	11.6	10.2	10.6	12.9	11.3	11.3	10.9
Primary metal industries	12.3	11.9	11.6	11.9	12.0	11.2	11.0	11.5	10.6	10.6	4.2
Blast furnaces, steel works, basic steel products	4.6	4.3	3.8	4.3	4.5	4.0	4.2	4.3	4.0	4.3	25.8
Iron and steel foundries	29.6	29.1	30.1	29.6	28.9	24.1	25.9	27.4	26.2	23.7	11.5
Nonferrous rolling, drawing, and extruding	13.7	14.9	12.4	13.6	13.2	12.2	12.0	12.2	11.7	10.2	19.4
Nonferrous foundries	27.7	25.0	24.1	25.5	23.6	24.4	17.8	21.1	19.2	19.6	19.8
Miscellaneous primary metal industries	24.5	20.4	20.1	21.5	20.1	19.7	17.9	20.0	20.3	20.9	16.1
Fabricated metal products	19.1	20.4	18.6	19.3	17.1	16.1	16.1	17.7	16.0	14.9	6.0
Metal cans	6.6	8.1	8.0	7.6	7.9	6.6	6.6	6.0	6.1	5.4	12.4
Cutlery, handtools, and general hardware	14.9	13.9	15.4	14.8	14.5	13.4	13.4	13.4	12.2	10.9	17.5
Heating apparatus and plumbing fixtures	20.5	22.4	21.7	21.6	16.9	16.2	19.9	13.3	17.2	14.3	22.0
Fabricated structural metal products	28.8	29.5	27.2	28.4	24.6	22.8	21.2	23.3	22.7	20.4	13.3
Screw machine products, bolts, etc.	14.0	18.0	13.5	15.2	16.0	14.6	12.2	16.6	11.3	13.4	10.3
Metal stampings	10.5	11.4	9.8	10.5	9.1	8.8	10.3	11.2	10.1	9.7	22.9
Coating, engraving, and allied services				36.2	14.9	19.6	23.4	31.3	20.4	17.0	19.0
Miscellaneous fabricated wire products	17.7	18.9	20.5	19.1	19.7	23.5	17.1	21.4	19.0	18.5	15.2
Miscellaneous fabricated metal products	18.4	22.5	16.8	19.1	15.2	13.7	14.9	15.7	15.5	14.8	11.2
Machinery, except electrical	12.9	12.6	12.4	12.6	12.1	11.7	11.4	11.5	11.2	10.6	6.3
Engines and turbines	6.2	8.1	4.8	6.3	6.3	6.3	6.7	6.5	6.7	5.5	11.4
Farm machinery and equipment	7.3	9.4	9.7	8.9	10.5	10.2	10.9	11.1	12.3	11.3	13.4
Construction, mining, materials-handling machinery	17.5	15.3	16.1	16.3	14.7	14.6	13.0	13.8	13.8	13.4	10.0
Metalworking machinery and equipment	12.7	11.6	11.0	11.7	11.8	10.2	10.6	9.9	9.6	9.7	14.1
Special industry machinery	16.4	13.2	14.2	14.6	15.3	14.7	14.7	15.3	14.2	12.4	10.7
General industrial machinery and equipment	11.3	13.7	14.1	13.1	11.1	12.3	10.9	12.1	10.3	9.4	2.7
Office, computing, and accounting machines	3.6	3.4	3.8	3.6	3.5	3.0	2.6	2.5	2.6	3.3	13.3
Service industry machines	13.4	11.6	11.9	12.3	11.6	10.6	13.6	13.9	13.9	11.8	17.8
Miscellaneous machinery, except electrical	19.9	18.5	21.3	19.9	18.5	17.1	18.9	16.6	16.7	19.2	5.3
Electrical machinery, equipment, and supplies	5.8	5.3	5.2	5.4	5.6	5.2	5.3	5.7	5.2	5.2	5.8
Electric transmission and distribution equipment	5.4	5.6	5.4	5.6	7.8	5.9	4.5	4.8	5.6	6.0	8.1
Electrical industrial apparatus	6.8	5.1	5.1	5.7	5.8	5.9	5.8	5.5	5.3	6.3	8.9
Household appliances	5.3	8.3	7.1	6.9	8.1	7.7	7.2	8.8	8.6	7.8	2.7
Electric lighting and wiring equipment	15.6	14.5	10.3	13.3	8.5	9.5	8.4	10.3	8.9	8.1	3.7
Radios and television receiving sets	2.5	3.5	5.8	4.1	4.8	3.8	4.1	5.2	2.6	2.7	2.7
Communication equipment	2.8	2.3	1.8	2.3	2.3	2.2	2.5	2.7	2.7	2.8	5.7
Electronic components and accessories	6.4	5.9	8.3	6.9	6.5	6.1	5.6	6.3	5.7	5.6	9.5
Miscellaneous electrical equipment and supplies	10.9	8.9	8.6	9.4	9.9	9.2	12.0	10.8	7.6	7.4	7.5
Transportation equipment	8.1	8.4	7.2	7.9	7.9	7.1	7.2	7.6	7.9	7.4	4.3
Motor vehicles and equipment	3.9	4.4	4.0	4.1	3.9	3.7	4.0	4.6	4.4	4.2	3.4
Aircraft and parts	3.5	3.6	3.2	3.5	3.5	3.6	3.8	3.4	3.4	3.2	26.6
Ship and boat building and repairing	31.2	29.6	27.5	29.4	34.4	27.9	24.7	26.4	28.0	27.1	11.2
Railroad equipment	15.0	12.4	10.4	12.5	13.6	12.2	13.0	10.9	11.4	9.0	5.9
Instruments and related products	6.3	5.9	5.6	5.9	5.3	5.4	5.4	5.4	6.3	6.4	7.9
Engineering and scientific instruments	5.0	2.6	3.7	3.7	3.3	4.2	4.0	5.3	6.7	7.7	6.5
Mechanical measuring and control devices	10.1	9.4	9.1	9.6	9.1	8.9	7.6	7.8	7.9	8.6	3.8
Surgical, medical, and dental equipment	5.1	6.4	4.1	5.2	4.1	6.3	6.3	5.7	7.6	6.3	4.0
Ophthalmic goods				2.8	4.3	3.4	3.0	4.4	2.0	5.9	6.1
Photographic equipment and supplies	5.5	4.8	5.1	5.1	3.8	3.3	4.3	3.7	4.9	3.2	5.4
Watches and clocks				4.5	4.7	3.6	6.7	5.1	3.5	6.1	13.4
Miscellaneous manufacturing industries	13.3	12.9	13.1	13.1	13.2	12.9	13.8	15.8	13.4	10.6	8.7
Jewelry, silverware, and plated ware	7.2	1.8	9.3	6.1	7.5	10.5	7.7	8.7	8.8	9.7	12.1
Musical instruments and parts				10.6	14.2	8.2	13.0	10.1	12.9	12.9	15.2
Toys, amusement, and sporting goods	14.6	15.0	17.1	15.7	14.0	16.5	16.8	17.9	15.0	10.5	15.8
Pens, pencils, office and art materials				13.5	19.9	10.7	19.2	21.5	13.5	8.8	12.1
Costume jewelry, buttons, and notions	17.1	18.0	8.7	14.6	11.8	12.5	11.2	15.1	12.4	10.2	9.6
Other miscellaneous manufacturing industries	7.5	9.6	5.1	7.4	10.4	8.6	7.8	11.5	10.3	8.7	

¹ The injury-frequency rate is the average number of disabling work injuries for each million employee-hours worked. A disabling work injury is any injury occurring in the course of and arising out of employment, which (a) results in death or permanent physical impairment, or (b) makes the injured worker unable to perform the duties of any regularly established job which is open and available to him throughout the hours corresponding to his regular shift on any 1 or more days after the day of injury (including Sundays, days off, or plant shutdowns). The term "injury" includes occupational diseases.

² Beginning with the first quarter of 1963, the revised injury data reflect both changes in industry definitions and reclassification of individual reports on the basis of improved classification information. A detailed explanation

of the changes in industry definitions is available upon request. Comparisons to the series prior to 1963 should be made with caution. Industries classified according to the *Standard Industrial Classification Manual 1957* Edition, Bureau of the Budget. Industry group totals include data for industries not shown separately.

³ Rates are preliminary and subject to revision when final annual data become available.

NOTES: These data were compiled according to the *American Standard Method of Recording and Measuring Work-Injury Experience*, approved by the American Standards Association, 1954.

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