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Job Tenure of American Workers

Earnings in Bituminous Coal Mines

Intercity Family Food Budget

UNITED STATES DEPARTMENT OF LABOR

BUREAU OF LABOR STATISTICS

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Monthly Labor Review

UNITED STATES DEPARTMENT OF LABOR • BUREAU OF LABOR STATISTICS

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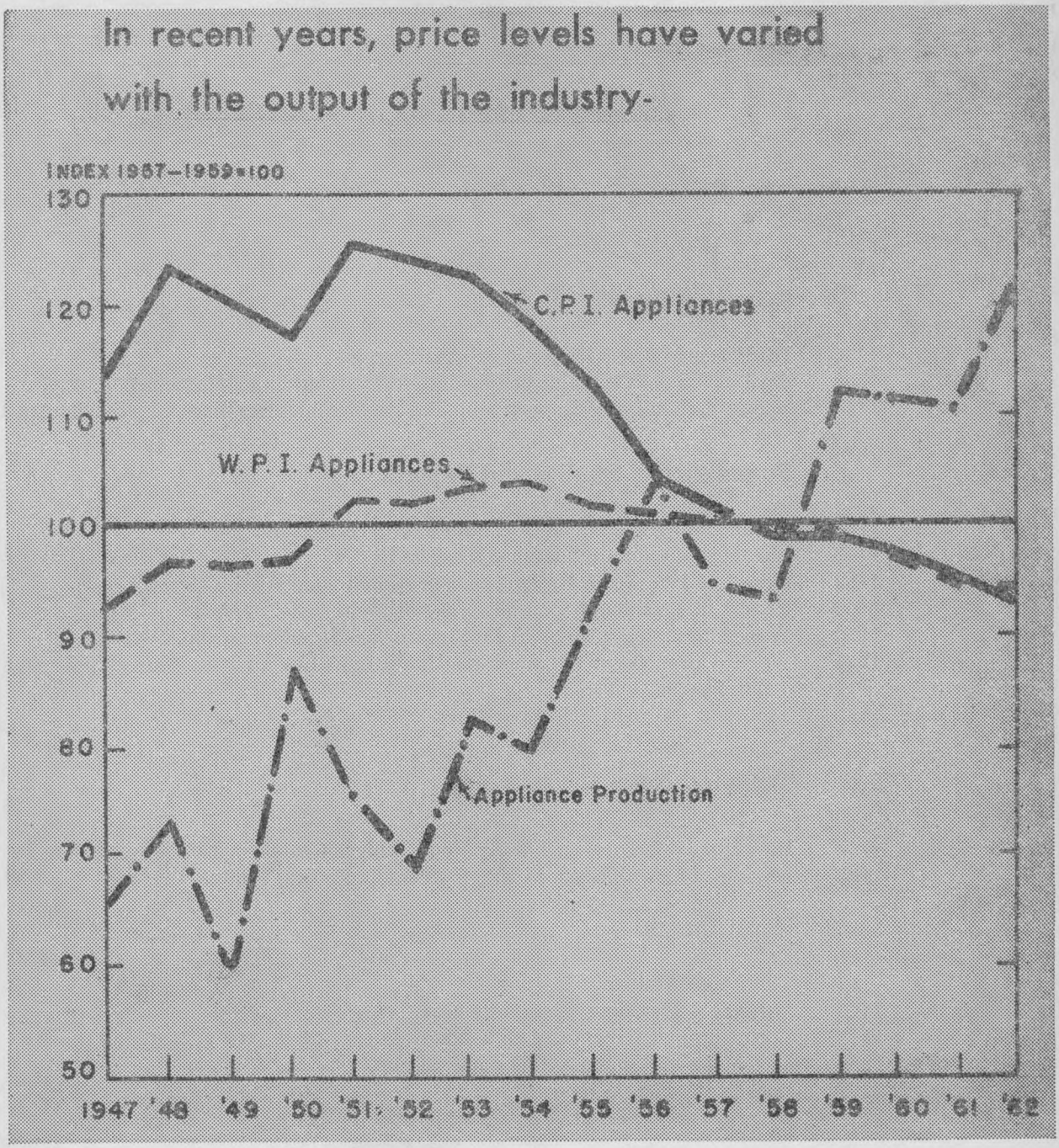
APPLIANCE OUTPUT AND PRICES



See "Price Trends and the Postwar Market for Appliances" in the November Monthly Labor Review

The Labor Month in Review

RECENT ASSESSMENTS of the effect of technological change on the economy do not diminish the controversy which has surrounded this subject since automation became a household word. Not only is it difficult to separate the effects of technological change from a lot of other variables that help to determine the level of employment and unemployment and changes in the structure of the labor force, but competent analysts differ in the conclusions they derive when using the same data on productivity.

Obviously, changes in capital investment, the scale of operation of a business, the phase of the business cycle, the level of management and worker skills, industrial relations, and the supply of raw materials may also result in changes in output per man-hour. In addition, some types of technological change—such as the development of a new product—may not be directly reflected in a productivity index.

Despite these obstacles to measuring the effect of technological change precisely, changes in output per man-hour have become a commonly accepted indicator of the rate of technological change. Therefore, relationships between current and less recent trends in productivity, and between changes in productivity and changes in output, should be useful tools for policymaking by government, business, and labor.

PRODUCTIVITY (OUTPUT PER MAN-HOUR) in the private economy increased about 4 percent in 1962—a relatively large increase. To add some perspective to this figure, productivity and manpower specialists in the Bureau of Labor Statistics evaluated recent data in their fields for the Subcommittee on Employment and Manpower of the U.S. Senate Committee on Labor and Public Welfare. The following discussion is based upon their testimony.

Since wide annual fluctuations in productivity make it difficult to determine what period of time is best for measuring trends, averages for varying periods, computed from man-hour information from establishment surveys made by the BLS, are used.

From 1909 to 1947, output per man-hour of the private economy rose 2 percent a year. For the entire longrun period 1909–62, which of course reflects the influence of the postwar years, the average rate was 2.4 percent. Thus, productivity for the postwar period as a whole and for the last 5 years has increased at a more rapid rate than over the long run. The longrun rate is also influenced by the decline in productivity which occurred in the early years of the depression, but it is difficult to find any long, sustained period with an average productivity gain as high as that of the 3 percent for the postwar period. In the decade 1919–29, when performance was relatively good, the average rate was about 2.9 percent.

It has been generally established that over short periods of time, productivity changes are closely related to changes in output, i.e., during expansion, when output goes up rapidly, productivity tends to increase rapidly, while it declines or shows a smaller increase during a downturn. If the rise in output per man-hour is not accompanied by an equivalent increase in output, employment will decline.

For the postwar period as a whole, and for the last 5 years, output went up more than productivity, but not by very much. For example, between 1957–62, private output went up 3.3 percent a year, while productivity rose 3.0 annually. Employment rose 0.7 percent a year in those 5 years.

VARYING MOVEMENTS of output and productivity within the private economy reveal specific indications of the effect of technological change. In manufacturing, during the first 10 postwar years, 1947–57, total output went up substantially more than productivity—4.3 versus 3.4 percent—so there was a margin for expansion in employment. However, since 1957, the average increase in output barely exceeded the average gain in productivity—3.6 versus 3.4 percent. Using output per man-hour for production workers only—which increased 3.6 percent per annum between 1947–57 and 4.1 percent for the last 5 years—for comparison, the implications are even more serious.

There have been, of course, other times of high output per man-hour of factory production work-

ers. In the decade 1919–29, the annual rate was 5.3 percent. However, total output increased at the same rate during that period, so there was no decline in total hours of production-worker employment. The current experience of high rates of productivity increases in manufacturing in the face of smaller gains in output, with its implication of relatively greater consequences of technological change or other labor saving factors, brings on the problem of job opportunities for blue-collar workers.

In contrast to manufacturing, productivity growth in nonmanufacturing as a whole has been relatively stable in the postwar years. (The average annual increase for the last 5 years was 2.4 percent; for the postwar period it was 2.3 percent.) There has been a change in the output-productivity relationship, however, which points to a declining margin of employment opportunity. Output has generally gone up more than productivity throughout the postwar years, but it has not gone up as fast in the last 5 years as it did earlier.

Agricultural output per man-hour improved less than 1 percent a year betwen 1909 and the mid-1930's, then picked up speed and since 1947 has an average of 5.8 percent a year. Because of large annual fluctuations, changes in trend are not easily discernible. Growth in this sector does seem to have slowed in the later part of the postwar period. For the last 5 years, the average has been 4.7 percent.

Although in the long run there has been a close relationship between productivity and growth of output and employment, in short time periods the process of productivity growth is often accompanied by sharp dislocation of workers and industries. When there are plenty of employment opportunities, shifts may be easy, but if output is not increasing fast enough, if workers lack necessary education or skills, if there is race or sex discrimination, or if there are impediments to mobility, unemployment may rise.

To gain insight into the numbers and characteristics of workers who will be available to meet the changing demands of the economy suggested by the trends just discussed, projections of the labor force are made, which attempt to reflect how people would behave under conditions of ample demand for labor, or full employment.

The labor force is expected to grow faster in the 1960's than in the 1950's—from 73.1 million in 1960 to 85.7 in 1970, or by 12.6 million, compared with 8.3 million in the 1950's. As it grows, the labor force will change in composition, with an increased proportion of young workers, older workers, and women, and with very little increase among men in the 25 to 44 age group. The greater number of women will be matched by a greater relative demand in occupations in which they are typically employed. The change in age composition will, however, require industry to use many more young workers relative to those in the prime working age group than is done now.

The implications of the changes in age composition of the labor force between 1960 and 1975 can be illustrated by the craftsmen occupations. Almost 70 percent of this group were 35 years of age or over in 1960; in 1975, there may have to be a great many more craft workers 25 to 34 and even 20 to 24 to fill the expected demand for these skills.

Since young workers are expected to provide almost half the additional labor supply in the present decade, the amount and quality of their education and training will be particularly important to them and to the nation. Occupational trends point to a shrinkage in the proportion of jobs requiring less skill and training. Moreover, the education requirements for many jobs have been rising because of technological changes which have raised the job content.

Fortunately, as the increasing proportion of youth who complete high school and college enter the labor market, and the older workers with less schooling leave, the educational level of the labor force will rise. For example, no increase in the number of workers 25 years old and over with less than 4 years of high school is expected between now and 1975, despite a 20-percent rise in the size of the labor force. The proportion of mature workers with at least a high school education will increase from about half in 1960 to over 60 percent in 1975; the proportion with a college degree, from 12 percent to 14 percent.

BLS Occupational Trend Projections: An Appraisal

HAROLD GOLDSTEIN*

EDITOR'S NOTE.—*The following article is an excerpt, with minor editorial modifications, from an address delivered before the Interstate Conference on Labor Statistics at San Francisco, Calif., June 27, 1963.*

AUTOMATION and other technological changes have affected the jobs of many workers, and created fears of job loss for others, whose attempts to assure their job security have been a major factor in recent collective bargaining situations. A rapidly moving economy needs an "early warning system" designed to forecast the effect of technological or other economic changes upon employment. It should be a complete system of evaluation of changing employment opportunities—of growth and decline in different fields—designed to provide information that would help industry, government, and individuals to adjust to the changing demands of the job market.

The Department of Labor has had such an early warning system for two decades: the occupational outlook research program of the Bureau of Labor Statistics. The program stemmed from the 1938 recommendation of a Presidential Advisory Committee on Education that an occupational outlook service be set up in the Bureau to make studies of employment trends and provide information for the use of individuals in choosing a career, and for the use of those responsible for the planning of education and training programs.

In requesting the first appropriation to get the service started, the Secretary of Labor and the Commissioner of Labor Statistics warned the Congress that projections of this type were difficult, and that basic studies would have to be made and experiments conducted for some years before any projections could be published. In fact, it was 5 years before the first publication was issued, in 1945.[1] Four years later, in 1949, the results of all the work done up to that time, much of it with the support of the Veterans Administration, were summarized in the first edition of the *Occupational Outlook Handbook*[2] which described future employment opportunities in more than 200 occupations. A second edition, in 1951, was somewhat larger. Beginning in 1957, with additional support from Congress, the volume was issued every 2 years. In the sixth edition, to be issued this fall, over 600 occupations will be covered.

The recently published data from the 1960 census of population by employment status and occupation enable us, for the first time, to evaluate the accuracy of the projections made in 1949 against the background of the actual employment changes which took place between 1950 and 1960.

There are some technical problems in evaluating this experience. One of them is that the long-range outlook statements in the *1949 Handbook* were written for the guidance of the individual in making an occupational choice. They were often expressed in terms of future employment opportunities, which reflect not only the growth or decline in demand in an occupation, but also expectations as to supply (a matter of some moment at that time because of the very large numbers of students in training for some occupations under the postwar veterans educational program) and replacement needs (which in many occupations open more jobs than net growth). Moreover, the projections were not expressed in quantitative but in rather general verbal terms which were not only imprecise but also reflected the normal idiosyncratic differences among writers and, in some cases, caution which is to be expected when a government agency publishes long-range projections about individual industries or occupations.

The evaluation is also complicated by imperfections in the data available to measure actual changes that have taken place since the forecasts were made. For many occupations, no data were

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[1] *Employment Opportunities for Diesel-Engine Mechanics,* BLS Bulletin 813 (1945); see *Monthly Labor Review,* February 1945, pp. 276–285.

[2] BLS Bulletin 940 (11949).

available at all. Many of the reported occupations were not completely comparable as between the 1950 and the 1960 censuses, because of shifts in popular terminology and differences in the way in which the census data were collected.

Before reporting on the results of this evaluation, it would be worthwhile to review briefly the character of the period for which these projections were made. It was a difficult period from the point of view of assessing the long-range outlook. During this time occurred major unforeseen, and possibly unforeseeable, events, including the war in Korea, the subsequent cold war and step-up of the size of the military establishment and of defense production, followed by the missile race and then the space race with their accent on science and technology.

The vantage point from which any projection is made is the present and the recent past. At the time these projections were made, 1948, we had gone through a decade of severe depression from which we had been pulled out in large part by a war. It was not easy for the general public, and indeed for many economists, to assume a rapid long-term growth of the economy.

This conservatism about the rate of future economic growth is illustrated in the Census Bureau's long-term projections of the population, which provided a framework for all long-term projections at that period. They had been published a few years before the 1949 edition of the *Handbook* was written. The medium projection of the population increase for the 1950's (a "high" and a "low" projection were also made) was at the rate of less than 1 percent a year to a total of just over 150 million by 1960. Moreover, the total population was expected to peak at 170 million around 1988, and then gradually to decline.

As we all know, by 1960 the population reached not 150 million, but 180 million, and is now projected by the Bureau of the Census at 210 million, more or less, in 1970. Thus, the population basis for projections in the late 1940's not only understated the total size of the American consumer market, but also the numbers of children for whom medical services, educational services, and many consumer products would have to be provided. The general economic assumptions underlying the studies for the *1949 Occupational Outlook Handbook* made inadequate allowance for these factors, as well as for the high level of defense production and scientific and technical employment that was occasioned by the missile and space competition.

Against this background, how well did an early warning system function in putting us on notice of declines in employment? In general, with the population and labor force growing, the safest assumption in the long run for projections is that every occupation will grow. It takes some boldness to identify industries or occupations which will decline in the face of a general expansion in the economy. It is most likely, therefore, that forecasters' conservatism would operate most strongly against predicting declines. How did it work in fact?

It is possible to identify in the 1950 and 1960 censuses some 24 occupations in which a decline took place (excluding very small declines which may have resulted from the large number of persons classified in the 1960 census as "occupation not reported"). Out of these 24 occupations, the 1949 *Handbook* had indicated an actual decline in nearly half, and a failure to grow in almost all the others. It indicated slow growth in one, and an average growth in one occupation. Thus, in the face of general presumption of economic growth, the *Handbook* clearly indicated a decline or failure to grow in 22 out of 24 occupations that in fact subsequently declined. Among the declines foreseen were some in the principal railway occupations, some in the metal trades (such as foundry and forge shop occupations and boilermaker), a few in building trades (such as paperhanger and painter) even though total construction was expected to increase, and one skilled printing trade—bookbinder—against a rising trend expected in other printing trades. Thus the first *Handbook*, representing the earliest research and the least experience, did a fair job in warning of declining occupations. Anticipation of the effects of technological changes was a major factor in those evaluations; in the case of the railroads, competition of other forms of transportation was also a factor considered.

Looking at the problem of evaluating the projections in the *Handbook* in broader terms—as a forecast of both increases and declines—we can compare the 1949 projections with subsequent experience for 108 occupations for which employment statistics are available. In setting up this

test, we should set standards more rigid than a simple forecast of the direction of change, since in a growing economy a forecast that every occupation will increase will be correct in a majority of cases. We have already seen that declines were anticipated with considerable success. To make the test more rigid with respect to the increases, we should check whether not only the direction but also the approximate magnitude of the change was anticipated. The statements in the *Handbook* about the outlook may be classified into five categories in relation to the average growth in employment which was expected to take place: No growth or decline, slow growth, average growth, above-average growth, and rapid growth. In evaluating the actual data reported in the 1950 and 1960 censuses or other sources of information on employment changes in occupations, average growth was taken to mean an increase of between 15 and 25 percent from 1950 to 1960 (since a decline in farm employment contributed to the overall employment growth rate of about 15 percent, and all of the occupations evaluated were nonfarm occupations). Rapid growth was taken to mean increases of 40 percent or more. Thus, the projections will be evaluated in terms of how well they anticipated the *relative* growth rate in each occupation.

When the 108 occupations are classified according to the predicted and actual rates of growth, we find that in 57 cases the actual rate of growth was in the same broad classification as the projected rate. In 18 cases the forecast was close—in the adjoining category. Thus, in 75 of the 108 cases, the forecast was reasonably accurate.

In 24 cases, the actual employment change was substantially different from the forecast, although still in the right direction (e.g., when above-average growth was forecast, the actual growth was slow; or when average growth was forecast, the actual growth was rapid).

Only in nine cases did the actual employment change go in opposite direction from the forecast—in two cases the occupation declined or failed to grow when growth was predicted, in seven cases the occupation increased when no growth or a decline was predicted.

In summary, 75 out of 108 predictions were reasonably accurate, and only 9 in the wrong direction. But what can we learn from the failures? The occupations increasing more than predicted were four times more numerous than those growing less than predicted—41 as compared to 10. When examined, they turned out to be preponderantly professional, clerical, and service occupations, whose growth in the 1950's—especially the professional and clerical fields—was very rapid. Only one of the professional occupations—pharmacists—grew somewhat more slowly than predicted, increasing slowly when it was expected to have an average increase. Among the blue-collar occupations, the number growing faster than predicted was about double the number growing more slowly—20 as compared to 9. Thus, there was a downward bias in the projections, especially in the case of the professional, clerical, and service occupations. Apparently, the structural shifts in the economy—especially the rapid development of white-collar occupations and service-producing industries—were not fully anticipated. The failure to project population growth accurately was reflected in an understatement of the demand for teachers and some of the personal service occupations, and the failure to anticipate the missile and space boom resulted in an understatement of the growth of engineers.

When the projections are examined by industry rather than by occupation against the subsequent course of events in industry growth, as measured by the Bureau's employment statistics for the period 1948–62, a similar degree of accuracy is seen. In the 1949 *Handbook*, longrun projections were given for 14 industries. In three of them, declines were indicated; in three others, no substantial changes in employment were expected; in eight, increases were foreseen. Of these 14 projections, 10 were borne out by events in the following 13 years. All three declines were forecast accurately—in railroads, foundries, and jewelry manufacturing. In the fur manufacturing industry, the projection was a cautious "no increases in employment are expected"; actually, employment declined by 16 percent. The watch and clock manufacturing industry was projected to have a longrun trend slowly upward; instead, a 30-percent decline took place. In this case, the projection reflected failure to take adequate account of import competition. The construction industry, booming in 1948, was projected to remain "at a high level for some time to come," a statement so cautious

that it fell short of foreshadowing the increase of more than 25 percent in construction employment that took place. A similar statement and similar error appeared in the projection for newspaper printing and publishing.

The following conclusions may be drawn from the preliminary evaluation of this economic experience in long-range projection: (1) This first attempt in the 1949 *Handbook* was particularly successful in identifying declining industries and occupations; (2) it was successful in about 3 out of 4 cases in projecting the direction and relative magnitude of all changes in employment by occupation, and by industry, both increases and decreases (and thus, both in pointing to growing fields as well as in warning about declining ones, made a contribution to the allocation of manpower in line with changing employment opportunity); (3) on the whole, there was a generally conservative bias in this first effort, reflecting the vantage point from which the projections were made (the depression of the 1930's and the low population growth rates projected at the time), and reflecting also inability to foresee the cold war and missile race; and (4) there appears to have been a tendency toward caution, which is to be expected when a government agency issues projections—caution in anticipating extreme changes, caution in anticipating changes in direction from past trends, and caution in pointing to declining employment when the evidence is less than overwhelming.

With this fairly good record chalked up in a first attempt, we can hope for even better performance now and in the future. There are a number of factors which encourage hope:

1. In the past 15 years, a great deal of experience has accumulated, not only in the BLS staff working in this area, but among economists generally. We now can go over this experience, dissecting it and learning where and why we were wrong and what kinds of analyses gave good answers. Moreover, we now develop a systematic projection of the entire economy, built on projections of the labor force and population. This will tend to prevent a general bias in the projections by forcing us to arrive at a total consistent with the economic projection by summing up the projections of individual occupations and industries.

2. We now have behind us a 10-year post-Korea period in which there has been no war or major depression, and this serves as a takeoff point for the projection of economic relationships which is much better than was available in the late 1940's after more than a decade of economic dislocations caused by a severe depression and a war.

3. Much new statistical data have become available to illuminate key areas of economic behavior—consumer expenditure patterns, research expenditures, interindustry flow of goods and services, to name a few. Along with the new data are improved techniques for analysis, being applied in a cooperative interagency study of economic growth.

4. We now have somewhat better data on employment by occupation within each industry and for the country as a whole in intercensal periods. This is made possible by an occupational-industry matrix, which enables us to make the implications of industry change for occupational change more explicit. Furthermore, the proposed development of a system of current employment statistics by occupation (for which a planning study is beginning this year) will make possible the analysis of changing employment levels of each occupation in each industry in relation to the industry's total employment and output. These data are now available annually for scientific and technical personnel, and will be extended to all major occupations in a new program initiated by the Bureau following a recommendation of the President's Committee to Appraise Employment and Unemployment Statistics.

Thus, there is reason to conclude that a workable early warning system of the effect of economic and technological change on employment in each occupation and industry is in operation, and to expect that it will be steadily improved.

Coal and Steel Community Policies for Averting Unemployment

EDITOR'S NOTE.—*This article is adapted from testimony by Kurt Braun, of the Division of Foreign Labor Conditions, Bureau of Labor Statistics, before the Subcommittee on Employment and Manpower of the Senate Committee on Labor and Public Welfare, on June 21, 1963.*

ALONG WITH its general economic development policy, the European Coal and Steel Community (ECSC) [1] is pursuing a policy of "readaptation and redevelopment" designed to help protect workers against unemployment and to redevelop depressed areas. Recognizing that technological progress in a wider economic area would necessitate regrouping and rationalization, and hence the closing of some enterprises, the authors of the Community's basic Treaty authorized its executive and lawmaking body—the High Authority [2]—to finance, by a levy on coal and steel production within the Community, readaptation assistance to affected workers and to encourage mobility. Regarding European labor and capital as "not sufficiently mobile for readjustment to take place automatically," the ECSC also, through the High Authority, advances funds for industrial redevelopment in regions where there is little or no other industry that could absorb mining and steel workers who would lose their jobs through the closing of enterprises. Thereby, the Community seeks to make new jobs available to workers, either immediately after displacement or after retraining.

Readaptation

The purpose of readaptation is the reconciling of two imperatives—economic progress and full employment. At first intended primarily to ease the consequences of increased competition in the common market during its initial stage, it now serves also to cushion the burden of structural and technological change which labor must bear. In the ECSC, readaptation includes: (1) Payment of a waiting allowance to workers between jobs; (2) payment of a differential allowance to make up a wage differential between the new and the former job; (3) payment of moving and transfer costs; and (4) free training for a new job.

Development of Readaptation Assistance. Believing in the beginning that readaptation aid would be needed only in the introductory phases of the common market for coal and steel, the founders of the Community included transitional provisions concerning this type of aid in a separate Convention annexed to the main Treaty. Section 23 of this Convention required the High Authority to assist, during the transitional period (ending in February 1958), in efforts to give workers protection from the burden of readaptation and the opportunity to continue productive employment if their employer ceased or changed his activities. The High Authority also was authorized to grant nonrepayable aid to certain enterprises. The national governments concerned had to match the

[1] The ECSC was formed in 1951 and began to operate on February 10, 1953. It is composed of the same six countries that later formed the European Economic Community (EEC): Belgium, France, the Federal Republic of Germany, Italy, Luxembourg, and The Netherlands. Preceding the formation of EEC (popularly known as the European Common Market) and the European Atomic Energy Community (EURATOM), the ECSC may be considered as the pilot project among the various programs for European economic unification.

The ECSC has the mission to contribute to the expansion of the economy, the development of employment, and the improvement of the standard of living in the participating countries through the creation of a common market in harmony with the general economy of the member states. "The Community must progressively establish conditions which will in themselves assure the most rational distribution of production at the highest possible level of productivity, while safeguarding the continuity of employment and avoiding the creation of fundamental and persistent disturbances of the economies of the member states."

[2] The High Authority is composed of nine members; eight are appointed by the governments of the member countries in agreement among themselves; the ninth is elected by the government-appointed members. All the members shall exercise their functions exclusively in the general interest of the Community, and the member states are obligated to refrain from any attempt to influence them in the performance of their duties.

The High Authority is assisted by a Consultative Committee including an equal number of representatives of organizations of manufacturers, workers, consumers, and dealers. It may consult the committee on any matter; it must do so in a number of cases spelled out in the Treaty. The members of the Consultative Committee are appointed by the Council of Ministers, which consists of one cabinet member from each of the six member states and which has the duty to harmonize the activities of the High Authority and those of the member governments in carrying out their basic economic policies.

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outlays of the High Authority; but this rule was applied in a flexible manner.

When it became clear after the end of the transitional period that readaptation aid would continue to be needed, article 56 of the Treaty, which contained readaptation provisions considerably less liberal than the Convention, was amended (in January 1960) to avoid curtailment of readaptation assistance and to make this type of assistance a permanent feature of the ECSC manpower policy. The new article 56 provides for measures designed to deal with (1) exceptionally large declines in labor requirements due to technological changes, which make it especially difficult in one or more areas to reemploy displaced workers and (2) permanent suspension, curtailment, or change of activities resulting from profound changes in the marketing conditions for coal or iron and steel not connected with the introduction of the common market.

In the former case, the High Authority shall, at the request of the government concerned and after consulting the Consultative Committee, make nonrepayable grants for use as a contribution to waiting allowances to support workers pending reemployment or to facilitate their resettlement, or as a subsidy to the costs of retraining workers forced to change their type of employment. In addition, the High Authority may grant or guarantee loans to mining and steel enterprises for programs to create new and economically sound job opportunities for surplus labor. With the consent of the Council of Ministers, this type of aid may be given also to industries not under the jurisdiction of the ECSC.

All of these forms of assistance may also be given in the case of cessation, curtailment, or change of activities resulting from changes in the marketing conditions. In addition, the High Authority may facilitate the financing of approved programs for the conversion of enterprises and give nonrepayable aid to the enterprises for continuing wage and salary payments during temporary layoffs necessitated by changes in their activities.

Extent of Assistance Measures. The waiting allowance may be paid for as long as 2 years if employment does not become available sooner. Paid on a tapering scale, it may amount to 90–100 percent of the former wage for the first 4 months and decreases gradually thereafter, frequently to 60 percent by the end of the period. Moreover, if the new job yields a wage lower than the old one, the loss may be made up completely or in part for a period likewise not exceeding 2 years. Workers receiving a waiting allowance are also eligible for retraining.

Resettlement or transfer allowances include lump-sum payments to help the worker defray travel and moving expenses for himself and his family and other expenditures connected with the transfer to a job at another location. The amount of such payments depends upon the cost involved, which differs in the various regions of the Community. Thus, in 1956, a transfer allowance for a married steelworker in Italy totaled $320, whereas miners of a comparable status in the French Centre-Midi received $560.

Although ad hoc retraining measures designed to cope with specific situations are taken when and where this is considered expedient, training for a new job is usually performed within the vocational training systems of the member countries. Since these systems are by no means uniform, the European Economic Community has outlined a common policy on vocational training in industry. The EEC Council of Ministers recently adopted proposals for the implementation of these outlines submitted by the EEC Commission and the European Parliament.[3] The new measures are designed to help reduce the shortage of skilled labor which acted as a brake on the EEC's economic expansion in 1961 and 1962. At the session at which the new policy was adopted, the chairman of the Social Affairs Committee of the Common Market Commission stated that "imbalances and tensions in the labor market are due in large measure to lack of adequate vocational training (in the Community more than 600,000 advertised jobs

[3] When the EEC and EURATOM were added to the ECSC in 1958, the governments of the six countries involved agreed that the three communities should have a common assembly, called the European Parliament. The 142 members of this Parliament are at present elected by and from the legislatures of the member countries. (The treaties of the various communities envisage election by direct universal suffrage in the future.) They are seated in three political groups (Christian Democrats, Socialists, and Liberals), irrespective of nationality.

The EEC Commission, composed of nine members appointed by the six governments but acting independently of national governments or sectional interests, is answerable exclusively to the European Parliament.

have remained vacant) . . . and regional development policy is often hampered by shortages of skilled labor." [4] He declared that the new policy will make it possible "to initiate programs which take account of the various countries' needs and meet them by joint actions."

The first measures taken to put the new scheme in practice were the introduction of (1) forecasting of the numbers, types, and grades of manpower needed in the Community's job markets and (2) constant guidance to young people and adults in the light of their capabilities and of the existing openings. The EEC Commission can propose to the Council of Ministers or to the member governments any measures necessary to achieve the vocational aims; these may be financed jointly by the members and the Community. Special rapid training courses are envisaged to achieve short-term balance between the demand for and the supply of skilled labor. These courses will be carried through in conjunction with forecasts indicating the Community's most urgent manpower needs.

An agreement between the High Authority and the German Federal Government on readaptation assistance to workers at German coal mines preparing to close by April 30, 1963, which was greeted with approval by the workers' organizations concerned, may be mentioned as a rather typical example of a readaptation plan. It entitled displaced mineworkers finding themselves either unemployed or undergoing occupational retraining to a waiting allowance equivalent to 50 percent of their previous gross wage and to additional payments according to number of dependents. Moreover, the High Authority agreed to assume part of the cost of occupational retraining, Discharged mineworkers taking up employment in another industry were given the right to a differential allowance equivalent to the difference between 60 percent of their previous gross wage and their new net wage and, likewise, to additional payments according to number of dependents. The differential allowance is 65 percent for workers who find new employment within the coal mining industry, but suffer a loss in earnings because they are placed in a lower wage group or are paid day rates instead of piece rates. Workers who are eligible for a pension under the social insurance law for the mining industry (a disability pension for 50 percent or more disablement or, for those age 50 or over, a regular miner's pension or a pension from the miners' provident fund) and who leave by arrangement with management are entitled to payment of a lump sum of DM 3,000 (about US$750). The German Government and the High Authority may refund 50 percent of a special allowance which a mine may pay to such workers.

To obtain any nonrepayable assistance, the interested country must still at least match the contribution by the High Authority. However, article 56 now explicitly admits exceptions from this rule if they are authorized by a two-thirds majority of the Council of Ministers.

In several instances, exceptions have been granted from this rule on sharing the cost of readaptation plans. Italy, for example, obtained a waiver for allowance payments and, with the approval of the High Authority, made a corresponding amount of low interest capital available for investment in new industry in depressed coal and steel areas. Thus, the High Authority accepted sole responsibility for the payment of waiting, retraining, and related allowances.

Likewise administered flexibly is the general rule that readaptation payments supersede national unemployment compensation, for which participants in a readaptation plan are not necessarily eligible. Some unemployed Belgian miners, for example, received, during the coal crisis, a special allowance, granted by the ECSC in addition to resettlement aid, of 20 percent of daily wages to supplement the regular unemployment benefits payable under the Belgian social security provisions.

During the first 10 years of the ECSC's operation, the High Authority has approved readaptation plans for over 156,000 workers, including 129,000 miners.[5] Its own contributions to these plans totaled more than $53 million and the governments of six member countries, among them, contributed an approximately equal amount. These sums were used to continue wages of workers looking for a job, to provide free retraining, to preserve (for not more than 2 years) wage levels of workers who accepted lower paying jobs, to refund travel and moving expenses incurred by

[4] *Bulletin from the European Community*, May 1962, p. 18.

[5] *Ten Years of the Coal-Steel Common Market* (Brussels, Spokesman of the ECSC's High Authority and European Community Information Service, undated).

READAPTATION WITH HIGH AUTHORITY PARTICIPATION UNDER ARTICLE 56,2, 1960–JAN. 31, 1963

Country	Total	Coal mining	Iron-ore mines	Iron and steel
	Number of workers			
Total	42,156	33,789	4,534	3,833
Germany (Federal Republic)	23,067	17,324	3,687	2,056
Belgium	12,145	12,010	----------	135
France	6,944	4,455	847	1,642
	Amount contributed by High Authority (thousands of dollars)			
Total	$11,170	$9,313	$1,028	$829
Germany (Federal Republic)	$5,030	$4,105	$666	$259
Belgium	2,448	2,363	----------	85
France	3,692	2,845	362	485

SOURCE: Summary of the Eleventh General Report on the Activities of the European Coal and Steel Community, March 14, 1963, p. 52.

workers changing the place of residence to take new jobs, or, in some countries, to pay lump sums to discharged workers.

Readaptation is, at present, being undertaken on a considerable scale because of the speedup of reconstruction operations in the coal mining industry and the structural changes now going on in the steel market. (See accompanying table.) The High Authority recently accepted a large number of applications for assistance to workers in the coal and iron-ore mines and, for the first time, the iron and steel industry. Because of varying local conditions, it also introduced changes and procedural improvements regarding certain types of assistance in order to make them more effective in safeguarding the standard of living of the workers concerned.

Mobility-Stimulating Measures. A major difficulty encountered in readaptation programs has been the traditional immobility of European workers. Although geographic as well as occupational mobility have increased considerably in recent years, the authorities in charge of various manpower programs have found that the European worker's attachment to his home area still is often so strong that he is unwilling to move, even to a nearby province. This, according to the report on the first 10 years of the ECSC, was demonstrated again not long ago, when workers of the Cevennes mines in southern France staged an orderly but determined stay-down strike while the northern mines were trying vainly to recruit the miners, whom they needed urgently.

There have been many other instances in which factors such as community attachment, seniority differences, temporary housing difficulties, and differences in language and even dialect have worked against resettlement. Experiences of this kind have contributed in no small measure to the ECSC's emphasis on the stimulation of labor mobility and the encouragement, as far as possible, of local redevelopment.

Financial support for free retraining, mentioned earlier, has been the chief method of encouraging occupational mobility of skilled and unskilled workers. The various types of resettlement aid are designed to promote geographic mobility. In addition, article 69 of the Treaty binds member countries to renounce any restrictions based on nationality on employing nationals of any member who have the "recognized qualifications" for positions in the coal and steel industries. (Supplementary agreements list numerous categories of skilled workers as meeting the qualifications.) The article also requires member countries to prohibit any discrimination in payment and working conditions as between domestic and foreign workers and to insure that differences in social security measures do not impede the movement of labor.

To implement the former provisions, the governments of the six member countries in 1957 concluded an agreement for the issuance of labor cards entitling miners and steelworkers possessing specified skills to work in any ESCS country without being subject to normal immigration and employment restrictions on foreign workers. Such miners and steelworkers may accept employment offered to them directly by an employer or through a regional employment service as a result of a matching of offers of and requests for employment, but they may not shop around for a job in a foreign country. From the institution of this system on September 1, 1957, to September 30, 1962, 1,695 cards were issued, and 423 cardholders obtained employment in Community countries other than their own.

Likewise in 1957, the six governments signed the European Convention on Social Security for Migrant Workers, thus implementing the Treaty provision for the harmonization of national social security regulations. The Convention established a number of rules designed to eliminate differences

in the reciprocal arrangements which had been set up in bilateral agreements and to abrogate certain provisions which were unfavorable to migrant workers. Any European country which does not belong to the ECSC but is a member of the International Labor Organization may accede to the Convention subject to the prior consent of all contracting parties.

Redevelopment Program

It has been mentioned that, owing to widespread labor immobility, the ECSC is as much interested in moving jobs to workers as in moving workers to jobs. Operating in close consultation with national agencies, the High Authority thus advances funds to be used to create new employment opportunities in depressed areas. To take care, in particular, of redundant miners, it has participated in a number of redevelopment plans in mining regions.

Such programs have provided 6,000 new jobs. The High Authority has made an investment loan to an aluminum plant built in the neighborhood of the now-closed mine at Champagnac, France. It has also provided funds for a project in the Liege area for preparing, leveling, and removing slag heaps from a site for new firms which will provide some 4,000 new jobs. With ECSC assistance, an aluminum-rolling mill employing between 500 and 700 people and a rubber plant, which is prepared to recruit 3 percent of its personnel from among redundant miners, are to be built in the depressed Borinage coalfield in Belgium. A textile company in Troyes has been granted a loan to open a mill at St. Eloys-les-Mines, a depressed mining town in the Puy-de-Dome region of France. All male employees hired at this mill will be miners put out of work by production setbacks in the Auvergne coalfields.

The High Authority considers that it is essential to avoid any time lag between the closure of a large enterprise and the creation of new employment opportunities. Accordingly, it seeks to gear each step of a redevelopment plan to expected employment problems and the probable course of the reorganization, regarding these aspects as more important than the actual degree of unemployment existing at any particular point of time.

Approaching the problem from the investor's standpoint, the High Authority has stated that a time lag between the closure of a mine and the start of corrective measures would prevent incoming enterprises from recruiting until the most productive workers had either found new local employment or left the area. In accordance with these principles, the Community, for example, helps establish and equip industrial settlements around mines before they are actually closed.

Evaluation

As indicated, the ECSC's High Authority can act only at the request of the governments of member countries, and, thus, cannot insist that any particular measure be taken; it can only use persuasion, since all initiative and responsibility rests with the national governments. Accordingly, it concentrates on getting the problems recognized, discussing them with all the parties immediately concerned, and securing the joint implementation of the arrangements ultimately agreed upon. Furthermore, the High Authority regards each operation as a separate entity whose individual features must be taken into account; hence the tendency to deal with the social problems involved in a flexible and comprehensive manner. Frequently, only a combination of readaptation and redevelopment operations is considered adequate, especially in the case of mine closures under the coal industry's reorganization program.

Some persons involved in the application of the ECSC's manpower policies have considered it a shortcoming that the initiative and ultimate responsibility for taking readaptation and related measures lie with the member governments.[6] They have asserted that this situation, together with the fact that the national governments also make the actual disbursements, has tended to slow down efforts to stimulate employment. Accordingly, it has been suggested that the procedures be modified and that the High Authority be empowered to act on its own motion.

The High Authority's methods of combating unemployment have had the support of the people in the six countries involved, including organized labor. Most observers agree that the readaptation

[6] See, for example, *Notes on the Readaptation Program* (ECSC Information Service, June 1958).

system is playing a particularly vital part in preventing disturbances incident to the reorganization of the Community's coal industry and the closing of mines unable to compete with more economic producers, both inside and outside the Community. Moreover, there has apparently been no friction within labor due to jobless coal and steel workers receiving benefits which other unemployed persons had to get along without. According to the High Authority, workers now are beginning to realize the importance of economic viability in their area for their own living conditions and their children's future, and, thus, are becoming less concerned with the preservation of uneconomic enterprises.

In the 10 years since the start of the ECSC's operation, unemployment in the covered industries has decreased. In the declining coal mining industry, where many aid projects have involved mines which could not be made profitable by new investment, this decrease has been brought about largely by readaptation and redevelopment activities. Their beneficial effects will probably survive even if the general economic boom levels off. Fewer workers should, in that case, lose their jobs, and the problem of placing the jobless thus should be less serious than it would otherwise be.

The methods here discussed have been effective also in the steel industry, where they have been used largely to support and retrain workers during unemployment due to reconversion or modernization of enterprises. But nowhere have they been put to the test under conditions other than general scarcity of labor. It thus cannot be said to what extent low unemployment and increased labor mobility have been attributable to the joint activities of the High Authority and the ECSC countries or to the generally tight labor market. Community leaders freely acknowledge that prosperity and the heavy demands on all resources of production have prevented any extreme strain on the readaptation system.

As to labor mobility, the ECSC Treaty does not yet guarantee complete freedom of movement within the Community but limits it to workers with certain skills who have been offered a job in a foreign country. Such offers have been forthcoming only when suitable domestic labor has been unavailable. The High Authority has characterized the labor card system as an "innovation limited in effect but important as an experiment." Furthermore, the international harmonization of social security provisions is still largely in the discussion and planning stage.

All things considered, the true test of the effectiveness of the High Authority's working methods will not come until the present European boom has diminished.

Special Labor Force Report

EDITOR'S NOTE.—*The following article is part of a series of reports on special labor force subjects. Other articles in the series have covered such subjects as employment of high school graduates and dropouts, work experience of the population, job mobility, and projections of the labor force. Reprints of all articles in the series, including in most cases additional detailed tables and explanatory notes, are available upon request to the Bureau or to any of its regional offices (listed on the inside cover of this issue.)*

Job Tenure of American Workers, January 1963

HARVEY R. HAMEL*

SOME 6½ of the 66 million persons employed during January 1963 had held the same job for at least 21 years, in spite of the dislocations of a world war, the Korean military action, and four business recessions since 1948. At the other extreme, 16 million persons had worked at the same job 1 year or less and 17.5 million had held the same job between 1 and 5 years. For all workers, the average (median) number of years of continuous association with the same employer or business was 4.6 in January 1963, about a third higher than the 3.4 years average tenure noted in a comparable survey in 1951.[1] (See table 1.)

Such variations in tenure, particularly in view of continuing high unemployment, have generated much interest in the job stability of the American work force. This study provides information on job tenure or the length of time that workers had been continuously employed on the job they held at the time of a survey in January 1963[2] and examines the variability of job tenure by age and sex, color, industry and class of worker, and occupation. One application of the data is presented in the final section of this article which discusses the proportions of workers which can be expected to continue at their present job through 1973.

Tenure by Age and Sex

Job tenure increases as workers grow older (table 2). Workers under age 25, who have the highest rate of job changing, averaged less than a year on their current job. Many in this age group were starting their first job or working intermittently while at school. As persons grow older, they are less likely to change jobs.

	Median years on current job
All employed persons	4.6
14 to 24 years	.8
25 to 44 years	4.2
45 years and over	10.4

Studies of the rate of job changing during a year show that older workers (45–64 years old) are only half as likely to change jobs as persons in the central age groups (25–44 years).[3] This tendency is reflected in the following tabulation, which shows that more than 3 out of 4 of the workers who had been employed at their current job for more than 15 years were at least 45 years old.

*Of the Division of Employment and Labor Force Analysis, Bureau of Labor Statistics.

[1] "Experience of Workers at Their Current Jobs, January 1951," *Current Population Reports*, Series P–50, No. 36.

[2] The data were obtained from answers to a supplementary question—"When did _____ start working at his present job (or business) ?"—to the regular monthly survey of the labor force conducted for the Bureau of Labor Statistics by the Bureau of the Census in the calendar week ending January 12, 1963.

For wage and salary workers, a "job" was defined as a "continuous period of employment with a single employer": for self-employed workers, as a "continuous period of employment in a particular type of business in the same locality."

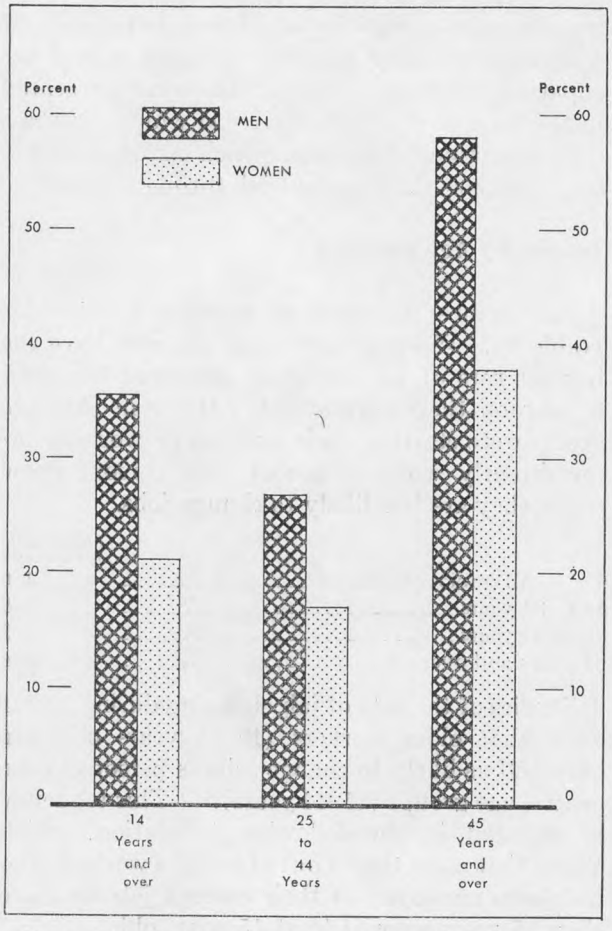
[3] "Job Mobility in 1961," *Monthly Labor Review*, August 1963, table 1, p. 898.

Employed at the same job for more than 15 years	*Number (millions)*	*Percent*
All workers	12. 4	100. 0
Under 45 years old	2. 8	22. 6
45 years old and over	9. 6	77. 4

In the central age group (25–44 years old), only 27 percent of the men and 15 percent of the women had worked more than 10 years for the same employer but among the older workers the proportions rose to some 58 percent for men and 38 percent for women. (See chart.)

The increase in job tenure with age is greater for men than for women. Men 25 to 44 years old had an average duration of 5 years compared with about 3 for women in the same age group, and among men and women 45 years old and over, the average job tenure lengthened to some 13 years and 7 years, respectively.

Workers on Current Job More Than 10 Years, by Selected Ages and Sex, January 1963



Note: Excludes persons not reporting length of time on current job.

Men had been on the same job nearly twice as long, on the average, as women: 5.7 and 3.0 years, respectively. More than one-third of the men had been continuously employed for over 10 years but only one-fifth of the women. Moreover, twice the proportion of men as of women had been working at the same job for more than 15 years. A greater proportion of women than men had been continuously employed for only 5 years or less. One cause of greater job stability among men is their tendency to remain in the labor force, while many women move into and out of the labor force as their family responsibilities change.

Single women have much the same job tenure as men in the same age groups and after age 45, on the average, stay even longer with the same employer. However, since relatively few women remain single, the job pattern for those who are married dominates the overall employment picture for women, as the following tabulation of median years on current jobs shows:

	Married women, husband present	*Single women*	*Men*
All employed persons	3. 4	1. 8	5. 7
14 to 24 years old	. 9	. 8	. 8
25 to 34 years old	1. 9	3. 6	3. 5
35 to 44 years old	3. 4	7. 3	7. 6
45 years old and over	6. 4	14. 2	12. 8

Single women had greater job tenure than married women, age for age, except for women under 25, where average duration was about the same for both groups. The average duration for all married women (3.4 years) was, however, much higher than for single women (1.8 years). This difference reflects the greater proportion of married women in age groups with longer job tenure (35 years and over) and the overwhelming percentage of single women in the youngest age groups, where job tenure is very low. Duration of the current job was much longer for women who usually work full time than for those who usually work at part-time jobs, 3.4 versus 2.0 years (table 3).

Tenure by Color

In the years since the start of World War II, the Negro population, particularly, has undergone profound social and economic changes. Some changes, including large-scale migration away from the rural South, have worked to shorten their average job tenure. White workers employed in

TABLE 1. LENGTH OF EMPLOYMENT OF WORKERS ON CURRENT JOB, BY SEX, JANUARY 1963

[Thousands of persons 14 years old and over]

Date current job started	Both sexes	Male	Female	Percent distribution		
				Both sexes	Male	Female
Total workers employed in January 1963	65,935	43,505	22,430	100.0	100.0	100.0
July 1962–January 1963	11,268	6,387	4,881	17.1	14.7	21.8
January–June 1962	4,900	3,028	1,872	7.4	7.0	8.4
January–December 1961	5,714	3,333	2,381	8.7	7.7	10.6
January–December 1960	4,643	2,795	1,848	7.0	6.4	8.2
January 1958–December 1959	7,166	4,494	2,672	10.9	10.3	11.9
January 1955–December 1957	7,645	5,103	2,542	11.6	11.7	11.3
January 1953–December 1954	3,095	2,130	965	4.7	4.9	4.3
July 1950–December 1952	4,265	3,022	1,243	6.5	6.9	5.5
October 1945–June 1950	6,285	4,827	1,458	9.5	11.1	6.5
January 1942–September 1945	2,619	1,861	758	4.0	4.3	3.4
Before January 1942	6,491	5,337	1,154	9.8	12.3	5.1
Date not reported	1,844	1,188	656	2.8	2.7	2.9
Median years on current job	4.6	5.7	3.0	------	------	------

January 1963 averaged considerably longer continuous employment on their current job than nonwhite workers (over 90 percent of whom are Negroes), 4.7 years and 3.6 years, respectively. Average job tenure for white and nonwhite women was about the same—3 years—but white men averaged about 2 years longer than nonwhite men, 6 versus 4 years. Additional evidence of conditions that tend to cut down the job tenure of nonwhites is discussed in a recent Bureau of Labor Statistics study.[4]

Long-term employment was much more frequent among white than nonwhite men, with 35 percent and 28 percent, respectively, working at the same job or business for over a decade. Also, among men 45 years old and over, a much larger proportion of the white workers still had the same job that they had started prior to January 1942; 29 percent compared with only 18 percent of the nonwhite workers. The higher average for white men reflects to a large extent their relatively greater employment in white-collar and craftsman jobs, whereas a disproportionate number of nonwhite men work at service and laborer jobs where relatively high rates of unemployment are characteristic. Even in the more stable occupations, nonwhites suffer a higher rate of joblessness, generally twice that of whites.

Not only was job tenure the same for white and nonwhite women, but about the same proportion of both white and nonwhite women (20 percent) had held their current job for more than 10 years. One might expect job tenure for nonwhite women to be shorter than for white women, because a much greater proportion of nonwhite women are employed in service occupations where work is less steady than in clerical jobs in which white women are concentrated. This factor is offset by the greater tendency for nonwhite than for white women to remain continuously in the labor force because of economic necessity. This more continuous association with the work force is reflected by their higher labor force participation rates.

Tenure by Industry and Class of Worker

Persons operating their own businesses or farms averaged much longer tenure than wage and salary workers. A majority of the male farmers were 45 years old or older, and 42 percent had operated their farms since before World War II. Self-employed men in agriculture averaged 18 years on the job, compared with only a year and a half for wage and salary farm workers, many of whom are subject to frequent spells of unemployment (table 4). Self-employed men in nonfarm industries, with money or time invested in a business enterprise or in learning a profession, had been consistently employed for 9 years on the average, nearly twice as long as wage and salary workers.

Men and women wage and salary workers employed in transportation and public utilities had greater job stability than workers in any other major industry group. Men in this industry had averaged about 10 years on their current job, and about one-third of them had been working at

TABLE 2. WHITE AND NONWHITE WORKERS: MEDIAN YEARS ON CURRENT JOB, BY AGE AND SEX, JANUARY 1963

Age	Both sexes			Male			Female		
	Total	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite
Total, 14 years and over	4.6	4.7	3.6	5.7	5.9	4.1	3.0	3.0	2.9
14 to 24 years	0.8	0.8	0.6	0.8	0.9	0.7	0.8	0.8	0.5
25 to 34 years	3.0	3.1	2.4	3.5	3.6	2.6	2.0	2.0	2.1
35 to 44 years	6.0	6.1	5.0	7.6	7.7	6.5	3.6	3.6	3.7
45 to 54 years	9.0	9.3	7.3	11.4	11.6	9.6	6.1	6.1	5.7
55 to 64 years	11.8	12.1	8.8	14.7	15.1	11.2	7.8	7.9	6.4
65 years and over	13.8	13.6	17.3	16.6	16.3	19.7	8.8	8.4	(1)

[1] Median not shown where base is less than 100,000.

[4] "Economic Status of Nonwhite Workers, 1955–62," *Monthly Labor Review*, July 1963, pp. 780–788.

TABLE 3. FULL- AND PART-TIME JOBS OF WOMEN: MEDIAN YEARS ON CURRENT JOB, BY AGE AND MARITAL STATUS, JANUARY 1963

Age and marital status	Median years on job		
	Total	Usually work—	
		Full time	Part time
ALL WOMEN			
Total, 14 years and over	3.0	3.4	2.0
14 to 24 years	0.8	0.9	0.5
25 to 34 years	2.0	2.3	1.1
35 to 44 years	3.6	4.0	2.2
45 years and over	6.8	7.4	5.1
SINGLE			
Total, 14 years and over	1.8	2.3	.8
14 to 24 years	0.8	0.9	0.6
25 to 34 years	3.6	3.6	(1)
35 to 44 years	7.3	7.5	(1)
45 years and over	14.2	14.7	10.6
MARRIED, HUSBAND PRESENT			
Total, 14 years and over	3.4	3.7	2.6
14 to 24 years	0.9	1.0	0.4
25 to 34 years	1.9	2.1	1.2
35 to 44 years	3.4	3.7	2.2
45 years and over	6.4	6.8	5.1
OTHER MARITAL STATUS [2]			
Total, 14 years and over	4.1	4.3	3.3
14 to 24 years	0.7	0.8	(1)
25 to 34 years	1.4	1.5	(1)
35 to 44 years	3.0	3.4	1.8
45 years and over	6.3	6.6	4.9

[1] Median not shown where base is less than 100,000.
[2] Includes widowed, divorced, and married, spouse absent.

the same job for over 15 years. Railroad workers, who comprise a large proportion of this group, had the longest current job duration of men working in any nonfarm industry (18 years). Some 40 percent of them had been working continuously since before World War II. Their exceptionally long tenure can probably be explained by the large proportion of older workers employed on railroads, where seniority has played an important role in governing layoffs and cutbacks.

The shortest tenure for men, 2½ years, was among construction workers, more than one-fourth of whom had been on their current job for no more than a half year. Their comparatively short average job duration reflects not only the inherent seasonality and limited duration of construction jobs, but also the industry's sensitivity to changes in business conditions. Continuous employment was also of short duration for workers in service and trade industries, which have many part-time workers and seasonal labor requirements as well.

Workers in manufacturing were employed considerably more steadily than the average wage and salary worker. Men working in durable goods industries had somewhat longer tenure (7.2 years) than those in nondurable goods industries (6.6 years), but for the women, the average was the same (about 4 years). Among male factory workers, job attachment was longest (12 years) for those employed in the primary metal industries. Twenty-five percent of these metalworkers had been continuously employed since before January 1942, compared with only 14 percent for all durable goods industries. Automobile workers had held their jobs for an average of 10 years, and 1 out of 6, for more than 21 years. At the other extreme were men in the highly seasonal lumber and wood products industry who averaged only about 3 years. One-fourth of these workers had been employed on their current job for 6 months or less, a much greater proportion than for any other group of factory workers, male or female. Among the nondurable goods industries, the longest average duration (8 years) was for men who make chemicals, and one of the shortest (4 years), for those in printing and publishing, an industry which has many young people employed distributing newspapers. Men working in public administration had comparatively long job duration—averaging about 7½ years, with 1 out of 4 having worked at the same job more than 15 years. Of this group, postal workers had the longest average tenure—about 9½ years.

Among the major industries, women workers in transportation and public utilities had the longest job duration—averaging about 6 years. Among women employed in the service and finance and trade industries, job tenure was very short, less than 2½ years. For example, about one-third of them had been working at their current job 1 year or less. Among women factory workers, who had an average of 4 years of continuous job attachment, job stability was highest among those in fabricated metal (5.5 years) and nonelectrical machinery industries (6 years). For women employed in the apparel industry, which has more women workers than any other in manufacturing, the average length of time on their current job was 3½ years, one of the shortest among the goods-producing industries.

Tenure by Occupation

Persons in occupations which require the most training, financial investment, or experience generally had the greatest degree of job stability. As previously indicated, farmers and farm managers had been on the same job for 18 years, twice as long as the men who ranked second in tenure—managers, officials, and proprietors. Craftsmen (about three-fourths of whom were employed outside the construction industry) averaged 7 years on their current job, much longer than semiskilled operatives or laborers who require less training and are more likely to be adversely affected by cyclical or seasonal fluctuations in labor demand. The substantial expansion in employment of men in professional and technical occupations in recent years and the comparatively large numbers of these highly trained workers in the under-45 age group is reflected in the relatively low average period of continuous employment in this occupational group, about 5½ years. Fewer than a third of these workers had been on the job more than 10 years compared with 40 percent or more of the craftsmen and managers. Men employed as farm and nonfarm laborers had the shortest tenure, followed closely by those who were in sales and service occupations.

Duration of current employment of women workers by occupation generally followed the same pattern as for men, with the exception of women farm laborers, most of whom were unpaid workers on family farms and, therefore, were less likely to move to other jobs than male farm laborers or any other group of wage and salary workers.

Despite the four economic downturns since World War II, a substantial number of workers have been continuously employed at the same

TABLE 4. MAJOR OCCUPATION AND INDUSTRY GROUP AND CLASS OF WORKER: LENGTH OF EMPLOYMENT ON CURRENT JOB, BY SEX, JANUARY 1963

[Percent distribution]

Occupation, industry, and class of worker	Male						Female					
	Total [1]	5 years or less	Over 5 to 10 years	Over 10 to 15 years	Over 15 years	Median years on job	Total [1]	5 years or less	Over 5 to 10 years	Over 10 to 15 years	Over 15 years	Median years on job
Total, 14 years and over	100.0	47.3	17.1	12.5	23.1	5.7	100.0	62.7	16.1	9.4	11.8	3.0
OCCUPATION												
Professional, technical, and kindred workers	100.0	48.5	19.7	12.3	19.5	5.4	100.0	58.2	16.6	10.9	14.2	3.7
Farmers and farm managers	100.0	15.9	11.9	13.1	59.2	18.0	(2)					(2)
Managers, officials, and proprietors, except farm	100.0	35.5	19.2	14.8	30.5	8.4	100.0	46.7	18.7	11.5	23.1	5.8
Clerical and kindred workers	100.0	49.2	15.7	12.2	23.0	5.3	100.0	63.9	16.7	9.1	10.3	3.0
Sales workers	100.0	59.7	17.6	10.0	12.6	3.5	100.0	64.7	18.1	8.0	9.2	2.9
Craftsmen and kindred workers	100.0	42.7	17.2	14.4	25.8	6.9	100.0	51.5	18.1	11.5	18.8	4.8
Operatives and kindred workers	100.0	50.1	17.3	12.6	20.0	5.1	100.0	55.6	17.2	11.7	15.4	4.1
Private household workers	(2)					(2)	100.0	75.4	11.5	6.0	7.1	1.7
Service workers, except private household	100.0	59.2	16.1	10.7	13.9	3.6	100.0	71.7	14.6	7.2	6.5	1.9
Farm laborers and foremen	100.0	70.5	13.9	5.5	10.1	1.5	100.0	35.7	15.0	13.6	35.7	9.9
Laborers, except farm and mine	100.0	63.2	14.2	9.1	13.4	2.5	(2)					(2)
INDUSTRY AND CLASS OF WORKER												
Agriculture	100.0	36.1	13.0	10.4	40.4	10.5	100.0	36.4	16.7	13.6	33.3	9.0
Wage and salary workers	100.0	70.6	11.8	5.7	11.9	1.4	100.0	74.3	15.7	5.0	5.0	0.8
Self-employed workers	100.0	15.4	11.7	13.1	59.7	18.2	100.0	19.2	19.2	19.2	42.4	13.9
Unpaid family workers	100.0	52.6	32.2	10.0	5.2	4.9	100.9	23.5	16.2	15.9	44.4	13.8
Nonagricultural industries	100.0	48.2	17.4	12.7	21.6	5.5	100.0	63.3	16 1.	9.3	11.4	3.0
Total wage and salary workers [3]	100.0	50.1	17.3	12.4	20.2	5.1	100.0	64.2	16.0	9.1	10.7	2.9
Mining	100.0	39.8	17.9	13.3	29.0	7.6	(2)					(2)
Construction	100.0	65.0	14.9	9.6	10.5	2.4	100.0	65.1	19.5	10.1	5.4	3.1
Manufacturing	100.0	41.8	18.4	14.4	25.4	7.0	100.0	56.0	16.8	11.4	15.8	4.1
Transportation	100.0	36.3	15.0	14.3	34.5	9.7	100.0	49.8	19.7	11.5	19.0	5.2
Communications and public utilities	100.0	29.5	21.3	18.6	30.6	9.8	100.0	45.2	17.0	15.8	22.1	6.2
Wholesale and retail trade	100.0	61.7	16.5	9.3	12.6	3.1	100.0	69.2	15.8	7.2	7.8	2.2
Service and finance	100.0	61.5	16.2	9.6	12.6	3.2	100.0	68.6	14.9	8.0	8.4	2.4
Public administration	100.0	40.6	19.1	15.1	25.3	7.4	100.0	50.5	21.6	12.4	15.5	5.0
Self-employed and unpaid family workers	100.0	34.9	18.4	15.0	31.8	8.9	100.0	53.5	16.2	11.4	18.9	4.5

[1] Excludes persons not reporting length of time on current job.
[2] Percent and median years not shown where base is less than 100,000.
[3] Includes forestry and fisheries not shown separately.

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

job or business for a very long time—more than 15 years. Over 1 out of 4 men and 1 out of 7 women over 24 years of age had held the same job since prior to 1948. Of the 10 million male workers with such long job tenure, one-fifth were craftsmen; about the same proportion were managers, officials and proprietors; and another one-fourth were professional workers or farmers (table 5). Persons in these four occupation groups, which generally require extensive training, financial investment, or education, comprised nearly two-thirds of the men with more than 15 years of unbroken job tenure but only one-half of all employed workers in January 1963. Only 1 out of 8 workers with such long job tenure were farm and nonfarm laborers or sales or service workers.

Although women comprised one-third of employed workers in January 1963, only 1 in 5 of the workers with more than 15 years of continuous employment was a woman. These women were more heavily concentrated in one occupation group than men, with one-fourth holding clerical jobs. Women who were operatives or professional and technical workers were relatively more numerous among those with over 15 years of unbroken employment than among all employed women.

Average length of continuous employment varied widely not only among occupations but also within individual occupations, depending on the industry in which a worker was employed. For example, male craftsmen 25 years old and over averaged 8 years on the job, but those employed on the railroads held the same job continuously for 19 years compared with a low of 4 years for construction workers. Skilled workers in factories tended to work more than twice as long as similar jobholders in the construction industry (table 6). Operatives in durable goods manufacturing industries averaged about twice the job tenure of those in service and finance industries but about half as long as railroad workers. Differences of this kind in job tenure by industry were characteristic of men in the two other major occupational groups studied—unskilled laborers and clerical workers.

Although job stability was as great for men in clerical jobs as it was for craftsmen, about one-fourth of the craftsmen were in the construction industry where job attachment is very short,

TABLE 5. WORKERS EMPLOYED OVER 15 YEARS ON CURRENT JOB BY MAJOR OCCUPATION AND INDUSTRY GROUP AND CLASS OF WORKER, BY SEX, JANUARY 1963

[Number in thousands]

Occupation, industry, and class of worker	Both sexes		Male		Female	
	Number	Percent distribution	Number	Percent distribution	Number	Percent distribution
OCCUPATION						
All occupation groups	12,362	100.0	9,769	100.0	2,593	100.0
Professional, technical, and kindred workers	1,406	11.4	988	10.1	418	16.1
Farmers and farm managers	1,304	10.5	1,266	13.0	38	1.5
Managers, officials, and proprietors, except farm	2,132	17.2	1,882	19.3	250	9.6
Clerical and kindred workers	1,359	11.0	672	6.9	687	26.5
Sales workers	457	3.7	314	3.2	143	5.5
Craftsmen, foremen, and kindred workers	2,104	17.0	2,056	21.0	48	1.9
Operatives and kindred workers	2,194	17.7	1,694	17.3	500	19.3
Private household workers	171	1.4	11	.1	160	6.2
Service workers, except private household	611	4.9	407	4.2	204	7.9
Farm laborers and foremen	229	1.9	103	1.1	126	4.9
Laborers, except farm and mine	395	3.2	376	3.8	19	.7
INDUSTRY AND CLASS OF WORKER						
All industry groups	12,362	100.0	9,769	100.0	2,593	100.0
Agriculture	1,577	12.8	1,407	14.4	170	6.6
Nonagricultural industries	10,785	87.2	8,362	85.6	2,423	93.4
Total wage and salary workers [1]	8,952	72.4	6,865	70.3	2,087	80.5
Mining	135	1.1	128	1.3	7	.3
Construction	310	2.5	301	3.1	9	.3
Manufacturing	3,795	30.7	3,125	32.0	670	25.8
Transportation and public utilities	1,281	10.4	1,127	11.5	154	5.9
Wholesale and retail trade	1,062	8.6	765	7.8	297	11.5
Service and finance	1,596	12.9	795	8.1	801	30.9
Public administration	764	6.2	615	6.3	149	5.7
Self-employed and unpaid family workers	1,833	14.8	1,497	15.3	336	13.0

[1] Includes forestry and fisheries not shown separately.

TABLE 6. MALE WORKERS 25 YEARS OLD AND OVER IN SELECTED MAJOR OCCUPATION GROUPS: MEDIAN YEARS ON CURRENT JOB, BY MAJOR INDUSTRY GROUP, JANUARY 1963

Industry group	Craftsmen, foremen, and kindred workers	Operatives and kindred workers	Laborers, except farm and mine	Clerical and kindred workers
All industry groups	8.0	7.3	4.9	8.1
Agriculture, forestry, fisheries and mining	7.9	7.3	(1)	(1)
Construction	3.8	3.4	1.9	(1)
Manufacturing	10.9	8.5	6.1	10.1
Durable goods	10.6	8.8	5.8	9.8
Nondurable goods	11.7	7.9	6.6	10.6
Transportation	14.7	7.2	10.9	11.3
Railroads and railway express	19.0	17.1	15.5	18.5
Other transportation	8.5	5.3	6.7	5.8
Communications and other utilities	12.1	9.9	5.2	(1)
Wholesale and retail trade	5.2	4.6	3.5	6.1
Service and finance	4.7	4.4	3.6	4.8
Public administration	9.0	(1)	8.6	8.2

[1] Median not shown where base is less than 100,000.

and few clerical workers were in this industry. If the craftsmen in construction are omitted, the average duration rises to about 9½ years.

Comparison With 1951 Survey

Average length of job tenure among American workers had increased about one-third since the last survey on job tenure was made by the Bureau of the Census in January 1951. At that time, because of the job dislocations during and after World War II, only 18 percent of the workers had been steadily employed on the same job for over a decade, compared with 30 percent in January 1963 (table 7). Although the increase in the proportion employed so long was greater for men than for women, 14 and 10 percentage points, respectively, the rise was sharper among women. Considering the small proportion of women with this length of work, some of this sharp rise is undoubtedly due to an increase during the 12 years between surveys in the proportion of employed women age 45 and over, the very age group which tends to have the greatest job tenure.

Primarily as a result of the rise in the proportion of workers employed over 10 years, the average length of continuous employment for all workers rose from 3.4 years in 1951 to 4.6 years in January 1963. Job tenure increased from 4 to about 5½ years for men and from 2 to 3 years for women. Almost all of the rise in job tenure was among workers 35 years old and over, with comparatively twice as many men 35 to 44 years old having worked continuously on the same job for more than a decade in January 1963 as in January 1951. Even among women 35 to 44 years old, many of whom have only recently returned to work after a long absence due to family responsibilities, there was a considerable increase over the 12-year period in the proportion showing more than a decade of continuous employment.

The increase in job stability among white men between 1951 and 1963, up 2 years to an average of 6 years, was greater than for nonwhite men who experienced a rise of only 1 year to an average of 4 years. The smaller increase among nonwhites largely reflects their much greater concentration in service and laborer occupational groups, which had a smaller rise in job tenure over the

TABLE 7. COMPARISON OF LENGTH OF EMPLOYMENT ON CURRENT JOB, BY AGE, SEX, AND COLOR, JANUARY 1951 AND 1963

Age, sex, and color	Median years on same job		Proportion of workers on same job	
	January 1963	January 1951	More than 10 years in January 1963	More than 11 years in January 1951
AGE AND SEX				
Both sexes, 14 years and over	4.6	3.4	29.8	17.6
14 to 17 years	0.7	0.7	----------	----------
18 and 19 years	.5	.6	----------	0.2
20 to 24 years	1.1	1.3	0.5	.2
25 to 34 years	3.0	2.6	10.1	3.4
35 to 44 years	6.0	3.2	33.0	17.3
45 to 54 years	9.0	6.3	46.0	31.4
55 to 64 years	11.8	8.0	53.2	38.8
65 years and over	13.8	10+	54.9	46.4
Male, 14 years and over	5.7	3.9	34.6	20.7
14 to 17 years	0.7	0.8	----------	----------
18 and 19 years	.5	.6	----------	0.2
20 to 24 years	1.0	1.2	0.7	.3
25 to 34 years	3.5	2.8	10.6	3.9
35 to 44 years	7.6	4.5	39.8	19.1
45 to 54 years	11.4	7.6	53.4	36.2
55 to 64 years	14.7	9.3	59.7	43.6
65 years and over	16.6	10+	59.4	50.8
Female, 14 years and over	3.0	2.2	20.6	10.2
14 to 17 years	0.6	0.5	----------	----------
18 and 19 years	.5	.6	----------	0.2
20 to 24 years	1.1	1.4	0.2	.2
25 to 34 years	2.0	1.8	8.9	2.2
35 to 44 years	3.6	3.1	19.0	12.9
45 to 54 years	6.1	4.0	32.9	19.5
55 to 64 years	7.8	4.5	40.6	23.5
65 years and over	8.8	4.9	43.8	28.6
COLOR AND SEX				
Male:				
White	5.9	4.0	35.3	21.4
Nonwhite	4.1	3.1	27.5	13.2
Female:				
White	3.0	2.3	20.7	10.7
Nonwhite	2.9	1.7	19.3	6.5

TABLE 8. PERCENT OF WORKERS 25 TO 54 YEARS OLD WITH CURRENT EMPLOYER OVER 10 YEARS IN JANUARY 1963 WHO CAN BE EXPECTED TO REMAIN WITH SAME EMPLOYER 10 ADDITIONAL YEARS, BY AGE AND SEX [1]

Age in January 1963 and sex	(1) Percent with current employer in January 1963		(2) Age in January 1973	(3) Percent surviving from 1963 to 1973	Percent of those with current employer over 10 years in January 1963 remaining with same employer to January 1973	
	Over 10 years	Over 20 years			(4) Unadjusted for deaths	(5) Adjusted for deaths
MALES						
25 to 29 years	4.3	-------	35 to 39	98.1	72.1	70.7
30 to 34 years	16.7	-------	40 to 44	97.6	58.7	57.3
35 to 39 years	36.9	3.1	45 to 49	96.3	56.1	54.0
40 to 44 years	44.4	9.8	50 to 54	94.0	62.6	58.8
45 to 49 years	52.3	20.7	55 to 59	90.2	67.7	61.1
50 to 54 years	57.1	27.8	60 to 64	85.4	72.3	61.7
55 to 59 years	61.0	35.4	----------	----------	----------	----------
60 to 64 years	63.4	41.3	----------	----------	----------	----------
FEMALES						
25 to 29 years	4.6	-------	35 to 39	98.9	50.0	49.4
30 to 34 years	13.2	-------	40 to 44	98.5	30.3	29.8
35 to 39 years	15.9	2.3	45 to 49	97.7	50.3	49.1
40 to 44 years	22.5	4.0	50 to 54	96.5	54.7	52.8
45 to 49 years	31.5	8.0	55 to 59	94.8	45.7	43.3
50 to 54 years	36.9	12.3	60 to 64	92.4	56.9	52.6
55 to 59 years	38.7	14.4	----------	----------	----------	----------
60 to 64 years	47.4	21.0	----------	----------	----------	----------

[1] The estimation procedure can best be described by the following example: 36.9 percent of working men 35 to 39 years old were reported to have been with their current employer over 10 years in January 1963. Similarly, the percent of those 45 to 49 years old with over 20 years of service with their current employer was estimated by linear interpolation to be 20.7 percent. Dividing the latter percent by the former yields an estimate of the proportion of male workers now age 35 to 39 years with over 10 years of service with their current employer who can be expected to remain with the same employer an additional 10 years, when they would be 45 to 49 years old. In this example, the result is 56.1 percent, as shown in column 4 of the table. However, this computation makes no allowance for the loss of workers due to mortality. It is therefore necessary to multiply this percent by the proportion of male workers who could be expected to survive from age 35 to 39 years to age 45 to 49 years. The appropriate survival ratio can be obtained from a life table, and the corresponding adjustment is shown in the table. In our example, the adjusted percent comes to 56.1 × .963, or 54.0 percent.

In extending this procedure to estimate the proportion of workers who would remain with the same employer to the age of retirement, it is necessary to introduce further assumptions regarding job retention rates for periods of service beyond 20 years' duration.

12 years than the average for all occupations. Among women, however, the average for nonwhites increased about half a year more than for whites, so that by January 1963, both groups worked an average of 3 years on the same job.

Continuation on Present Job

The data from this survey can be used to develop rough estimates of the proportion of workers with a given number of years on their current job who can be expected to remain with the same employer a specified number of additional years. For example, table 8 shows the proportions of workers who have already demonstrated a considerable degree of job attachment in remaining with their current employer over 10 years (in January 1963) and who might be expected to remain with the same employer 10 additional years. As might be expected, the proportion who achieve this term of service is low at the younger ages and rises with age to 63.4 percent for men age 60 to 64 years.

These projections rest upon the assumption that the pattern of job attachment observed among workers at successively older ages at one moment in time (i.e., January 1963) can be used to represent the pattern of job attachment for a particular age group of workers as it ages over time.[5] One limitation of this procedure stems from the fact that the patterns of job attachment observed among working men in January 1963 reflect the interruptions of civilian careers occasioned by World War II and the Korean conflict. For this reason, the proportion of men 35 to 54 years old having over 20 years' service with their current employer in January 1963 was undoubtedly lower than it would have been in the absence of these national emergencies.

The impact of the interruptions brought about by these emergencies can be seen in the fact that the percent of working men remaining with their current employer an additional 10 years declines as we move from the group age 35 to 39 years to the group age 45 to 49 years (table 8, col. 5). This percentage would normally be expected to rise with advancing age. As a result, projections of job retention derived from these age groups may require further adjustment before they can be applied to younger groups of working men.[6]

By extending this procedure to cover other periods of service, it would be possible to estimate proportions of workers who could be expected to remain with a given employer until they reached any specified age, such as the age of retirement, or until they become eligible for retirement benefits. Such projections might provide useful guidelines for estimating the future costs of private pension plans or other retirement provisions. In view of the limitations of both the procedure and the available data, the results would be very rough approximations.

[5] A similar assumption is required when tables of working life are used to estimate the future work-life expectancy of a given worker or group of workers.

[6] The corresponding percentages for working women vary more than those of the men. However, the variations among working women can readily be explained by the normal interruptions occasioned by marriage and childbearing among younger working women.

Summaries of Studies and Reports

Earnings in Bituminous Coal Mines, November 1962

STRAIGHT-TIME EARNINGS of production and related workers in bituminous coal mines averaged $2.95 an hour in November 1962, according to a study conducted by the Bureau of Labor Statistics.[1] The 96,949 workers covered by the study (virtually all men [2]), averaged $111 a week, working an average of 37½ hours. Eighty-five percent of the workers were in underground mines. These workers averaged 10 cents more per hour than workers in surface mines,[3] but because of a shorter workweek, their weekly average was $12 lower. For each type of mine, variations in earnings were found by location, size of mine, labor-management contract status, and occupation.

Information is also provided on the incidence of certain establishment practices, including work schedules, paid vacations, and health and pension benefits. A more comprehensive account of this study will be presented in forthcoming BLS Bulletin 1383.

Mines having collective bargaining agreements with the United Mine Workers (Ind.) accounted for four-fifths of the workers covered by the study; an additional 2 percent of the workers were in mines having agreements with other unions. Union mines accounted for nearly nine-tenths of the workers in underground mines, compared with three-fifths in surface mines.

The study was conducted during a period of labor unrest in the industry, particularly in the coal fields of eastern Kentucky. Substantial, long-term unemployment and the loss of certain health and welfare benefits due to the alleged nonpayment of royalties [4] to the UMWA Welfare Fund by some operators contributed to this unrest, which included picketing and physical conflict.

Average Earnings

Earnings data were developed separately for seven major coal-producing States,[5] together accounting for nine-tenths of the workers in the industry. Compared with the national average of $2.95, average straight-time hourly earnings of production and related workers in all bituminous coal mines in these States ranged from $3.27 in Illinois to $2.65 in Virginia. Workers in West Virgina, accounting for approximately a third of the industry's work force, averaged $2.98 an hour. Averages in the remaining four States were—Pennsylvania, $2.94; Ohio, $2.83; Kentucky, $2.82; and Alabama, $2.76. Hourly earnings of seven-tenths of the workers in the industry were grouped between $3 and $3.50. One of the factors contributing to this relatively narrow range of individual hourly earnings was the extensive use of

[1] The survey included establishments employing 10 workers or more and primarily engaged in producing bituminous coal or in developing bituminous coal mines, excluding coal preparation plants operated separately, and other separate auxiliary units such as central offices (part of industry 1211, as defined in the 1957 edition of the *Standard Industrial Classification Manual* prepared by the U.S. Bureau of the Budget).

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

[2] Women accounted for less than one-half of 1 percent of the work force.

The term production and related workers, as used in this survey, includes working foremen and all nonsupervisory workers (including leadmen and trainees) engaged in excavation, haulage, trucking, hoisting, ventilation, drainage, drilling, blasting, loading, crushing, processing, inspection, storage, handling, warehousing, shipping, maintenance, repair, janitorial work, watchmen services, development (except construction performed by a separate work force), auxiliary production for plant's own use (e.g., power plant), and recordkeeping and other services closely associated with the above production operations.

[3] Surface mines included strip or open-pit and auger mines. Auger mines accounted for less than 5 percent of the workers in this branch of the industry.

[4] The UMWA Welfare and Retirement Fund is financed from royalty payments by signatory operators on each ton of coal produced for use or for sale. At the time of the study, the stipulated payment was 40 cents a ton. Some mines were reported as not paying the full amount at the time of the study, and the fund had announced its policy of cancellation of miners' eligibility for hospital and medical care benefits if their employer was "in flagrant violation" of the agreement. It is not known what proportion of the workers were so affected but it is believed to be relatively small.

[5] The comprehensive bulletin will also contain separate data for selected Coal Act Production Districts.

TABLE 1. NUMBER, WEEKLY HOURS WORKED, AND AVERAGE STRAIGHT-TIME EARNINGS[1] OF PRODUCTION WORKERS IN BITUMINOUS COAL MINES, BY TYPE OF MINE, UNITED STATES AND SELECTED STATES, NOVEMBER 1962

Type of mine	Number of workers	Average		
		Hourly earnings[1]	Weekly hours worked[2]	Weekly earnings[1]
All mines: United States[3]	96,949	$2.95	37.5	$111.00
Underground mines:				
United States[3]	82,186	2.97	36.5	109.00
Alabama	4,691	2.78	34.0	95.00
Illinois	4,824	3.16	41.5	130.50
Kentucky	10,510	2.77	39.0	108.50
Eastern Kentucky[4]	7,740	2.74	39.0	106.50
Western Kentucky[5]	2,770	2.84	40.0	114.00
Ohio	2,428	3.04	36.0	109.00
Pennsylvania	13,663	3.12	32.5	101.50
Virginia	6,436	2.63	38.5	101.00
West Virginia	32,511	3.00	38.0	114.00
Surface mines:				
United States[3]	14,763	2.87	42.0	121.00
Illinois	2,810	3.44	44.0	151.00
Ohio	2,501	2.63	41.0	107.50
Pennsylvania	2,820	2.08	44.5	92.50

[1] Excludes premium pay for overtime and for work on weekends, holidays, and late shifts. Weekly earnings were rounded to the nearest half dollar.
[2] Weekly hours were rounded to the nearest half hour.
[3] Includes data for States in addition to those shown separately. Alaska and Hawaii were not included in the study.
[4] Eastern Kentucky as used in this report includes the following counties: Bell, Boyd, Breathitt, Carter, Clay, Elliott, Floyd, Greenup, Harlan, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, McCreary, Magoffin, Martin, Morgan, Owsley, Perry, Pike, Rockcastle, Wayne, and Whitley.
[5] Western Kentucky as used in this report includes the following counties: Butler, Christian, Crittenden, Daviess, Hancock, Henderson, Hopkins, Logan, McLean, Muhlenberg, Ohio, Simpson, Todd, Union, Warren, and Webster.

time rates of pay. Incentive methods of wage payment accounted for only 8 percent of the workers in underground mines and less than 1 percent in surface mines.

Production and related workers in the industry, working an average of 37½ hours, averaged $111 a week. Individual weekly earnings were more widely dispersed than hourly earnings. The middle half of the workers earned between $90.50 and $130. Among the seven States for which separate data are provided, average weekly earnings ranged from $138 in Illinois to $97.50 in Alabama. Averages for the other States were $113.50 for West Virginia, $112 for Kentucky, $108.50 for Ohio, $102 for Virginia, and $100 for Pennsylvania.

Workers in underground mines averaged $2.97 an hour compared with $2.87 for workers in surface mines (table 1). This wage relationship varied considerably among the three States for which comparisons could be made: In Illinois, workers in surface mines averaged 28 cents an hour more than those in underground mines; in Ohio and Pennsylvania, underground mine workers averaged more than surface mine workers by amounts of 41 cents and $1.04, respectively. Mines with union contracts accounted for virtually all the workers in both underground and surface mines in Illinois and approximately nine-tenths of the underground mine workers in both Ohio and Pennsylvania, but only a third of the surface mine workers in Ohio and an eighth of such workers in Pennsylvania.

Among underground mines, the national average for workers in mines with collective bargaining agreements was $3.11 an hour, compared with $1.98 for workers in mines without such agreements. Corresponding averages among surface mines were $3.37 and $2.12. Nationwide, workers in underground mines with 100 or more employees averaged $3.15 an hour, compared with $2.45 for workers in smaller mines. Among surface mines, the corresponding averages were $3.41 and $2.64. Mines with union contracts accounted for virtually all of the employment in the larger mines in both branches of the industry. The proportions in the smaller size group (less than 100 workers) were 56 percent in underground mines and 43 percent in surface mines.

As illustrated in the following tabulation, individual hourly earnings were more closely grouped in underground mines than in surface mines:

Hourly earnings	*Percent of production workers earning specified amounts in—*		
	All mines	*Underground mines*	*Surface mines*
Under $1.50	2.6	2.4	3.2
$1.50 and under $2.00	7.1	5.8	14.2
$2.00 and under $2.50	7.3	6.0	14.6
$2.50 and under $3.00	9.0	8.6	11.0
$3.00 and under $3.50	70.5	76.2	38.8
$3.50 and under $4.00	3.3	.8	16.8
Over $4.00	.4	.2	1.4
Total (percent)	100	100	100
Number of workers	96,949	82,186	14,763

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

Average straight-time weekly earnings in underground mines were $109, compared with $121 for surface mines, although average hourly rates were 10 cents higher in underground than in surface mines. The average of weekly hours worked by those in surface mines was 42, compared with 36½ for workers in underground mines.

Occupational Earnings

Earnings data were tabulated separately for occupations accounting for approximately four-fifths of the production worker employment in both branches of the industry.

Hourly averages for selected occupations studied separately in underground mines and presented in table 2 ranged from $3.32 for maintenance electricians working above the ground to $2.15 for hand loaders. Five of the six jobs averaging $3.25 or more were journeymen maintenance workers; operators of continuous-mining machines averaged $3.28 an hour. Averages for approximately half of the jobs studied separately in underground mines ranged between $3 and $3.25 an hour. Average weekly earnings for all but eight of the selected jobs ranged from $100 to $120. Nationwide, and in those States where comparisons were possible, occupational hourly earnings were higher in nearly all instances in mines employing 100 or more than in the smaller mines, and higher in mines with union contracts than in those without such contracts.

Hourly earnings of individuals performing similar tasks in underground mines were usually grouped within comparatively narrow ranges. For example, more than four-fifths of the continuous-mining-machine operators and inside maintenance mechanics earned between $3.30 and $3.40 an hour (more than nine-tenths of these workers were employed in union mines). Reflect-

TABLE 2. NUMBER AND AVERAGE STRAIGHT-TIME EARNINGS[1] OF PRODUCTION WORKERS IN SELECTED OCCUPATIONS IN UNDERGROUND BITUMINOUS COAL MINES, UNITED STATES[2] AND SELECTED STATES, NOVEMBER 1962

Selected occupations	Number of workers, United States[2]	Average hourly earnings[1]									
		United States[2]	Alabama	Illinois	Kentucky			Ohio	Pennsylvania	Virginia	West Virginia
					Total	Eastern[3]	Western[4]				
Brakemen, inside	1,423	$2.85	$2.76	----	$2.26	$2.26	----	$2.57	$2.99	$2.78	$2.98
Bratticemen	1,115	2.93	2.90	$3.13	2.78	2.73	$2.88	3.03	3.03	2.87	2.90
Continuous-mining-machine operators	2,355	3.28	3.13	3.46	3.17	3.34	----	----	3.28	2.77	3.27
Car droppers, outside	1,030	3.16	----	3.16	3.13	3.20	2.94	3.20	3.16	3.11	3.18
Drillers, machine	1,695	3.02	2.96	3.21	2.70	2.62	2.83	3.15	3.17	----	3.13
Electricians maintenance, inside	2,375	3.24	3.09	3.34	3.07	3.07	3.09	3.34	3.30	3.29	3.28
Electricians maintenance, outside	837	3.32	3.25	3.34	3.22	3.25	2.95	----	3.33	3.23	3.37
Loaders, hand	5,920	2.15	2.30	----	1.65	1.68	----	2.01	2.49	1.82	2.32
Loading-machine operators	4,031	3.19	3.03	3.36	2.99	3.00	2.94	3.30	3.24	3.13	3.24
Mechanics maintenance, inside	4,209	3.28	----	3.31	3.20	3.32	3.04	3.32	3.31	3.16	3.32
Mechanics maintenance, outside	1,771	3.30	3.20	3.31	3.23	3.35	3.06	3.37	3.29	3.29	3.31
Motormen, inside	6,353	2.89	2.80	2.97	2.68	2.68	2.69	2.98	3.04	2.52	2.94
Roof bolters	4,753	3.14	2.99	3.25	2.94	2.94	2.94	3.16	3.18	3.14	3.18
Shuttle-car operators	6,668	3.00	2.86	3.06	2.87	2.89	2.83	3.04	3.08	2.91	3.01
Slate pickers, outside	682	2.70	----	2.79	2.34	2.31	2.45	2.76	2.83	2.65	2.75
Tipple operators	1,448	2.89	1.76	3.11	2.41	2.32	2.71	3.04	3.18	2.94	2.95
Truckdrivers	1,106	2.69	2.26	3.16	2.36	2.43	2.16	2.70	3.03	2.21	2.79

Selected occupations	Average weekly earnings[1]									
	United States[2]	Alabama	Illinois	Kentucky			Ohio	Pennsylvania	Virginia	West Virginia
				Total	Eastern[3]	Western[4]				
Brakemen, inside	$101.00	$92.50	----	$89.50	$89.50	----	$76.00	$78.50	$112.00	$112.00
Bratticemen	107.50	104.50	$136.50	108.50	106.00	$113.50	103.00	94.50	107.00	112.50
Continuous-mining-machine operators	116.00	103.00	128.00	143.00	124.50	----	----	110.50	109.00	120.00
Car droppers, outside	116.00	----	124.00	114.00	113.50	115.00	109.50	103.50	114.00	121.00
Drillers, machine	115.50	98.00	129.00	105.50	101.00	113.00	109.50	96.50	----	123.50
Electricians maintenance, inside	113.00	116.50	153.50	121.00	121.00	123.50	118.00	135.50	138.00	136.00
Electricians maintenance, outside	125.00	114.00	137.50	120.50	121.00	113.50	----	97.00	122.50	135.00
Loaders, hand	73.00	76.50	----	63.00	64.50	----	73.50	79.50	62.00	77.00
Loading-machine operators	117.50	104.50	142.50	118.50	119.00	117.50	114.00	105.00	121.50	124.00
Mechanics maintenance, inside	125.50	----	147.50	131.50	133.00	130.00	135.00	114.00	128.50	135.00
Mechanics maintenance, outside	119.50	108.00	137.00	118.00	121.50	114.00	130.50	112.00	121.00	129.00
Motormen, inside	105.00	93.00	121.50	107.00	106.50	108.50	103.50	95.50	97.50	113.00
Roof bolters	112.50	102.50	132.00	116.00	115.00	118.00	107.00	101.50	126.50	116.00
Shuttle-car operators	112.00	100.00	125.00	113.50	113.00	113.50	101.00	99.50	116.00	116.00
Slate pickers, outside	101.00	----	116.00	89.00	86.00	98.00	93.50	99.50	99.50	104.50
Tipple operators	108.50	63.00	131.50	88.50	86.00	97.00	112.50	120.00	110.00	114.00
Truckdrivers	100.00	83.00	129.50	89.00	90.00	85.50	96.00	90.00	83.00	110.50

[1] See footnote 1, table 1.
[2] See footnote 3, table 1.
[3] See footnote 4, table 1.
[4] See footnote 5, table 1.

TABLE 3. NUMBER AND AVERAGE STRAIGHT-TIME EARNINGS[1] OF PRODUCTION WORKERS IN SELECTED OCCUPATIONS IN SURFACE BITUMINOUS COAL MINES, UNITED STATES[2] AND SELECTED STATES, NOVEMBER 1962

Selected occupations	Number of workers United States[2]	Average hourly earnings[1]				Average weekly earnings[1]			
		United States[2]	Illinois	Ohio	Pennsylvania	United States[2]	Illinois	Ohio	Pennsylvania
Bulldozer operators	1,628	$2.72	$3.35	$2.66	$2.16	$113.50	$146.50	$107.50	$95.50
Drillers, machine	671	2.94	3.36	2.55	2.39	122.50	142.50	100.50	99.50
Groundmen	527	2.74	3.48	2.04	1.69	117.50	171.50	88.50	65.50
Mechanics, maintenance	581	3.17	3.50	3.03	2.72	134.50	154.50	119.00	109.00
Oilers and greasers	1,662	2.54	3.55	2.32	1.75	114.50	168.50	101.50	81.50
Power shovel operators	2,352	3.13	3.86	3.08	2.55	141.50	186.50	134.00	117.00
Slate pickers	418	2.08	3.34	2.24	1.57	77.50	123.50	88.50	55.50
Tipple operators	562	2.55	3.31	1.93	1.88	104.00	120.50	83.00	80.00
Welders, maintenance	782	3.18	3.53	2.72	2.15	135.50	150.50	107.50	93.50

[1] See footnote 1, table 1.

[2] See footnote 3, table 1.

ing differences in hours of work, individual weekly earnings of workers in the selected jobs were more widely distributed than were hourly earnings.

Among the selected surface mining occupations studied and presented in table 3, highest average hourly earnings were recorded for maintenance welders ($3.18) and the lowest for slate pickers ($2.08). Power shovel operators, numerically the most important occupation, averaged $3.13 an hour. Maintenance electricians, working an average of 45 hours a week during the payroll period studied, received the highest weekly earnings ($153.50); lowest weekly earnings ($77.50) were recorded for slate pickers, who work an average of 37.5 hours a week.

Establishment Practices

Work schedules of 40 hours a week applied to seven-tenths of those employed below the surface (inside workers) in underground mines; three-fifths of the outside workers were on a 36¼ hour weekly schedule. Inside workers accounted for 82 percent of the work force in underground mines. Work schedules for workers in surface mines were more varied: nearly three-tenths were scheduled to work 36¼ hours; a similar proportion, 40 hours; a fifth, 43½ hours; and a sixth, more than 43½ hours a week. Most frequently, work schedules included a daily paid lunch period of 30 minutes. For the large majority of the inside workers in underground mines, time required to travel from the mine opening to the working face was included in the work schedule.

Two-fifths of the workers in the industry were employed on late shifts at the time of the survey. Three-tenths of the workers in underground mines and a fifth of those in surface mines were employed on second-shift operations; third-shift operations accounted for about a tenth of the workers in both branches of the industry. Approximately seven-eighths of the workers on second-shift operations received 4 cents per hour in addition to rates paid for similar work on day shifts, and about nine-tenths of the third or other late-shift workers received 6 cents per hour.

Vacation pay was provided by mines employing more than five-sixths of the workers in underground mines and three-fourths of those in surface mines. The payment under the UMWA contract was $200 for workers with 1 year of service or more. Provisions for paid holidays were virtually nonexistent in the industry.

Hospital and medical care, benefits to widows and orphans, and retirement pensions were among the benefits provided by the UMWA Welfare and Retirement Fund at the time of the study. Nonunion mines most generally did not provide health, insurance, and pension benefits.

—FREDERICK L. BAUER
Division of Occuptional Pay

Earnings of Communications Workers in 1962

EARNINGS of the 631,205 employees (excluding officials and managerial assistants) of the Nation's principal communications carriers averaged $2.77 an hour in late 1962.[1] This represents an increase of 4.1 percent from the 1961 average and 123 percent since October 1947, when the first annual study of communications workers' earnings was made by the Bureau of Labor Statistics in cooperation with the Federal Communications Commission. In December 1962, scheduled compensation[2] of employees of class A telephone carriers, accounting for 94 percent of the total work force covered by the study, averaged $2.78 an hour, compared with $2.67 a year earlier. Straight-time hourly rates of pay for the nonmessenger employees of Western Union's wire-telegraph operations averaged $2.63 in October 1962, a 4.4-percent increase above the 1961 level ($2.52). Radiotelepgraph and ocean-cable carriers employees earned $3.13 and $2.94 and hour, respectively.

Class A Telephone Carriers

Earnings of the 596,327 employees of the 58 class A telephone carriers covered by the study averaged $2.78 an hour in December 1962 (table 1). Based on regular scheduled compensation, which includes the basic pay rate plus any regularly scheduled supplementary compensation such as differentials for evening and night work, individual earnings of these workers were widely dispersed. The middle half of the workers earned between $1.94 and $3.30 an hour. This dispersion was due to a variety of factors, including the great diversity of skills and responsibilites 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 progression steps based on the employee's length of service with the company. Thus, for linemen, the highest rate for incumbents exceeded the lowest by more than $1 in 37 of the carriers.

Average hourly earnings among the occupational groups for which separate data were reported ranged from $1.61 for trainee telephone operators to $5.10 for professional and semiprofessional employees. Experienced switchboard operators, comprising one-fifth of the total employment, and nearly all women, averaged $1.98 an hour. Nonsupervisory clerical employees (112,315 women and 8,300 men) averaged $2.13 an hour. Average hourly earnings for occupations largely staffed by men were $2.76 for linemen, $3.04 for central office repairmen, $3.13 for testboard men and repeatermen, $3.14 for PBX and station installers, $3.17 for cable splicers, and $3.25 for exchange repairmen.

By region, average earnings for all telephone employees included in the study ranged from $2.44 in the Southeast to $2.97 in the Middle Atlantic region. Average hourly earnings for the selected occupational groups shown in table 1 were not consistently highest or lowest in any one region. Significant regional variations in occupational wage relationships may be noted. For example, nonsupervisory clerical employees averaged 2 to 8 percent more than experienced switchboard operators in eight of the nine regions, they averaged 17 percent more in the Southeast. Earnings of central office repairmen exceeded those of experienced switchboard operators by 45 to 56 percent

[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 radiotelegraph and ocean-cable carriers with annual operating revenues below $50,000 or telephone carriers with annual operating revenues below $250,000. A more comprehensive account of the study will be published in a forthcoming BLS Bulletin. It is estimated that this study covered nearly nine-tenths of the workers in the telephone communications industry in December 1962 and over nine-tenths of the workers in the telegraph communications industry in October 1962.

Prior to 1961, information on employee earnings included in these reports related to an October payroll period for all carriers. Effective in 1961, the reference date for class A telephone carriers was changed to December. For a summary of communications workers' earnings in late 1961, see *Monthly Labor Review,* October 1962, pp. 1125–1129.

[2] The earnings 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. . . . 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.

in six regions, 58 percent in the South Central, 71 percent in the Southeast, and 74 percent in the North Central region. The wage advantage of PBX and station installers over the experienced operators amounted to 45 percent in the Pacific region and more than 50 percent in all other regions permitting comparisons, except the Southeast where the difference was 26 percent. In the Southeast region, all workers classified as PBX and station installers were in non-Bell companies (in this region, Bell System PBX and station installers were also required to repair the equipment and were thus classified differently), whereas, Bell System companies accounted for the large majority of experienced switchboard operators.

Employees of the Bell System companies, accounting for 96 percent of the class A telephone carrier employment, averaged $2.81 an hour—66 cents more than employees of other companies. For each of the occupational groups studied separately, average hourly earnings of Bell System employees were higher than those of the other companies. Average scheduled workweeks of Bell and non-Bell system employees were 38.2 and 39.9 hours, respectively.

Total employment of class A telephone carriers declined from a peak of 681,600 in 1957 to 596,300 in December 1962. Much of the decrease came from a decline of 68,500 (to 167,200) in the number of telephone operators, caused chiefly by installation of new and improved equipment. The following tabulation reveals that, in 1947, telephone operators exceeded construction, installation, and maintenance employees by a ratio of 2 to 1. By 1962, construction, installation, and maintenance employees constituted a slightly larger proportion than telephone operators.

	Percent of total employment in—				
	Oct. 1947	*Oct. 1952*	*Oct. 1957*	*Dec. 1961*	*Dec. 1962*
Telephone operators	46	43	35	29	28
Clerical employees, nonsupervisory	16	18	19	20	20
Construction, installation, and maintenance employees	23	23	27	29	29
Other	15	16	19	22	22
All employees, except officials and managerial assistants (thousands)	552.7	610.6	681.6	599.1	596.3

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

Between 1947 and 1962, changes in the occupational composition of the telephone labor force have increased the proportion of men in the industry from about 33 to 44 percent. It is estimated that these changes were responsible for 30 cents of the $1.52 increase in average hourly earnings between October 1947 and December 1962.[3]

Average hourly earnings for all employees of class A telephone carriers increased by 121 percent between October 1947 and December 1962 and by 4.1 percent during the past year. Increases in earnings between 1947 and 1962 varied among the occupational groups. For example, earnings of nonsupervisory clerical employees increased 88 percent, compared with 134 percent for linemen. Differences in earnings among regions have remained generally unchanged since 1951, the first year regional earnings were tabulated.

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 25,146 nonmessenger employees of Western Union's wire-telegraph operations averaged $2.63 an hour in October 1962 (table 2)—11 cents (4.4 percent) above the 1961 average.[4]

Men accounted for 56 percent of the nonmessenger employees and virtually all of the messengers in October 1962. Among the nonmessenger employees, men were found predominantly in the following occupationtal groups: Professional and semiprofessional employees, telegraph office

[3] Weighting occupational averages for December 1962 by occupational employment for October 1947 results in an average of $2.48 instead of $2.78.

[4] Much of this increase was the result of general wage increases included in the terms of agreements negotiated with the Commercial Telegraphers' Union (AFL–CIO) and the American Communications Association (Ind.) in 1962. Effective June 1, 1962, all hourly rated employees (except nonmotor messengers) received a 4-cent-an-hour increase and all monthly rated employees received a $6-per-month increase; an additional sum, equivalent to about 3 cents an hour for nonmessenger employees, was used for adjusting rates of pay of certain employees, principally in the Plant Department, because of higher skills required in their classifications. Nonmotor messengers with 24 months or more progression credit received a 4-cent-an-hour increase effective Sept. 1, 1962. Under the terms of the 1962 agreements, effective June 1, 1963, all hourly rated employees (except nonmotor messengers) are scheduled to receive an additional increase of 7 cents an hour, and all monthly rated employees, an additional increase of $11 per month; these increases, of course, are not reflected in the earnings data in this article. Contracts with CTU apply in all cities, except the New York City metropolitan area, and cover approximately 22,000 employees; about 4,100 employees in the New York area are represented by ACA.

TABLE 1. CLASS A TELEPHONE CARRIERS:[1] AVERAGE HOURLY EARNINGS[2] OF EMPLOYEES IN SELECTED OCCUPATIONS, BY REGION,[3] DECEMBER 1962

Occupational group	United States[4]		New England		Middle Atlantic		Great Lakes		Chesapeake	
	Workers	Earnings[2]	Workers	Earnings[2]	Workers	Earnings[2]	Workers	Earnings[2]	Workers	Earnings[2]
All employees except officials and managerial assistants	596,327	$2.78	44,759	$2.77	125,581	$2.97	103,421	$2.85	32,398	$2.70
Cable splicers	15,411	$3.17	1,237	$3.23	2,937	$3.34	2,755	$3.23	961	$3.20
Cable splicers' helpers	2,149	2.09	258	2.04	566	2.13	258	2.21	117	1.96
Central office repairmen	37,123	3.04	2,346	3.06	8,341	3.17	6,426	3.13	1,840	2.99
Clerical employees, nonsupervisory	120,615	2.13	9,109	2.08	27,690	2.20	20,065	2.18	6,060	2.08
Exchange repairmen	13,349	3.25	378	3.37	3,813	3.31	3,998	3.24	417	3.31
Experienced switchboard operators	119,412	1.98	9,524	2.00	23,805	2.15	20,692	2.03	7,207	1.92
Linemen	13,448	2.76	869	2.83	2,687	2.98	2,296	2.92	838	2.64
Mechanics, building and motor-vehicle service	3,249	2.95	219	2.78	953	3.01	681	3.08	178	2.73
PBX and station installers	25,834	3.14	369	3.27	8,708	3.25	6,588	3.20	562	2.90
Test-board men and repeatermen	16,392	3.13	668	3.30	1,569	3.41	1,763	3.24	380	3.29
	Southeast		North Central		South Central		Mountain		Pacific	
All employees except officials and managerial assistants	66,811	$2.44	22,117	$2.55	55,384	$2.50	26,196	$2.54	85,920	$2.91
Cable splicers	2,128	$3.04	616	$2.97	1,221	$3.06	684	$2.93	2,331	$3.23
Cable splicers' helpers	237	1.92	2	(5)	491	2.12	32	2.13	35	2.56
Central office repairmen	3,673	2.92	747	3.12	3,222	3.01	1,389	2.83	5,302	3.05
Clerical employees, nonsupervisory	12,315	2.00	4,177	1.88	9,941	2.02	5,373	1.92	18,706	2.22
Exchange repairmen			10	(5)	1,671	3.22	331	3.03	2,661	3.20
Experienced switchboard operators	15,752	1.71	4,720	1.79	14,347	1.91	4,638	1.88	13,902	2.10
Linemen	1,459	2.51	584	2.44	2,019	2.64	780	2.47	1,510	2.92
Mechanics, building and motor-vehicle service	448	2.72	68	2.82	117	3.16	59	2.54	459	3.11
PBX and station installers	123	2.15	15	(5)	3,350	3.09	749	2.90	5,013	3.05
Test-board men and repeatermen	1,452	3.07	376	3.13	1,618	3.15	551	3.09	3,232	3.20

[1] Covers telephone carriers with annual operating revenues exceeding $250,000.

[2] Average hourly earnings were computed by dividing total scheduled weekly compensation by total scheduled weekly hours.

[3] The regions include: *New England*—Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; *Middle Atlantic*—Delaware, New Jersey, New York, and Pennsylvania; *Great Lakes*—Illinois, Indiana, Michigan, Ohio, and Wisconsin; *Chesapeake*—District of Columbia, Maryland, Virginia, and West Virginia; *Southeast*—Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee; *North Central*—Iowa, Minnesota, Nebraska, North Dakota, and South Dakota; *South Central*—Arkansas, Kansas, Missouri, Oklahoma, and Texas (except El Paso County); *Mountain*—Arizona, Colorado, Idaho (south of Salmon River), Montana, Nevada, New Mexico, Texas (El Paso County), Utah, and Wyoming; and *Pacific*—California, Idaho (north of Salmon River), Oregon, and Washington.

[4] Figures include long-lines employees and class A telephone carrier employees in Hawaii and Puerto Rico. Alaska had no class A telephone carriers reporting to the Federal Communications Commission.

[5] Insufficient data to warrant presentation of an average.

TABLE 2. WESTERN UNION TELEGRAPH CO.: PERCENTAGE DISTRIBUTION OF WIRE-TELEGRAPH EMPLOYEES,[1] BY STRAIGHT-TIME AVERAGE HOURLY EARNINGS,[2] SELECTED OCCUPATIONS, OCTOBER 1962

Average hourly earnings[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							
$1.15 and under $1.30										98.1	
$1.30 and under $1.50										1.9	6.7
$1.50 and under $1.70	1.2	1.0	4.5	0.1					0.6		6.2
$1.70 and under $1.90	5.8	8.0	19.0	5.5	15.0	0.1			9.1		23.2
$1.90 and under $2.10	9.4	13.5	27.4	6.7	19.7	.3		0.3	6.5		52.2
$2.10 and under $2.30	26.5	30.7	40.7	82.5	17.3	11.5	12.8	3.5	79.5		11.7
$2.30 and under $2.50	12.4	20.2	8.1	5.2	4.7	7.9	86.8	3.6	4.3		
$2.50 and under $2.70	11.8	9.8	.2	.1	.8	33.6	.4	13.5			
$2.70 and under $2.90	7.1	6.1	.1		26.0	5.7		13.9			
$2.90 and under $3.10	5.4	3.1			12.6	24.4		22.2			
$3.10 and under $3.30	8.1	3.5			3.9	16.5		41.9			
$3.30 and under $3.50	2.8	1.8						1.1			
$3.50 and under $3.70	1.4	.8									
$3.70 and over	8.0	1.3									
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	25,146	5,377	2,253	1,900	127	721	234	1,493	1,475	3,130	1,428
Average hourly earnings[2]	$2.63	$2.36	$2.06	$2.23	$2.41	$2.73	$2.37	$2.93	$2.20	$1.18	$1.93

[1] Includes employees working in the conterminous 48 States and the District of Columbia; the company does not operate in Alaska or Hawaii. Data for ocean-cable employees of the company are incorporated in table 4.

[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

superintendents and managers, and construction, installation, and maintenance employees. Women accounted for a large proportion of the clerical employees and telegraph operators.

For many of the nonmessenger occupational categories studied, the hourly rates of the highest paid employees exceeded those of the lowest paid by more than $1. Wage provisions contained in agreements with both the Commercial Telegraphers' Union and the American Communications Association(Ind.) include established rate ranges for specific occupations, with differences between the starting and maximum rates amounting to more than 60 cents an hour for some classifications.[5] In some jobs, however, individual rates were closely grouped. For example, the hourly rates of over three-fourths of the experienced telegraph operators (except Morse operators) in the traffic department. Morse operators, and telephone operators were within 20-cent ranges.

The 4,558 messengers, nearly all males and constituting about 15 percent of the company's wire-telegraph work force, included 3,156 full-time and 1,402 part-time employees. Full-time messengers averaged $1.51 an hour and worked an average of 39 hours a week at the time of the study, compared with $1.19 an hour for part-time messengers who averaged 18 hours a week. In October 1962, foot and bicycle messengers averaged $1.18 an hour, the same as a year earlier. Motor messengers averaged $1.93, 4 cents more than in 1961.

Total employment of Western Union's wire-telegraph operations in October 1962 was 4½ percent below October 1961 and 44 percent below October 1947 employment. The occupational composition of the work force changed considerably in the last 15 years. For example, the proportion of workers classified as telegraph operators declined from 34 percent in 1947 to 25 percent in 1962; similarly, the proportion 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 account for 18 cents of the $1.58 increase in average hourly rates of pay between 1947 and 1962.[6]

Radiotelegraph Carriers

The 3,805 employees of the five principal companies engaged in transmitting nonvocal radio communications averaged $3.13 an hour in October 1962—an increase of 5.4 percent since October

[5] Advancement from the starting rate through the various progression steps to the maximum rate is automatic for employees meeting the requirements of the job after specified periods of service. For additional information on the company's wage structure, see *Industry Wage Survey: Communications, October 1960* (BLS Bulletin 1306, 1961), p. 6.

[6] Weighting current occupational averages by occupational employment for October 1947 results in an average of $2.45 instead of $2.63 for nonmessenger employees.

TABLE 3. PRINCIPAL RADIOTELEGRAPH CARRIERS:[1] PERCENTAGE DISTRIBUTION OF EMPLOYEES, BY AVERAGE HOURLY EARNINGS,[2] SELECTED OCCUPATIONS, OCTOBER 1962

Average hourly earnings [2]	All employees, except officials and managerial assistants [3]	Clerical employees, nonsupervisory	Marine coastal station operators	Mechanics and maintenance technicians	Messengers, foot and bicycle	Radio operating technicians	Radio operators	Teletype-multiplex operators
$1.15 and under $1.30	7.4				70.7			
$1.30 and under $1.50	1.6	0.9			13.5			
$1.50 and under $1.70	2.1	1.3			15.1			0.6
$1.70 and under $1.90	2.5	8.7			.8			
$1.90 and under $2.10	3.6	11.3						2.7
$2.10 and under $2.30	4.8	8.2	1.4	0.3			0.7	11.1
$2.30 and under $2.50	5.0	9.5		.3		1.1		13.7
$2.50 and under $2.70	6.9	12.8	3.6	7.4		7.6	1.4	12.4
$2.70 and under $2.90	8.1	8.9	4.3	10.4		3.6	3.5	17.6
$2.90 and under $3.10	8.1	13.2	23.2	10.0		6.5	3.5	8.2
$3.10 and under $3.30	6.7	8.5	16.7	5.4		9.4		6.3
$3.30 and under $3.50	11.6	10.1	32.6	10.7		10.8	19.9	27.3
$3.50 and under $3.70	6.2	3.8	2.9	17.4		6.5	59.6	
$3.70 and over	25.4	2.9	15.2	38.1		54.7	11.3	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers	3,805	956	138	299	392	278	141	476
Average hourly earnings [2]	$3.13	$2.65	$3.31	$3.41	$1.30	$3.55	$3.50	$2.83

[1] Covers radiotelegraph carriers with annual operating revenues exceeding $50,000.

[2] See footnote 2, table 1.

[3] Excludes employees of radiotelegraph carriers outside the conterminous 48 States and the District of Columbia.

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

TABLE 4. PRINCIPAL OCEAN-CABLE CARRIERS: [1] PERCENTAGE DISTRIBUTION OF EMPLOYEES, BY AVERAGE HOURLY EARNINGS,[2] SELECTED OCCUPATIONS, OCTOBER 1962

Average hourly earnings [2]	All employees, except officials and managerial assistants [3]	Cable operators	Clerical employees, nonsupervisory	Messengers, foot and bicycle	Teletype multiplex operators
$1.15 and under $1.30	7.2			65.6	
$1.30 and under $1.50	3.2			29.1	
$1.50 and under $1.70	.9		1.9	1.3	
$1.70 and under $1.90	2.6		5.6	3.3	
$1.90 and under $2.10	3.5		7.9	.7	1.7
$2.10 and under $2.30	7.6		11.7		10.4
$2.30 and under $2.50	6.8		9.0		7.0
$2.50 and under $2.70	10.2		13.6		42.6
$2.70 and under $2.90	10.7		16.3		24.3
$2.90 and under $3.10	10.4	10.2	17.2		13.9
$3.10 and under $3.30	9.4	37.3	10.0		
$3.30 and under $3.50	8.0	52.5	1.3		
$3.50 and under $3.70	3.5		2.3		
$3.70 and over	16.0		3.1		
Total	100.0	100.0	100.0	100.0	100.0
Number of workers	1,369	59	478	151	115
Average hourly earnings [2]	$2.94	$3.27	$2.69	$1.28	$2.62

[1] Covers ocean-cable carriers with annual operating revenues exceeding $50,000; includes ocean-cable employees of Western Union Telegraph Co.
[2] See footnote 2, table 1.
[3] Excludes employees of ocean-cable carriers outside the conterminous 48 States and the District of Columbia.

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

1961 ($2.97). Men, accounting for approximately seven-eighths of radiotelegraph employees, were predominant in all of the major occupational groups studied. Between 1961 and 1962, average hourly earnings for all job categories presented in table 3, except foot and bicycle messengers, increased by 11 to 15 cents; the increase for foot and bicycle messengers was 5 cents.

Radiotelegraph employee earnings were widely dispersed, with the middle half of the workers earning between $2.42 and $3.70. Earnings rose 122 percent since October 1947 ($1.41). Since October 1947, percentage increase in average earnings varied among occupational groups. Thus, marine coastal station operators' earnings rose by 86 percent, compared with an increase of 121 percent for teletype-multiplex operators.

Employment of radiotelegraph carriers in October 1962 was 24 percent below the level recorded in October 1947, and since 1961, the number of workers has decreased approximately 4½ percent.

Ocean-Cable Carriers

Earnings of the 1,369 employees of the three ocean-cable carriers covered by the study averaged $2.94 an hour in October 1962—5 percent above the 1961 level ($2.79), and 96 percent above the 1947 average ($1.50). Employment remained approximately at the 1961 level but was 7 percent below the number of workers recorded in 1947. Men, accounting for 85 percent of ocean-cable employment, were predominant in all of the occupational categories studied separately.

Table 4 presents average hourly earnings for selected occupational categories which accounted for three-fifths of the total ocean-cable employment. Since October 1961, average hourly earnings increased from 7 to 14 cents, except for foot and bicycle messengers. This group remained at the same level as in 1961 ($1.28).

—JOSEPH C. BUSH
Division of Occupational Pay

Digest of 1961 State Reports on Vocational Education

In 1961, almost 4 million persons were enrolled in vocational education classes financed jointly by Federal and State and local funds under authorization of Federal vocational education laws, according to the *Digest of Annual Reports of State Boards for Vocational Education* for the fiscal year 1961.[1] High school youth accounted for 48 percent of the total enrollment of 3,855,564.

A little more than two-fifths of all students were enrolled in home economics, one-fifth were in agriculture, and one-fourth in trades and industry (table 1). The remainder were in classes for distributive occupations, practical nursing, and technicians. Twenty years earlier, when total enrollment was 2.4 million, agricultural education took about one-fourth of the students, home economics and trades and industry roughly one-third each, and distributive education the remainder. (The practical nursing and technician programs did not begin until the late 1950's.)

From 1955 through 1961, Federal expenditures for vocational education increased from $30.4 million to $48.0 million (58 percent); during the previous 7 years, funds had fluctuated between $25 and $27 million. State and local expenditures, on the other hand, increased year by year from $77.1 million in 1948 to $206.1 million. Comparisons of the expenditures for each type of program reveal that 28.6 percent of the $254 million spent for vocational education in 1961 went to home economics; but of the Federal contribution, only 19 percent was spent on home economics. (See table 2.) On the other hand, Federal expenditures for the new practical nursing and technician programs constituted 7.3 and 16.4 percent, respectively, of total Federal expenditures, while State, local, and Federal expenses for these two programs amounted to 2.9 and 7.2 percent of total vocational education funds. Some of the trends and problems revealed by the state reports are summarized in the following discussion.

Instruction Programs

Technician Training. The demand for technicians requires that we train youth in technician occupations; new materials, new processes, and new products all demonstrate the need for technical workers to continue their education. The National Defense Education Act of September 2, 1958, provided funds to train technicians to meet defense needs and by 1961, nearly 123,000 persons were enrolled in courses covered by the act. This was a 21-percent increase over 1960, when, according to a rough estimate, there were about 775,000 technicians working with engineers and scientists. Almost a third of the students were in California, and most were men, as was the case in the other States.

In 1961, approximately 39,200 persons were enrolled in preparatory programs and 83,700 in extension courses. (Those attending extension classes already have the minimum qualifications for a job, while preparatory students are seeking to acquire such qualifications.) In the preparatory programs, 69 percent of the students were attending 2-year post-high school courses.

Electronics took 49 percent of the total enrollment and mechanical programs, including drafting and designing, 24 percent.

About 300 students were enrolled in preparatory programs in data processing and computer programming and 5,700 were enrolled in extension work in this field. Significant numbers of students also took chemical, electrical, and production courses.

Training is being made available to individuals for employment as highly skilled technicians through the development of programs in areas larger than the usual school district. An increasing number of States have enacted legislation for area vocational education. Some provide for establishing State or area technical institutes and community or junior colleges. In 1961, two States reported new legislation designating junior colleges as area schools and six States reported changes in existing laws designed to stimulate area vocational education. Funds for establishing technical institutes were provided by a number of legislatures, while in other States, funds were approved to speed up construction of such schools. One State plans to spend $120 million over the

[1] U.S. Office of Education, 1963. The *Digest* covers programs authorized by the Smith-Hughes Act of 1917, the Vocational Education Act of 1946 (the George-Barden Act), and the National Defense Act of 1958. It does not cover training under the Area Redevelopment Act, which became law on May 1, 1961.

TABLE 1. NUMBER AND PERCENT OF ENROLLEES IN FEDERALLY REIMBURSED VOCATIONAL EDUCATION PROGRAMS, YEAR ENDING JUNE 30, 1961

Type of instruction	All programs		Preparatory programs		Extension programs	
	Enrollment	Percent	Enrollment	Percent	Enrollment	Percent
All categories	3,855,564	100.0	1,861,710	100.0	1,922,854	100.0
Agriculture	805,322	20.9	462,756	24.8	342,566	17.2
Trades and industries	963,609	25.0	307,344	16.5	656,265	32.9
Home economics	1,610,334	41.8	981,109	52.7	629,225	31.6
Distributive occupations	306,083	7.9	43,179	2.3	262,904	13.2
Practical nursing	47,264	1.2	29,098	1.6	18,166	.9
Technician	122,952	3.2	39,224	2.1	83,728	4.2

next 10 years to develop a system of area vocational schools.

Over seven-tenths of the 620 institutions offering technician programs in 1961 were comprehensive high schools, vocational or trade high schools, or community or junior colleges. There were also 66 combined vocational-technical schools and 49 straight technical schools conducting such programs.

Trade and Industrial Education. Adult courses continue to receive the major emphasis in the trade and industrial education program of most States. Of the 964,000 students, 524,000 attended evening school; only 40,000 of these were women. The *Digest* reports that although over the years much more effort has been spent in teacher education for full-time day instructors than for part-time and evening extension teachers who are responsible for the greater portion of the total enrollment in trade and industrial education programs, increased attention is now being given to training for evening instructors.

In 1961, 65,000 girls were enrolled in trade and industrial education classes during the day. The *Digest* reports that an increasing number of girls and women is being trained in a wide range of service occupations, including beauty culture, commercial foods, school lunch work, and institutional service. Employment opportunities for skilled assistance personnel in the medical and dental fields are stimulating the organization of many new programs for girls and women on both secondary and post-high school levels. Female enrollment in supervisory training programs continues to show a marked increase, a rather recent development.

Of the 439,000 full-time and part-time day students, 132,000 were apprentices, who received some or all of the classroom portion of their training through the trade and industrial education program. Apprentice-related training at school has been under severe physical limitations. The report of a panel of consultants for vocational education [2] states that adequate classroom space and appropriate instructional equipment and materials have not been available for many types of courses and that these inadequacies have caused some programs to be removed from the public schools. It also says that craftsmen used as teachers for related training and skill training of both apprentices and journeymen have not been afforded adequate opportunities to learn modern instruction methods.

Distributive Education. With more workers now employed in service industries than in production industries, there is increasing demand for distributive education which provides a broad and varied education program for these workers. The distributive program began in 1938 with 36,000 students; in 1961, there were 306,000 students, 86 per-

TABLE 2. EXPENDITURES FOR VOCATIONAL EDUCATION, BY SOURCE OF FUNDS AND TYPE OF PROGRAM, YEAR ENDING JUNE 30, 1961

[Amount in thousands]

Type of program	Total		Federal	
	Amount	Percent	Amount	Percent
Total	$254,073	100.0	$48,010	100.0
Agriculture	$69,607	27.4	$13,669	28.5
Distributive occupations	10,593	4.2	2,557	5.3
Home economics	72,622	28.6	8,938	18.6
Trades and industry	75,396	29.7	11,436	23.8
Practical nursing	7,450	2.9	3,497	7.3
Technician programs	18,406	7.2	7,913	16.5
	State		Local	
	Amount	Percent	Amount	Percent
Total	$89,155	100.0	$116,909	100.0
Agriculture	$25,861	29.0	$30,077	25.7
Distributive occupations	3,697	4.2	4,339	3.7
Home economics	27,745	31.1	35,940	30.7
Trades and industry	25,834	29.0	38,125	32.6
Practical nursing	1,869	2.1	2,084	1.8
Technician programs	4,148	4.6	6,345	5.4

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

[2] See *Education for a Changing World of Work* (U.S. Office of Education, 1963).

cent of whom were in extension courses.[3] The rest were in part-time cooperative classes, either as part of their high school curriculum or as post-high school students. A little more than half of the students were men. Emphasis in the high school cooperative programs is on the economics of distribution, management, salesmanship, and career training.

Home Economics. The *Digest* states the major purposes of vocational education in home economics as the preparation of students for homemaking responsibilities and activities necessary to achieve family well-being and the aiding of family members in developing and using human and material resources more effectively. With the increasing number of women employed outside the home, home management problems are being felt more keenly and home economics education helps women prepare for the dual role of homemaker and wage earner. The growing number of families moving from rural to metropolitan areas has created a special need for evaluating home economics programs so that courses may contribute more to helping such families cope with the changes in family living practices which urban living demands.

Home economics education, one of the original programs under the Smith-Hughes Act of 1917, has for many years enrolled more students than other federally reimbursed vocational education programs. In fiscal 1961, the enrollment of 1,610,000 students represented 41.8 percent of the total vocational education enrollment. Sixty-one percent attended regular day programs; the rest were evening and part-time students.

Agriculture. In addition to training proficient farmers, agricultural training now must provide background and experience in farming to the increasing number of persons who are engaged in other agricultural occupations. There is also a trend toward the farm management approach, with more attention on managerial decisions.

In 1961, there were 805,000 persons (all men) enrolled in agricultural courses, 463,000 were day students, 73,000 were part-time, and 269,000 were evening students.[4] Texas accounted for 126,000 enrollments. North Carolina was next with 54,000. The only other States with as many as 40,000 enrollments were Georgia, Mississippi, and South Carolina.

Practical Nurse Education. The number of enrollments in practical nursing and other health occupations increased from 28,300 in 1956, the first year of the program, to 62,200 (including 14,900 who are trained through the regular expenditures of the trades and industrial program) in 1961. The *Digest* reported that most States were screening more qualified applicants than could be admitted. One-third of those admitted today are 20 years of age or younger. Three-fifths of the students were in preparatory classes in practical nursing and other health occupations; the remainder were in extension classes.

Training Opportunities

In today's vocational education system, home economics students constitute higher proportion of the total than they did 20 years ago, while there has been a relative decline in the proportion enrolled in agriculture and trades and industry classes. The report of the consultants on vocational education reveals that if the number of schools offering courses can be used as an index of the availability of instruction, agriculture today presents considerably more training opportunities, than do trade and industrial occupations. There were 9,823 schools offering agriculture in 1959–60; trade and industrial education was offered in 2,138. In the same period, home economics was taught in 95 percent of all public secondary schools with more than 100 pupils. Forty-nine percent of the girls in these schools were enrolled in home economics. Of those schools offering home economics, 40 percent offered vocational home economics.

Less than 10 percent of the high schools offer trade and industrial education programs,[5] but the *Digest* notes an encouraging trend of one-trade programs in small high schools giving way to area vocation schools or centers where youth from

[3] Programs vary from short intensive courses to curriculums extending over 3 years, with students attending 4 hours a week. Ibid., p. 156.

[4] The vocational program for employed youth and adults usually takes the form of classes meeting at least 10 times a year. Ibid., p. 155.

[5] Ibid., pp. 112–120.

several small communities may benefit from a greater variety of trade offerings in well-equipped facilities.

Recruitment and training of technical teachers for full-time day programs continue to present a major problem in the development of technician education programs. In some States, it is very difficult to attract competent personnel to the technician teaching field because of the differential between salaries in education and industry. In many instances, industry has cooperated by making instructors available, and advisory committees have assisted in recruiting qualified personnel. However, the basic problem of providing adequate salary scales remains to be solved. Agriculture teachers are also needed. The problem of supplying sufficient well-qualified teachers continues to limit the size and number of practical nursing programs.

—Phyllis Groom
Division of Publications

North Carolina's system of vocational education envisions the maximum utilization of human and natural resources. The chief institution in the system, aside from the high school, is the Industrial Education Center, which is designed to prepare people for the occupational needs of industry. The Industrial Education Center is not a secondary school; it is primarily a postsecondary school. But it serves the vocational training needs of the State's people and industries at whatever level. Indeed, it is a part of the State's program for industrial expansion.

A primary purpose of the center is to provide post-high school technical-vocational training for qualified high school graduates. An equally important purpose is to provide needed training, based on occupational surveys, to employed or unemployed adults and out-of-school youth who need to acquire skills or new skills or to upgrade their present skills and knowledge in order to meet the demands of present-day industry. Much of this kind of training is for the unemployed and the underemployed. A third purpose of the center is to offer preemployment training to selected high school seniors enrolled in high schools that do not provide such training. This, of course, is a service of particular value to the smaller high schools. The center, therefore, offers training opportunities in technical and trade skills, agricultural technology, distributive education, health education, and homemaking for both men and women.

The system of Industrial Education Centers in North Carolina is now 3 years old. There are 20 centers in operation, and the number of students served had gone from 18,000 in 1959–60 to 22,000 in 1960–61 to 30,000 in 1961–62. The ultimate intent is to have these centers so strategically located as best to serve the needs of industry on an area basis and, where possible, located within commuting distance of all eligible trainees. With this in mind, extension units have been organized by several centers in the larger areas. The extension units are administered and supervised by the parent centers. There is always the possibility, however, that a unit may develop into a center and come under its own jurisdiction. . . . No post-high school technical training is done at the extension units; such training is done only at the centers themselves. The units concentrate on training high school seniors and others in preemployment courses and on training unemployed and employed adults and out-of-school youth in skills and new skills. They give particular attention to training for the needs of new industry.

—Ivan E. Valentine, The Organization, Function, and Objectives of the Industrial Education Centers of North Carolina in *Education and Training for the World of Work: A Vocational Education Program for the State of Michigan* (Kalamazoo, Mich., W. E. Upjohn Institute for Employment Research, 1963), p. 89.

Report of President's Commission on the Status of Women

EDITOR'S NOTE.—*This article presents excerpts (with minor style modifications) from American Women, the unanimous report of the Commission on the Status of Women presented to President John F. Kennedy on October 11, 1963. The excerpts are limited almost exclusively to passages which deal with women as workers. The report is available from the Superintendent of Documents at $1.25. Reports of the findings of seven committees appointed by the Commission cover education, home and community services, private employment, public employment, labor standards, social insurance and taxes, and the legal treatment of women in respect to civil and political rights. In addition, a summary of four "consultations" held under Commission auspices deals with private employment opportunities, new patterns in volunteer work, portrayal of women by the mass media, and problems of Negro women. Single copies of the committee reports and the report of the consultations may be obtained from the Women's Bureau of the Department of Labor.*

WHEN PRESIDENT JOHN F. KENNEDY appointed our Commission, he said: ". . . we have by no means done enough to strengthen family life and at the same time encourage women to make their full contribution as citizens." Greater development of women's potential and fuller use of their present abilities can greatly enhance the quality of American life. We have made recommendations to this end.

Education and Community Services

The Commission has given great weight to educational needs of mature women, but nothing it can recommend to meet the special needs of women is of greater importance than improvement in the quality of early education available to all of the Nation's youth. But improvement in American education as it has been in the past is not enough. Its framework must be enlarged to include adult education as an integral part of the structure.

The structure of adult education must be drastically revised. It must provide practicable and accessible opportunities, developed with regard for the needs of women, to complete elementary and secondary school and to continue education beyond high school. Vocational training, adapted to the Nation's growing requirement for skilled and highly educated manpower, should be included at all of these educational levels. Where needed and appropriate, financial support should be provided by local, State, and Federal governments and by private groups and foundations.

Skilled counseling is an essential part of education. States and school districts should raise their standards for State employment service counselors and school guidance counselors. Institutions offering counseling education should provide both course content and ample supervised experience in the counseling of females as well as males, adults as well as adolescents.

Demands upon women in the economic world, the community, and the home mean that women often simultaneously carry on several different kinds of activity. If the family is to continue to be the core institution of society, as it has been for many centuries, new and expanded community services are necessary.

For the benefit of children, mothers, and society, child care services should be available for children of families at all economic levels. Proper standards of child care must be maintained, whether services are in homes or in centers. Costs should be met by fees scaled to parents' ability to pay, contributions from voluntary agencies, and public appropriations.

Tax deductions for child care expenses of working mothers should be kept commensurate with the median income of couples when both husband and wife are engaged in substantial employment. The present limitation on their joint income, above which deductions are not allowable, should be raised. Additional deductions, of lesser amounts, should be allowed for children beyond the first. The 11-year age limit for child care deductions should be raised.

The reorganization of ordinary home maintenance service is long overdue. Many of the women employed in household work remain in it only because they have no alternative. Household workers have, historically, been low paid, without standards of hours and working conditions, with-

out collective bargaining, without most of the protections accorded by legislation and accepted as normal for other workers, and without means and opportunity adequately to maintain their own homes.

Few families can now afford to employ such workers full time at decent wages, but many families can pay rates in line with modern labor standards for special services as they need them. Privately run placement organizations to market such special services can operate to the mutual benefit of employer and employee, and are doing so in some communities. They can conduct training programs and insure standards of job performance, and they can monitor conditions of work and wages paid. The public employment offices should review their treatment of household service, encouraging the development of specialties and conducting placement on that basis.

Private and Public Employment

Among the great majority of women, as among the great majority of men, the motive for paid employment is to earn money. For some, work has additional—or even primary—value as self-fulfillment.

Though women are represented in the highly paid professions, in industry, in business, and in government, most jobs that women hold are in low-paid categories. The difference in occupational distribution of men and women is largely responsible for the fact that in 1961, the earnings of women working full time averaged only about 60 percent of those of men working full time. But in various occupations where both sexes were employed, the levels of women's earnings were likewise demonstrably lower than those of men.

The Commission attempted to gather informed views as to the extent to which access to jobs, rates of pay, and opportunities for training and advancement are based on the qualifications of the women who apply for or hold them, and the extent to which discriminations are made against them in these regards solely because they are women.

The reasons given by employers for differential treatment cover a considerable range. Frequently, they say they prefer male employees because the nonwage costs of employing women are higher. They say that the employment pattern of younger women is in and out of the labor force. They say that women's rates of sickness, absenteeism, and turnover are higher than men's; that the hiring of married women introduces one more element into the turnover rate because the residence of a married couple is normally determined by the occupation of the man. They say that though attendance rates of older women are often better than those of men, insurance and pensions for older workers are expensive, and that compliance with protective labor legislation applying to women is sometimes disruptive of schedules. They say that men object to working under women supervisors.

Because many personnel officers believe that women are less likely than men to want to make a career in industry, equally well-prepared young women are passed over in favor of men for posts that lead into management training programs and subsequent exercise of major executive responsibility.

Various means of causing employers to consider actualities rather than rely on conventional assumptions were considered by the Commission.

At the request of the Commission, the U.S. Employment Service issued a directive to public employment offices in the States, instructing their staffs to refer applicants on the basis of qualifications regardless of sex and requesting employers using these offices to avoid job orders specifying sex except where genuinely warranted.

Equal opportunity for women in hiring, training, and promotion should be the governing principle in private employment. An Executive order should state this principle and advance its application to work done under Federal contracts.

The Commission estimates that no more than 20 percent of all women workers would be covered by an Executive order regarding Government contracts. Action should be undertaken to encourage employers who do not have Government contracts to comply with the Federal policy of nondiscrimination.

Recognizing that merit is a well-established principle in Federal employment policy, the Commission sought to bring practice into closer accord with principle throughout the Federal service, civilian and military. Action on our recommendations took place so rapidly during the life of the Commission that our report becomes for

the most part an account of progress already achieved. [EDITOR'S NOTE.—Such actions were described in "Progress of the Commission on the Status of Women," *Monthly Labor Review*, February 1963, pp. 141–142. In addition, the Commission's report mentions the revision, in January 1963, of standards for State merit systems, in connection with various grants-in-aid from the Departments of Health, Education, and Welfare, Labor, and Defense, to prohibit discrimination on the basis of any nonmerit factor.]

Many of the lowest paid jobs in industry and the service occupations have historically been filled by women; driven by economic necessity, they have taken whatever jobs they could find even though conditions were damaging to health and family life. Little by little, first in some of the States and then at the Federal level, legislation has put floors under wages and ceilings on hours. But such laws are far from uniform from State to State and are still far from adequate.

The Federal Fair Labor Standards Act, including premium pay for overtime, should be extended to employment subject to Federal jurisdiction but now uncovered, such as work in hotels, motels, restaurants, and laundries, in additional retail establishments, in agriculture, and in nonprofit organizations.

State legislation, applicable to both men and women, should be enacted, or strengthened and extended to all types of employment, to provide minimum wage levels approximating the minimum under Federal law and to require premium pay at the rate of at least time and a half for overtime.

The normal workday and workweek at this moment of history should be not more than 8 hours a day and 40 hours a week. The best way to discourage excessive hours for all workers is by broad and effective minimum wage coverage, both Federal and State, providing overtime of at least time and a half the regular rate for all hours in excess of 8 a day or 40 a week.

Until such time as this goal is attained, State legislation limiting maximum hours of work for women should be maintained, strengthened, and expanded. Provisions for flexibility under proper safeguards should allow additional hours of work when there is a demonstrated need. During this interim period, efforts should continuously and simultaneously be made to require premium rates of pay for all hours in excess of 8 a day or 40 a week.

Exemptions for executive, administrative, and professional women should be carefully drawn so as to insure against evasion of normally applicable hour laws in the case of workers who genuinely need their protection.

In 1919, the first equal pay laws in the States were enacted; 24 States now require that women who do the same or comparable work as men in the same establishment be paid at the same rates. A bill embodying this principle, signed by President Kennedy on June 10, amends the Fair Labor Standards Act of 1938; it covers some 27.5 million men and women. State laws should [universally] establish the principle of equal pay for comparable work.

The right of workers to organize and bargain collectively has been established under Federal law. In places of work solely under State jurisdiction, the difficulty of organizing women, especially those in low-paid work who are least able to risk possible loss of earnings, is augmented when employers are under no legal obligation to bargain collectively or to refrain from antiunion practices. State laws should protect the right of all workers to join unions of their own choosing and to bargain collectively.

Social Insurance

Because increases in general benefits under old-age, survivors, and disability insurance and unemployment insurance would be applicable to the entire population, the Commission did not consider them. The improvements proposed are limited to inequities directly affecting women.

A widow now becomes eligible at age 62 to receive a benefit equal to 82½ percent of her husband's primary benefit. An aged widow should not have to live on less than her husband would receive if he survived her. We are aware of the cost of such a program—its full realization would require an increase of 0.25 percent of taxable payrolls—but this much additional basic security would mitigate existing dependency.

Many single women who are primary workers have relatives other than parents who are as dependent on their earnings as wives and children

are on the earnings of husbands or fathers. Yet on their death, parents alone are eligible for benefits. A broader definition of dependents of single workers, men and women alike, would meet a genuine social need. The cost—in the neighborhood of 0.01 percent of taxable payrolls—would not be significant in relation to the gains it would bring.

Under the Federal-State system of unemployment insurance, all except one of the major groups still left uncovered are substantially, if not predominantly, composed of women workers. The coverage of the unemployment insurance system should be extended. Small establishments and nonprofit organizations should be covered now through Federal action, and State and local government employees through State action. Practicable means of covering at least some household workers and agricultural workers should be actively explored.

Statutory, administrative, and judicial limitations have restricted the protection of women against loss of income that this program was originally intended to cover. In this view, concentrated attention is given to preventing women from drawing unemployment benefits on the ground that they work sporadically without seriously looking for continuous employment. We believe that benefits should be afforded women on the same basis as men, with adoption of realistic measurements of attachment to the labor market which would prevent benefit payments to persons of either sex who seek work only sporadically.

In 36 States, disqualification of women from the receipt of unemployment compensation for specified periods during pregnancy and maternity is stipulated. Wide variations among types of jobs and physical capacities of individuals suggest the desirability of flexible means of determining the period during which a woman is in fact unable to work.

We believe that unemployment compensation should be available to persons seeking work who are temporarily jobless because of a family move, but recommend that such compensation be drawn from the general unemployment fund of the State rather than charged against the account of the former employer.

The general Federal system of social security makes no provision for compensating a working wife for loss of income due to childbearing. Forty-six of the 50 States also ignore it. This is one of the major remaining gaps in the protection of workers against losses of income. Paid maternity leave or comparable insurance benefits should be provided for women workers; employers, unions, and governments should explore the best means of accomplishing this purpose.

Public Office

The low proportion of women in public office reflects the low proportion of women prominent in the private occupations that normally lead to political activity and advancement. As more and more women plan ahead for a career after their children are grown, and apply themselves in earlier years to a grassroots apprenticeship, the scale of their political activity is likely to broaden. Women should be encouraged to seek elective and appointive posts at local, State, and national levels and in all three branches of government.

Public office should be held according to ability, experience, and effort, without special preferences or discriminations based on sex. Increasing consideration should continually be given to the appointment of women of demonstrated ability and political sensitivity to policymaking positions.

Federal Program

To further the objectives proposed in this report, an Executive order should:

1. Designate a Cabinet officer to be responsible for assuring that the resources and activities of the Federal Government bearing upon the Commission's recommendations are directed to carrying them out, and for making periodic progress reports to the President.

2. Designate the heads of other agencies involved in those activities to serve, under the chairmanship of the designated Cabinet officer, as an interdepartmental committee to assure proper coordination and action.

3. Establish a citizens committee, advisory to the interdepartmental committee and with its secretariat from the designated Cabinet officer, to meet periodically to evaluate progress made, provide counsel, and serve as a means for suggesting and stimulating action.

Wage Chronology: General Motors Corp.[1]

Supplement No. 5—1961–63

NEGOTIATIONS in the automobile industry to replace agreements scheduled to expire in August and September 1961 began in late June and early July of that year. General Motors Corp. and the United Automobile, Aerospace, and Agricultural Implement Workers of America (UAW)[2] began their discussion on June 28 with the presentation of general bargaining objectives.[3] The union's proposal (made separately to General Motors, Ford Motor Co., Chrysler Corp., and American Motors during July) was incorporated in a comprehensive document outlining their demands. Among other points, it noted that the 2.5-percent annual improvement factor was below "either the actualities or potentialities of productivity advance in our economy today."

The union ultimately asked for continuation of the 2.5-percent annual improvement factor and the cost-of-living escalator clause, with incorporation into base rates of 12- of the existing 17-cent-an-hour allowance. Proposed changes in related wage practices included liberalization of supplemental unemployment benefits, higher separation payments, and a guaranteed workweek for hourly workers through payment on a salary basis. Broadened job opportunities were to be provided through a shorter workweek, sabbatical leaves, longer vacations, restrictions on overtime, and earlier retirement. Many of the demands were designed to raise the benefits provided by the welfare programs. The union called for a broadened and company-paid health insurance plan, higher life and sickness and accident insurance benefits, higher pensions periodically adjusted to the change in the Consumer Price Index, and assumption by the company of part of the cost of retirees' insurance. The union also demanded more protection in the form of moving allowances, transfer rights, etc., for workers affected by the corporation's decisions to transfer operations or to open and close plants.

On July 31, after more than a month of bargaining that failed to produce satisfactory progress, the UAW and General Motors each served notice of intention to terminate the contract upon its expiration. Union members had voted previously to strike, if necessary, in support of their demands.

General Motors, on August 22, proposed a 22-point program to be embodied in a 3-year contract,[4] and stipulated that the offer would expire along with the contract at midnight on August 31, if agreement was not reached by then. Economic proposals of the company included continuation of the existing annual improvement factor increases, and incorporation of 12 cents of the existing 17-cent-an-hour cost-of-living allowance into base rates. The company proposed continuation of the cost-of-living escalator clause, subject to review in September of 1962 and 1963, with the adjustment limited to 3 cents in the second year of the agreement and a total of 6 cents over the life of the agreement.

Other points in the company's economic program included a new short workweek benefit to supplement pay when less than 36 hours were worked in a week; an improved supplemental unemployment benefit plan, including increased separation pay; a moving allowance provision for employees transferring to other company plants; an improved vacation pay plan; increased life insurance and pension benefits; and improved hospital and medical expense benefits. The union rejected the offer as "totally inadequate."

On August 31, at the request of the Federal Mediation and Conciliation Service, the parties agreed to extend the contract to September 6. Two days later, the union made a proposal that included essentially its earlier demands, but added a progress- or profit-sharing plan similar to the

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[1] See *Monthly Labor Review*, April 1951, pp. 405–406; August 1953, pp. 845–847; October 1955, pp. 1147–1151; and April 1961, pp. 395–401; or BLS Report 185, 1961.

[2] The UAW changed its name to the United Automobile, Aerospace, and Agricultural Implement Workers of America on May 8, 1962.

[3] The UAW's bargaining program was adopted in April 1961, at a special collective bargaining convention. See "Special Bargaining Convention of the United Auto Workers," *Monthly Labor Review*, June 1961, pp. 611–613.

[4] The UAW received almost identical offers from both Ford and Chrysler on the same day.

[5] The American Motors profit-sharing plan required the company to pay 10 percent of profits before taxes (computed on the balance remaining after an amount equal to 10 percent of stockholders' equity had been set aside) to be used for increased benefits for hourly rated workers, and an additional 5 percent to be used to purchase American Motors' stock for these workers. For details of the American Motors–UAW 1961 agreement, see *Monthly Labor Review*, October 1961, pp. 1117–1118.

one incorporated in the agreement reached a week earlier with American Motors Corp.[5] (A profit-sharing plan had been one of the union's contract demands in 1958.) The profit-sharing plan proposal was withdrawn the following day. However, the union stipulated that General Motors match all other benefits incorporated in the American Motors contract. A few hours before the extended deadline, union and company representatives announced that in light of "significant progress," the contract would be further extended to September 11.

Accord on basic economic terms of a new contract was reached on September 6, contingent upon settlement of noneconomic issues at both national and local levels. Local issues were resolved at more than 30 plants, but when the parties at almost 100 other plants were unable to resolve their differences on these issues by September 11, local strikes began.

The last of the local strikes ended September 27, after the parties agreed to final contract provisions. The national contract covered 310,000 workers in 131 bargaining units in 18 States. There were many similarities between the General Motors contract and the pact with American Motors, the principal difference being the profit-sharing plan at American Motors and the methods of financing the increased benefits. The GM contract continued the annual improvement factor increases of 2.5 percent (with a minimum of 6 cents an hour) and the cost-of-living escalator clause (with 12 cents of the 17-cent allowance incorporated into base rates). The settlement provided that 2 cents of the first year's annual improvement factor increase be used to defray part of the company's cost of assuming the employees' share of hospital-medical insurance for active employees and their dependents, and that the 1-cent cost-of-living allowance that would have been due in September be used to pay part of increased company costs resulting from improved pensions and payment of one-half the premiums for hospital-medical insurance for retired employees and their dependents. Life insurance was increased; hospital, medical, and surgical benefits were improved. Provision was made for the company to pay 75 percent and the employees 25 percent of any increase in these insurance costs, but the agreement dated September 20, 1961, stipulated that the employees would not pay any cost increase for the duration of the agreement.[6] Other contract changes included a moving allowance provision and improved vacation benefits, jury duty, and separation pay. Paid relief time (previously a company policy but an issue in strikes at some plants) was incorporated into the agreement.

Supplemental unemployment benefits were increased and the maximum period for such benefits was doubled—to 52 weeks. A short workweek provision was established, with 50 percent of the regular hourly rate being paid for each hour under 40 lost during unscheduled short workweeks and 65 percent during scheduled short workweeks. In addition, the company was to finance hospital, medical, and surgical insurance for laid-off workers and their dependents for as long as they were eligible for SUB payments and for up to 6 months for disabled employees. Any payments made by the company for such coverage for laid-off employees was to be credited against contributions to the SUB fund.

The company was to contribute 5 cents to the SUB fund for each hour employees received pay from the company through November 1962, regardless of the amount of money in the fund; thereafter, company contributions were to be based on a new method of computing maximum funding.

The contract is to be in force until August 31, 1964, with no reopening provisions. The following tables bring the General Motors Chronology up to date through September 1963.

[6] See footnote 2, table A.

A—General Wage Changes

Effective date	Provision	Applications, exceptions, and other related matters
Mar. 6, 1961	No change	Quarterly review of cost-of-living allowance.
June 5, 1961	do	Do.
Sept. 4, 1961	do	The 1-cent-an-hour cost-of-living adjustment that would have been due was waived by the union; see following page.

A—General Wage Changes—Continued

Effective date	Provision	Applications, exceptions, and other related matters
Sept. 4, 1961 (agreement dated Sept. 20, 1961).	6 cents an hour increase or 2½ percent of base rates, minus 2 cents, whichever was greater,[1] (increase ranged from 4 to 10 cents an hour, BLS estimated average—4.4 cents).	Agreement maintained the improvement factor of the previous agreement, minus 2 cents in 1961, and provided adjustments to be effective on Sept. 3, 1962, and Sept. 2, 1963.[2] Waiver of 2 cents of annual improvement factor increase and 1 cent due under Sept. 4, 1961, cost-of-living review was in consideration of, but did not fully offset, improved pension benefits and company's assumption of full cost of hospital-medical care for employees and dependents, and one-half cost of hospital-medical care for retired employees and dependents.
Oct. 2, 1961 (agreement dated Sept. 20, 1961).	----------	The agreement incorporated 12 cents of the 17-cent cost-of-living allowance in effect on Oct. 1, 1961, into base hourly rates,[3] and continued the cost-of-living escalator formula of the previous agreement.[4]
Dec. 4, 1961	1 cent an hour increase	Quarterly adjustment of cost-of-living allowance.
Mar. 5, 1962	No change	Quarterly review of cost-of-living allowance.
June 4, 1962	1 cent an hour increase	Quarterly adjustment of cost-of-living allowance.
Sept. 3, 1962	---do	Do.
Sept. 3, 1962	6 cents an hour increase or 2½ percent of base rates, whichever was greater,[1] (increase ranged from 6 to 12 cents an hour, BLS estimated average—6.8 cents).	Deferred increase.
Dec. 3, 1962	1 cent an hour increase	Quarterly adjustment of cost-of-living allowance.
Mar. 4, 1963	No change	Quarterly review of cost-of-living allowance.
June 3, 1963	1 cent an hour increase	Quarterly adjustment of cost-of-living allowance.
Sept. 1, 1963	2 cents an hour increase	Do.
Sept. 2, 1963	6 cents an hour increase or 2½ percent of base rates, whichever was greater,[1] (increase ranged from 6 to 12 cents an hour, BLS estimated average—7.0 cents).	Deferred increase.

[1] The 2½-percent increase (minus 2 cents in 1961) applied to straight-time hourly rates, excluding the cost-of-living allowance in effect and shift premiums as follows:

Straight-time hourly wage rate	*Hourly annual improvement factor increase in—*	
	1961	*1962 and 1963*
Less than $2.60	4 cents	6 cents
$2.60 but less than $3.00	5 cents	7 cents
$3.00 but less than $3.40	6 cents	8 cents
$3.40 but less than $3.80	7 cents	9 cents
$3.80 but less than $4.20	8 cents	10 cents
$4.20 but less than $4.60	9 cents	11 cents
$4.60 but less than $5.00	10 cents	12 cents

[2] By supplemental agreement dated Sept. 20, 1961, amending the insurance program, the parties agreed that the annual improvement factor increases due Sept. 3, 1962, and Sept. 2, 1963, were to be reduced by 25 percent of the increase in average monthly insurance base premiums above the average base premium in January 1962, after adjustment of this January base for the increase in premiums between Jan. 1, 1962, and July 31, 1962, resulting from improvements in plans outside Michigan. However, since the 2 cents of the first year's annual improvement factor was used to cover a portion of the cost of this insurance which could not be made effective immediately, the contract settlement agreement, dated Sept. 20, 1961, waived the employees' share of the increased cost for the duration of the agreement.

[3] Except base rates used in incentive pay calculations.

[4] The new agreement provided that future cost-of-living adjustments be determined in accordance with the following table:

Consumer Price Index (1947–49=100)	*Hourly cost-of-living allowance*
125.6 or less	None.
125.7 to 126.1	1 cent.
126.2 to 126.6	2 cents.
126.7 to 127.1	3 cents.
127.2 to 127.6	4 cents.
127.7 to 128.1	5 cents.
128.2 to 128.6	6 cents.
128.7 to 129.1	7 cents.
129.2 to 129.6	8 cents.
129.7 to 130.1	9 cents.
130.2 to 130.6	10 cents.
130.7 to 131.1	11 cents.
131.2 to 131.6	12 cents.
131.7 to 132.1	13 cents.
132.2 to 132.6	14 cents.
132.7 to 133.1	15 cents.
and so forth, with a 1-cent adjustment for each 0.5-point increase in the index.	

As in previous agreements, the cost-of-living review in December, March, June, and September was to be based on the Bureau of Labor Statistics Consumer Price Index for the months of October, January, April, and July.

B—Hiring and Minimum Job [1] Rates (Automobile Plants in Michigan)

Effective date	Hiring rate [2]	Minimum job rate [2]	Effective date	Hiring rate [2]	Minimum job rate [2]
Dec. 5, 1960	$2.27	$2.37	Sept. 3, 1962	$2.40	$2.50
Sept. 4, 1961	2.31	2.41	Dec. 3, 1962	2.41	2.51
Dec. 4, 1961	2.32	2.42	June 3, 1963	2.42	2.52
June 4, 1962	2.33	2.43	Sept. 1, 1963	2.44	2.54
			Sept. 2, 1963	2.50	2.60

[1] Applicable to the lowest paid classification in General Motors plants in Detroit and in the corporation's automobile manufacturing plants elsewhere in Michigan.

[2] Includes cost-of-living allowance.

C—Related Wage Practices

Effective date	Provision	Applications, exceptions, and other related matters
	Pay in Lieu of Vacation	
July 1, 1960 (agreement dated Sept. 20, 1961).	----------	Employee who did not respond to recall notice because he chose to remain in another company plant to receive vacation allowance based on seniority in both plants (formerly seniority was broken at old plant if employee did not return to work within 3 days of recall; vacation allowance then based on seniority at new plant).
Oct. 3, 1961 (agreement dated Sept. 20, 1961).	Changed to: Vacation pay based on seniority and number of pay periods worked in eligibility year.[1] Employees with seniority of 1 year or more and employed (1) 26 pay periods or more in eligibility year to receive full allowance provided in previous agreements, or (2) fewer than 26 but more than 12 pay periods to receive proportion of full allowance, based on number of pay periods worked.[2]	Employee retiring with (1) more than 12 pay periods of work to receive same vacation allowance as other employees, (2) fewer than 13 pay periods of work to receive 1/26 of allowance to which he would have been entitled for each pay period worked.[1] Provision (2) also applicable to employee on military leave during year leave of absence began or ended. Employee working 13 pay periods or more to receive credit for pay periods he was unable to work because of compensable disability. *Eliminated;* Provision that work only during weeks including June 30 or December 31 entitled employee to vacation allowance.[3]
	Holiday Pay	
Oct. 3, 1961 (agreement dated Sept. 20, 1961).	----------	In effect and continued: To be eligible for holiday pay, employee must have had seniority and: A. (1) otherwise would have been scheduled to work on that day and (2) worked scheduled days before and after holiday, or B. (1) have been laid off because of model change, plant rearrangement, or inventory, and (2) returned to work in week in which holiday fell, or subsequent week, and (3) worked on his first scheduled day following holiday, or C. during holiday or prior week must have (1) been laid off by reduction in force, (2) gone on sick leave, or (3) gone on military leave.

See footnotes at end of table.

C—Related Wage Practices—Continued

Effective date	Provision	Applications, exceptions, and other related matters
	Holiday Pay—Continued	
Oct. 3, 1961 (agreement dated Sept. 20, 1961)—Continued	----------	Holiday pay provided for holidays falling on Saturday if employee worked last scheduled day in week. Holidays recognized by Federal or State Government falling on Sunday to be observed Monday. Employee provided extra day's pay for holiday during vacation period. Holiday pay provided eligible employee on approved leave of absence who returned to work in holiday week.
	Jury-Duty Pay	
Oct. 3, 1961 (agreement dated Sept. 20, 1961).	Changed to: Greater of $10 or daily fee paid by court but, when added to court fee, not more than employee's straight-time daily earnings, excluding night shift and continuous operation premiums.	Payment limited to 60 days in any calendar year. Fee paid for each day employee reported for or served on jury.
	Relief-Time Pay	
Oct. 3, 1961 (agreement dated Sept. 20, 1961).	Established: Production employees provided 24 minutes paid relief time per shift.	Existing policy included in agreement for first time. Applicable to production workers on conveyor lines.
	Group Insurance Plan	
Oct. 2, 1961 (agreement dated Sept. 20, 1961).	Plan in effect: For employees---------- *Life insurance:* (1) before age 65, $5,500 to $10,500, depending on base hourly rate (was $4,500 to $9,000) and (2) at and after age 65 with (a) 10 but less than 20 years in plan, $825 to $1,575 (was $675 to $1,350) or (b) 20 years or more in plan, $1,650 to $3,150 (was $1,350 to $2,700).[4]	Employee weekly contributions before age 65—80 cents to $1.80; after age 65—40 to 90 cents. Company to pay remaining cost and administrative expenses. Employee not to contribute to life insurance after age 65. At and after age 65, life insurance reduced 2 percent per month until (1) for employee with 10 years or more in plan—face value decreased to 1½ percent of insurance in effect on 65th birthday times years in plan, up to 20, but not less than $825, and (2) for employee with less than 10 years in plan—face value decreased to $500 or until employee was separated from active service, whichever occurred first. Reduced insurance continued until death for long-term employee, until separation for employee with less than 10 years' service.[5] Employee in plan 5 years or more at age 60 who (1) stopped work at or after age 60 and continued contributions until work was stopped or (2) stopped work before age 60 but was insured to that age, could continue life and accidental death and dismemberment protection to age 65, for contribution of 50 cents per month per $1,000 of life insurance; thereafter, provision for reduction applied. Employee who did not continue insurance permitted to convert to individual policy.

footnotes at end of table.

C—Related Wage Practices—Continued

Effective date	Provision	Applications, exceptions, and other related matters
	Group Insurance Plan—Continued	
Oct. 2, 1961 (agreement dated Sept. 20, 1961)—Continued	----------	Employee separated at or after age 60, except for total disability, with less than 5 years in plan at age 60 to have all insurance discontinued but to be permitted to convert to individual policy; if separated because of total disability, life insurance could be continued during disability up to years employee participated in plan, but not after age 65, if employee paid premium of 50 cents per month per $1,000. Face value of insurance for employee at or over age 65 not to be increased to new levels; if employee joined plan after Sept. 1, 1950, and after age 65, face value limited to $500 and insurance cancelled on separation from service.
	Accidental death and dismemberment benefits: One-half face value of life insurance in case of accidental death.[4] Schedule of benefits for dismemberment.	
	Total and permanent disability benefits: Face value of life insurance, in 50 monthly payments ($110 to $210, was $90 to $180), provided employee disabled prior to age 60 with 10 years (was 15 years) or more in plan.[4]	Employee could elect to waive monthly benefits and continue full face value of life insurance without contributions. Total benefits for subsequent disability reduced by amounts received for first disability. $500 life insurance provided without cost to employee who received all monthly benefits. Greater of $500 or remaining installments paid beneficiary of employee who died before receiving all payments. Full amount of life insurance for earnings bracket reinstated if employee recovered and returned to work.
	Sickness and accident benefits: [6] $55 to $110 a week (was $45 to $100) for maximum of 26 weeks; payable from first day of accident or of hospitalization for illness; otherwise from eighth day of sickness. Maternity benefits up to 6 weeks.	26-week maximum applicable for disability recurring within 3 months of employee's return to work. New maximum duration available if disability recurred more than 3 months after employee returned to work or resulted from different cause. Benefits to be reduced by payments for time lost from work under a workmen's compensation or occupational disease law.[7] Benefits limited to $35 a week for employee who joined plan after Aug. 31, 1950, and after age 65. (Contribution for life and sickness and accident insurance 25 cents per week.) Maternity benefits available only to workers covered by plan when pregnancy began. All group insurance continued during receipt of sickness and accident benefits if contribution continued. When disability continued beyond exhaustion of weekly benefits (1) employee with less than 10 years in plan permitted to continue life and accidental death and dismemberment insurance up to number of years of participation in plan, but not after age 65, and (2) employee with service of 10 years or more permitted to continue life and accidental death and dismemberment insurance during disability to age 65, at which time reduction provisions applied.

See footnotes at end of table.

C—Related Wage Practices—Continued

Effective date	Provision	Applications, exceptions, and other related matters
	Group Insurance Plan—Continued	
Oct. 2, 1961 (agreement dated Sept. 20, 1961)—Continued	----------	Both groups of employees to continue contributions at rate of 50 cents per month per $1,000 life insurance. All coverage terminated at end of month following termination of employment.
Nov. 1, 1961 (agreement dated Sept. 20, 1961).	Added: *Hospital and medical benefits:*	Added: Company to contribute one-half of premiums for hospital and medical coverage for retirees and their dependents. Pensioners retired before Nov. 1, and not covered by plan, permitted to enroll at same cost as those already covered.
Jan. 1, 1962 (agreement dated Sept. 20, 1961).	Changed: *Extended group insurance:* All insurance (life, accidental death and dismemberment, total and permanent disability, and sickness and accident) continued at regular contribution rate for 1 month following month of layoff or leave of absence. Life and accidental death and dismemberment insurance continued for additional 11 months (was 4 months) with employee contributing 50 cents a month per $1,000 of life insurance. *Hospital, surgical, and medical benefits:* Benefits for employees and their dependents—to be company paid.[8] (Benefits included were already in effect except as noted.)	Formerly company and employees each paid one-half the cost of the plan.
	I. Michigan (Blue Cross and Blue Shield)--	In the Detroit area, employee could elect the Community Health Association Plan.
	Hospitalization (room and board): In member hospital, full coverage for semiprivate room or ward up to 365 days (was 120 days) per admission. In nonmember hospital, actual charges up to $15 a day for maximum of 365 days.	Employee using private room in member hospital to pay difference between that charge and semiprivate accommodations. Benefits not available for institutions for convalescence, nursing or rest care, for conditions not requiring substantially continuous bed care by licensed doctors and registered nurses; for teeth extractions or other dental treatment, for observation or diagnostic study, physical therapy, X-ray and laboratory examinations, electrocardiography or basal metabolism tests; for care under the laws of the United States or any State or political subdivision; for care for occupation disabilities provided in accordance with law; for care provided by another Blue Cross plan. Benefits limited to 30 days for each confinement for tuberculosis, nervous and mental conditions, alcoholism, or drug addiction. Changed: Company to pay full cost of hospital, surgical, and medical expense insurance for— Laid off employee (with unbroken seniority) and dependents for 1 month for each 4 weeks' supplemental unemployment benefits to which entitled at time of layoff, up to 12 months (formerly 6 months with worker paying full cost). Disabled employee and dependents for up to 6 months (formerly employee paid half cost).

See footnotes at end of table.

C—Related Wage Practices—Continued

Effective date	Provision	Applications, exceptions, and other related matters
	Group Insurance Plan—Continued	
Jan. 1, 1962 (agreement dated Sept. 20, 1961)—Continued	----------	Employees could continue insurance by paying full cost for any month up to 12 for which employer was not required to pay. Company can offset payments for laid-off employees against contributions to SUB fund.
	Special hospital expenses (other than for room and board): In member hospitals, full coverage up to 365 days (was 120 days) for meals and special diets; general nursing care; use of operating and other surgical treatment rooms; anesthesia when administered by a hospital employee; all laboratory examinations; physical therapy treatments; oxygen and other gas therapy; drugs, biologicals, and solutions; materials used in dressings and casts; and radium when owned or rented by hospital.	Supplies and services available only to bed patients when furnished by hospital and prescribed by attending doctor. Benefits limited to drugs and medicines in official formularies; exclude services of doctor, surgeon, or special nurse, X-ray or electrocardiographic services (covered under surgical-medical benefits), blood, prosthetic or other appliances, and ambulance service.
	In nonmember hospitals (1) affiliated with another Blue Cross Plan or located in area not served by a plan, regular charges for services listed above or (2) any other accredited hospital, up to $15 per day.	Hospital and medical service coverage extended up to 6 months without cost to disabled employees.
	Outpatient benefits: In member hospital, services and supplies regularly provided for bed patients. In nonmember hospitals, up to $25 for each condition.	Services and supplies limited to drugs, and pharmaceuticals, etc., to extent used in hospital and when administered in connection with use of operating or surgical treatment rooms, anesthesia, laboratory examinations (when related to surgery or treatment of emergencies), accidental injuries, and physical therapy for up to 60 days. Benefits not available for regular treatment of chronic conditions; extraction of teeth or other dental treatment; or routine physical, premarital, or preemployment examinations.
	Maternity benefits: All services provided for regular hospitalization plus use of delivery room, infant feeding and other routine care of the newborn child, and obstetrician's services.	Available after 270 consecutive days in plan. Prenatal and postnatal care not provided.
	Surgical-medical benefits: 1. *Plan to pay full amount of scheduled fee for employees earning less than $7,500 annually for:*	Services available anywhere. Participating doctors could make additional charges for employees earning above $7,500 or for those who requested and occupied a private room. Payment to nonparticipating doctors limited to lesser of charge for service or scheduled fee. Benefits not available for (1) industrial disabilities, (2) service by government agency without cost to employee, (3) hospital, dental, or nursing services, (4) medicines, drugs, etc., (5) operations for cosmetic purposes unless for correction of (a) congenital anomalies for patient under 12 years who participated in plan from birth or (b) conditions resulting from accidental injuries or surgical scars, (6) sterilization, or (7) routine or periodic physical, premarital, or other examinations or tests not directly related to diagnosis of illness or injury.

See footnotes at end of table.

C—Related Wage Practices—Continued

Effective date	Provision	Applications, exceptions, and other related matters
	Group Insurance Plan—Continued	
Jan. 1, 1962 (agreement dated Sept. 20, 1961)—Continued	*Surgical services*—all accepted operative and cutting procedures for diagnosis and treatment of diseases, injuries, fractures, and dislocations, and postoperative care for greater of hospital stay or 14 days.	
	Medical care—up to 365 days (was 120 days) care in hospital when surgery was not required; up to 30 days for tuberculosis or nervous and mental conditions.	Full benefits reinstated 3 months after release from hospital; after 6 months for tuberculosis or nervous and mental conditions.
	Anesthesia—payment for administration of anesthesia in surgical, medical, or obstetrical care by doctor not in charge of case.	
	Emergency first aid—up to $15 for care within 24 hours of nonoccupational injuries.	Applicable in doctor's office or hospital outpatient department.
	2. *Plan to pay balance of scheduled fee after employee paid the greater of $5 or 10 percent of fee for:*	Plan to reimburse employee for payments during 1 year in excess of $25 for employee with income under $2,500, $50 for $2,500 but less than $5,000 and $75 for $5,000 and over.
	Diagnostic X-ray and laboratory services and radiological services—in doctor's office, hospital, or hospital outpatient department and laboratory services in doctor's office or hospital outpatient department.	
	Consultation services—necessary technical assistance for diagnosis or treatment when not routinely provided by hospital.	Limited to one medical, obstetrical, or surgical consultation per continuous period of hospitalization.
	Technical surgical assistance—when required, not routinely provided, and related to service being received by employee.	
	II. Other States.	
	Coverage to be provided as nearly equal as practicable to the Michigan Blue Cross and Blue Shield plans.	In areas where local Blue Cross or medical plans fail to provide such benefits, supplemental benefits to be provided. Employees in California allowed to elect the Comprehensive Kaiser Health Foundation Plan or the Blue Cross and Blue Shield plans. In other areas, corporation to choose carrier in agreement with union so as to provide employees with a choice between Blue Cross and Blue Shield or similar plan or a plan similar to the Kaiser plan.
	Pension Plan	
Jan. 1, 1962 (agreement dated Sept. 20, 1961).	Increased: Normal monthly retirement benefits to $2.80 a month for each year of credited service. Benefits in addition to Federal social security benefits.	Applicable to employee retiring after Aug. 31, 1961. In effect: year of credited service to equal 1,700 compensated hours or more. Proportionate credit, to nearest 1/10 of a year, given employee with less than 1,700 hours. Eliminated: Deduction from pension of any workmen's compensation or disability payments.
	Early retirement benefits—for retirement under mutually satisfactory conditions, continued to be twice normal retirement benefits up to age 65. For retirement at own option employee could, in lieu of a reduced immediate benefit, elect (1) from retirement to age 62—amount of	

See footnotes at end of table.

C—Related Wage Practices—Continued

Effective date	Provision	Applications, exceptions, and other related matters
	Pension Plan—Continued	
Jan. 1, 1962 (agreement dated Sept. 20, 1961)—Continued	reduced immediate monthly benefit (or further reduced amount if employee elected survivor's option) plus $96 reduced by 0.6 percent for each month employee was under 62 at date of early retirement, and (2) from age 62—amount of (1) above less $96. Option not available if benefit was less than $15 per month. *Total and permanent disability benefits*—continued to be twice normal retirement benefits, until employee became eligible for Federal social security benefits. Service requirement reduced to 10 years (was 15 years) for employees disabled after Aug. 31, 1961. Automatic retirement benefits for certain eligible employees at age 68 with more than 5 but less than 10 years of credited service, retiring after Aug. 31, 1961, increased to $28 a month (was $24). *Vested rights* [9]—deferred benefits per year of service continued to be same as normal retirement benefits. Added: *Survivors' option*—providing reduced benefits to employee and spouse. Employee benefit to equal (1) if employee and spouse were the same age—90 percent of benefit employee would have received, (2) if spouse was older than employee—90 percent plus 0.5 percent for each 12 months spouse's age exceeded that of employee, and (3) if employee was older than spouse—90 percent minus 0.5 percent for each 12 months spouse's age was less than that of employee. Spouse's benefit to begin after employee's death and to equal 50 percent of employee's reduced benefit.	Added: Service prior to age 30 to be credited in computing benefit. Actuarially reduced benefits payable at age 60. Election available to employee eligible for normal, early, automatic, disability, or deferred pension. Employee required to make election at time of application for pension, or, at age 65, if receiving disability pension. Employee could designate (1) wife or (2) husband. if employee's income was over half total income of both. Election revoked if employee or spouse died before effective date of election.
	Supplemental Unemployment Benefit Plan	
Sept. 4, 1961 (agreement dated Sept. 20, 1961).	Company to contribute 5 cents per manhour compensated through November 1962, regardless of maximum funding position during period.	See also contributions for short workweeks and special benefits, effective Jan. 1, 1962; new maximum financing formula, effective Dec. 1, 1962: and offset for provision of hospital, surgical, and medical insurance to laid-off employees, effective Jan. 1, 1962, under Group Insurance.
Jan. 1, 1962 (agreement dated Sept. 20, 1961).	*Accrual of credit units:* Increased: Maximum number of credit units to 52. *Size of benefits:* [10] Changed: *Regular benefits*—an amount which, when added to State unemployment compensation, weekly earnings from the company (including potential earnings for available time not worked), plus earnings over $10 from other employers, would equal 62 percent of straight-time weekly earnings for a 40-hour week (including cost-of-living allowance but excluding premiums and bonuses) plus $1.50 per dependent up to 4. Maximum weekly benefit—$40.	Benefits except for scheduled short workweek to be (1) discontinued when credit unit cancellation base [11] fell below $12.80, (2) reduced 20 percent but not below $5, when base was $12.80 but less than $41.60. Full benefits to be paid employee otherwise eligible but with insufficient credits required for full amount of regular, special, or short workweek benefits.

See footnotes at end of table.

C—Related Wage Practices—Continued

Effective date	Provision	Applications, exceptions, and other related matters
	Supplemental Unemployment Benefit Plan—Continued	
Jan. 1, 1962 (agreement dated Sept. 20, 1961)—Continued	*Eligibility;* Added: Employee to be eligible for benefits if disqualified for unemployment compensation (1) when laid off because of inability to perform work offered although capable of doing other work to which entitled if seniority had been sufficient, (2) for refusal to accept an offer by the company of work which he was not required to take under local agreement, (3) because of eligibility for or receipt of statutory retirement or disability benefits which could be received while working, (4) when automatically retired without company pension, (5) when serving an unemployment compensation waiting week while temporarily laid off out of line of seniority unless layoff resulted from model change, plant rearrangement, or inventory, (6) when receiving military termination pay, (7) when earnings for week were at least equal to or above State unemployment compensation earnings limit less $2, but employee failed to claim compensation, or (8) when employee participated in a Federal retraining program providing benefits or subsistence.[12]	Employee could be eligible for part of week if specified disqualifying conditions were not responsible for entire week's unemployment. One-fifth of weekly benefit paid for each day eligible.
	Added: *Short workweek and special benefits* for scheduled and unscheduled short workweek.	Company not required to contribute to SUB fund for short workweek and special benefits for scheduled short workweeks, unless credit unit base fell below $300 per employee. If contribution was required, company to pay lesser of (1) amount of short workweek and special benefits for scheduled short workweek for which company was not obligated to contribute during preceding month or (2) amount required to bring credit unit base up to $300 for month for which company did contribute. In addition, when credit unit base fell below $300 per employee, company to contribute for each pay period (a) sum equal to benefits paid for short workweek and (b) special benefits for scheduled short workweek. Payable: Without application, for any week in which employee worked a short workweek and received company earnings sufficient to disqualify for State unemployment compensation. No minimum or maximum benefit. With application, for any week in which employee worked a short workweek but did not receive sufficient company earnings to be disqualified for State unemployment compensation. No minimum or maximum benefit.
	Scheduled short workweek—65 percent of straight-time hourly pay and cost-of-living allowance in effect, times difference between compensated or available hours and 40.	Defined as week in which hours were reduced to adjust production to customer demand.

See footnotes at end of table.

C—Related Wage Practices—Continued

Effective date	Provision	Applications, exceptions, and other related matters
	Supplemental Unemployment Benefit Plan—Continued	
Jan. 1, 1962 (agreement dated Sept. 20, 1961)—Continued	Unscheduled short workweek—50 percent of straight-time hourly pay and cost-of-living allowance in effect, times difference between compensated or available hours and 40.	Defined as week in which (1) reduced hours not classified as scheduled, (2) employee returned from layoff to replace a separated or absent employee, or (3) employee returned to work after a week of layoff because of an increase in production.[13] Also included one which would otherwise have been a scheduled short workweek during 2 weeks preceding end of model run in worker's department or during 1 of 6 weeks after start of new model run. Compensated or available hours to include hours (1) paid for, (2) scheduled but not worked, (3) while on layoff for any reason not covered by SUB plan,[14] (4) not worked in accordance with local agreement or because of absenteeism of other workers, and (5) below 40 hours normally not worked by part-time employee or employee on less than regular length shifts. No credit units canceled for unscheduled short workweek benefits for 3 hours or less, for scheduled short workweek benefits, or for benefit paid for unemployment compensation waiting week during which employee was temporarily laid off out of line of seniority. One-half regular cancellation rate applied for unscheduled short workweek if pay from company exceeded 62 percent of 40 hours' pay plus $1.50 for each dependent up to 4.
	Eligibility—employee (1) with 1 year of service or more who worked for the company during week but compensated or available hours were less than 40,[15] (2) who was laid off some part of week,[16] (3) who was ineligible for State unemployment compensation because of company earnings,[17] (4) who satisfied specified SUB eligibility requirements, and (5) without the equivalent of a week of unemployment as defined by the State unemployment compensation law with respect to any part of the workweek.	
	Added: *Special benefits*—the greater of regular benefits or a benefit calculated in the same manner as a short workweek benefit reduced by State unemployment compensation and weekly earnings over $10 from another employer.	
	Eligibility—employee who (1) met all conditions for regular benefit (except $2 minimum not applicable), (2) worked for the company during the week but compensated or available hours were less than 40, and (3) did not receive sufficient company earnings to be disqualified for State unemployment compensation.	
	Added: *Leveling week benefit*—employees serving a waiting week for State benefits to receive full amount (65 percent) of regular benefit (or special if applicable) for such week if temporarily laid off out of line of seniority pending adjustment of work force. Not subject to $40 maximum. No benefits payable during model change, plant rearrangement, or inventory. No credit units canceled for week in which benefit was received.	
Dec. 1, 1962 (agreement dated Sept. 20, 1961).	Changed: *Maximum funding*—to 16 times the average full benefit (including average weekly amount paid to cover medical expense benefits for laid-off employees) times number of employees in active service and laid-off workers with credit units.	Only full benefits paid for full weeks of layoff and benefits paid for State waiting week used in computing average full benefit.

See footnotes at end of table.

C—Related Wage Practices—Continued

Effective date	Provision	Applications, exceptions, and other related matters
	Separation Pay	
Jan. 1, 1962 (agreement dated Sept. 20, 1961).	Increased: 50 hours' pay for employees with less than 3 years' service to 1500 hours' pay for those with 30 years' seniority.[18] Benefit to be reduced by 1 percent for each full $1.60 credit unit cancellation base was below $160.	Time for applying for benefits extended to 24 months.
	Relocation Allowance	
Jan. 1, 1962 (agreement dated Sept. 20, 1961).	Established: Allowance of $55 to $215 for single employees and $180 to $580 for married employees, depending on distance between old and new plants,[19] provided workers who (1) were transferred to plant 50 miles or more from former place of work, (2) changed permanent residence, and (3) made application for allowance within 6 months of transfer.	Applicable to employees permanently released because of transfer of major operation and employed at the new plant with full seniority. Allowance to be reduced by any government payment for same purpose.

[1] Under previous agreement, retiring employee received 1/52 of allowance to which he would have been entitled for each pay period worked.

[2] Vacation allowance provided employees with more than 12 but less than 26 pay periods was as follows:

Pay periods worked	*Percentage of full allowance*
25	96
24	92
23	88
22	84
21	80
20	76
19	73
18	69
17	65
16	61
15	57
14	53
13	50

[3] To be eligible for a vacation allowance under previous agreement, an employee was required to work either during the weeks including June 30 or December 31 (unless he was laid off, on sick or military leave, died or retired in previous 2 months), or in 39 weekly pay periods during the year.

[4] Revised schedule of benefits, effective Oct. 2, 1961. $500 was added to each insurance bracket, the lowest bracket was eliminated, and 2 higher brackets were added to the schedule to provide higher benefits for employees in the higher wage brackets. All wage brackets in the schedule were increased to reflect the 12-cent cost-of-living allowance incorporated into base rates.

Base hourly rate	Life insurance	Accidental death insurance	Total life and accidental death insurance	Life insurance at age 65 and over		Monthly total and permanent disability benefits* (before age 60)	Weekly sickness and accident benefit** (before retirement)	Employee's weekly contribution (before age 65)†
	Up to age 65			Minimum (10 years in plan)	Maximum (20 years or more in plan)			
Under $2.40	$5,500	$2,750	$8,250	$825	$1,650	$110	$55	$0.80
$2.40–$2.64	6,000	3,000	9,000	900	1,800	120	60	.90
$2.65–$2.89	6,500	3,250	9,750	975	1,950	130	65	1.00
$2.90–$3.14	7,000	3,500	10,500	1,050	2,100	140	70	1.10
$3.15–$3.39	7,500	3,750	11,250	1,125	2,250	150	80	1.20
$3.40–$3.64	8,000	4,000	12,000	1,200	2,400	160	85	1.30
$3.65–$3.89	8,500	4,250	12,750	1,275	2,550	170	90	1.40
$3.90–$4.14	9,000	4,500	13,500	1,350	2,700	180	95	1.50
$4.15–$4.39	9,500	4,750	14,250	1,425	2,850	190	100	1.60
$4.40–$4.64	10,000	5,000	15,000	1,500	3,000	200	105	1.70
$4.65 and over	10,500	5,250	15,750	1,575	3,150	210	110	1.80

*For 50 months for those employees with 10 years or more in plan.
**For a maximum of 26 weeks.
†See insurance plan description above for employee contributions after age 65.

Footnotes continued on p. 1183.

Footnotes to Table C—Continued

[5] 10 years participation in plan credited to employees who were in service on May 31, 1950, and had 5 but fewer than 10 years of participation in plan on the last day of the calendar month in which 65th birthday occurred.

[6] Benefits not applicable in States with statutory temporary disability insurance laws; company could supplement State plan if benefits were lower than those provided in regular insurance plan.

[7] Benefits not reduced by statutory payments for hospitalization, medical expenses, or allowances specifically for loss of use of bodily members or for disfigurements.

[8] To present a more useful report, details of the Michigan Blue Cross and Blue Shield plans are being shown for the first time.

[9] In Supplement No. 4 (*Monthly Labor Review*, April 1961, p. 399), the entry under vested rights should have read as follows: Deferred benefits same per year of service as new normal benefits, except service prior to age 30 was not credited.

[10] Alternative benefit schemes for Virginia and North Carolina were updated to reflect the new benefit amounts.

[11] Credit unit cancellation schedule was as follows:

If the credit unit cancellation base applicable to the week for which such benefit paid is—	And if the years of seniority of the person to whom such benefit is paid are—					
	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 and over
	The credit units canceled for such benefits shall be—					
$272.00 or more	1.00	1.00	1.00	1.00	1.00	1.00
$243.20 to $271.99	1.11	1.00	1.00	1.00	1.00	1.00
$214.40 to $243.19	1.25	1.11	1.00	1.00	1.00	1.00
$185.60 to $214.39	1.43	1.25	1.11	1.00	1.00	1.00
$156.80 to $185.59	1.67	1.43	1.25	1.11	1.00	1.00
$128.00 to $156.79	2.00	1.67	1.43	1.25	1.11	1.00
$99.20 to $127.99	2.50	2.00	1.67	1.43	1.25	1.11
$70.40 to $99.19	3.33	2.50	2.00	1.67	1.43	1.25
$41.60 to $70.39	5.00	3.33	2.50	2.00	1.67	1.43
$12.80 to $41.59	10.00	5.00	3.33	2.50	2.00	1.67
Under $12.80	No benefits payable					

[12] For employees disqualified for unemployment compensation because of period worked or when company earnings were at least equal to or above State unemployment compensation earnings limit, see short workweek benefits.

[13] Only to extent short workweek was attributable to such cause.

[14] SUB benefits not payable for periods of layoff occurring for disciplinary reasons or as a consequence of (1) any strike, slowdown, work stoppage, picketing (whether or not by employees), or concerted action at a company plant [or plants], or any dispute of any kind involving employees represented by the union whether at a company plant [or plants], or elsewhere, (2) any fault attributable to the applicant, (3) any war or hostile act of a foreign power (but not government regulations or controls connected therewith), (4) sabotage or insurrection, or (5) any act of God.

[15] Excluding weeks in which holiday pay was the only compensation received by employee.

[16] Layoff must have been for reasons specified in regular SUB plan.

[17] Employee must have been ineligible for State benefits solely because of company earnings or these earnings in combination with other reasons specified in regular SUB plan.

[18] Payments to be made in accordance with the following schedule:

Years of seniority on last day worked in bargaining unit	*Number of hours' pay*	*Years of seniority on last day worked in bargaining unit*	*Number of hours' pay*
Less than 3	50	17 but less than 18	600
3 but less than 4	75	18 but less than 19	656
4 but less than 5	100	19 but less than 20	713
5 but less than 6	125	20 but less than 21	775
6 but less than 7	156	21 but less than 22	838
7 but less than 8	188	22 but less than 23	900
8 but less than 9	219	23 but less than 24	969
9 but less than 10	250	24 but less than 25	1,038
10 but less than 11	288	25 but less than 26	1,113
11 but less than 12	325	26 but less than 27	1,188
12 but less than 13	363	27 but less than 28	1,263
13 but less than 14	406	28 but less than 29	1,338
14 but less than 15	450	29 but less than 30	1,413
15 but less than 16	500	30 and over	1,500
16 but less than 17	550		

[19] Relocation allowance was as follows:

Miles between plants	*Allowance for—* *Single employee*	*Married employee*
50 but less than 100	$55	$180
100 and less than 300	75	220
300 and less than 500	105	290
500 and less than 1,000	155	420
1,000 and over	215	580

Prepared in the Division of Wage Economics.

Wage Chronology: Commonwealth Edison Co. of Chicago [1]

Supplement No. 2—1962–63

A PROPOSED 2-YEAR AGREEMENT,[2] drafted by local representatives of the International Brotherhood of Electrical Workers and the Commonwealth Edison Co. in bargaining that opened on February 19, 1962, was rejected by the union members on May 21, 1962. The negotiators had agreed upon wage-rate increases of 6 to 12 cents an hour, additional increases for crew leaders, higher shift premium pay, a liberalization of funeral leave eligibility, and extended vacations for long-service employees—6 consecutive weeks of vacation for employees with service of 25 years or more to be taken in one of the years of service between 25 and 35, another 6 consecutive weeks of vacation in one year for employees with service of 35 years or more,[3] and 7 consecutive weeks in one year before retirement for employees who had already acquired 35 years of service.

Negotiations were resumed on May 23 and resulted in a 2-year agreement differing from the rejected settlement principally in vacation provisions. Instead of the 6 consecutive weeks of vacation at specified intervals for workers with long service, 2 workdays of vacation were added for workers with service of 12 and 22 years or more and 1 day for workers with 13 years' service. Workers earning less than $2.66 an hour were to receive a wage-rate increase of 8 cents instead of 6 or 7 cents; all other wage-rate changes were the same as in the rejected agreement. The new agreement, like the original proposal, provided additional increases for crew leaders and higher shift premium pay and contained a reopening on wages and contract length in the second year. The new agreement was reached by the negotiators on May 24 and ratified by union members on June 15.

Under the reopening provision of the 1962 contract, negotiations began on February 20, 1963, and agreement on a 6- to 15-cent-an-hour wage increase was reached on March 29. The agreement, ratified by union members on April 24, was extended to March 31, 1965, with provision for a wage reopening on March 31, 1964.

The following tables bring the Commonwealth Edison basic chronology and supplement, covering 3,350 plant workers in inside and outside departments [4] in the Chicago area, and production workers at the Powerton Generating Station, Pekin, Ill., up to date through 1963.

[1] See *Monthly Labor Review*, April 1953, pp. 404–411; August 1961, pp. 870–877; or BLS Report 205, 1961.

[2] Agreement was reached with 18 locals; of these, 5 represented workers covered by this chronology.

[3] In other years, these employees would be entitled to 4 weeks and 2 days of vacation annually, of which, by local custom, 2 weeks would be taken consecutively.

[4] The inside and outside plant departments include generating stations, substations, building services, electrical construction (overhead and underground), substation construction, meter, and transportation. The chronology does not cover workers in other operations merged with the company after the chronology was first prepared, nor does it include office workers.

A—General Wage Changes

Effective date	Provisions	Applications, exceptions, and other related matters
Apr. 1, 1962 (agreement dated July 12, 1962).	8 to 12 cents an hour increase, averaging 10.3 cents.[1]	Increases varied by maximum job rate as follows: *Maximum hourly job rate* — *Hourly increase* $3.00 or less — $0.08 $3.01 to $3.45 — .10 $3.46 and over — .12
Apr. 1, 1963 (agreement dated May 6, 1963).	6 to 15 cents an hour increase, averaging 12.3 cents an hour.[1]	Increases varied by maximum job rate as follows: *Maximum hourly job rate* — *Hourly increase* $2.25 or less — $0.06 $2.26 to $2.55 — .07 $2.56 to $2.85 — .08 $2.86 to $3.15 — .10 $3.16 to $3.45 — .12 $3.46 and over — .15

[1] Union estimates.

B—Hourly Rates for Selected Occupations, 1961–63

Department and job title	Minimum and maximum rates and progression schedule (in italics) [1]		
	Apr. 1, 1961	Apr. 1, 1962	Apr. 1, 1963
INSIDE PLANT			
Auxiliary operators, electrical	$2.46–$2.71 *b*	$2.54–$2.79 *b*	$2.62–$2.87 *b*
Boiler mechanics, principal	3.46– 3.72 *d*	3.58– 3.84 *d*	3.73– 3.99 *d*
Boiler mechanics, 2d grade	2.69– 2.92 *c*	2.77– 3.00 *c*	2.87– 3.10 *c*
Laborers, janitors	2.20– 2.36 *a*	2.28– 2.44 *a*	2.28– 2.44 *a*
Switchboard operators	3.37– 3.60 *c*	3.49– 3.72 *c*	3.64– 3.87 *c*
Control operators	3.46– 3.72 *d*	3.58– 3.84 *d*	3.73– 3.99 *d*
Mechanics, 2d grade	2.69– 2.92 *c*	2.77– 3.00 *c*	2.87– 3.10 *c*
OUTSIDE PLANT			
Cablemen	2.64– 2.87 *c*	2.72– 2.95 *c*	2.82– 3.05 *c*
Groundmen	2.34– 2.53 *i*	2.42– 2.61 *i*	2.42– 2.61 *i*
Linemen	3.39– 3.60 *h*	3.51– 3.72 *h*	3.66– 3.87 *h*
Metermen	2.85– 3.08 *c*	2.95– 3.18 *c*	3.07– 3.30 *c*
Servicemen, meter	3.37– 3.60 *c*	3.49– 3.72 *c*	3.64– 3.87 *c*
Troublemen, cable	3.56– 3.82 *d*	3.68– 3.94 *d*	3.83– 4.09 *d*
SUPER-POWER DIVISION			
Boiler cleaners	2.29– 2.53 *e*	2.37– 2.61 *e*	2.37– 2.61 *e*
Boiler operators	3.37– 3.60 *c*	3.49– 3.72 *c*	3.64– 3.87 *c*
Boiler operators, 2d grade	2.84– 3.08 *c*	2.94– 3.18 *c*	3.06– 3.30 *c*
Boiler operators, auxiliary	2.46– 2.71 *b*	2.54– 2.79 *b*	2.62– 2.87 *b*
Coal plant operators (A)	3.37– 3.60 *c*	3.49– 3.72 *c*	3.64– 3.87 *c*
Coal plant operators (BB)	3.06– 3.29 *c*	3.16– 3.39 *c*	3.28– 3.51 *c*
Coal plant operators (B)	2.85– 3.08 *c*	2.95– 3.18 *c*	3.07– 3.30 *c*
Coal plant operators (C)	2.49– 2.74 *b*	2.57– 2.82 *b*	2.65– 2.90 *b*
Electrical mechanics (A)	3.37– 3.60 *c*	3.49– 3.72 *c*	3.64– 3.87 *c*
Electrical mechanics (B)	2.85– 3.08 *c*	2.95– 3.18 *c*	3.07– 3.30 *c*
Helpers, electrical maintenance	2.36– 2.60 *f*	2.44– 2.68 *f*	2.52– 2.76 *f*
Helpers, mechanical, maintenance	2.36– 2.60 *f*	2.44– 2.68 *f*	2.52– 2.76 *f*
Instrument mechanics	3.37– 3.60 *c*	3.49– 3.72 *c*	3.64– 3.87 *c*
Janitors	2.20– 2.36 *a*	2.28– 2.44 *a*	2.28– 2.44 *a*
Mechanics (A)	3.37– 3.60 *c*	3.49– 3.72 *c*	3.64– 3.87 *c*
Mechanics (B)	2.85– 3.08 *c*	2.95– 3.18 *c*	3.07– 3.30 *c*
Switchboard operators	3.37– 3.60 *c*	3.49– 3.72 *c*	3.64– 3.87 *c*
Switchboard operators, assistant	2.85– 3.08 *c*	2.95– 3.18 *c*	3.07– 3.30 *c*
Turbine operators (A)	3.37– 3.60 *c*	3.49– 3.72 *c*	3.64– 3.87 *c*
Turbine operators, 2d grade	2.84– 3.08 *c*	2.94– 3.18 *c*	3.06– 3.30 *c*
Turbine operators, auxiliary	2.44– 2.71 *g*	2.52– 2.79 *g*	2.60– 2.87 *g*

[1] Progression from the minimum to maximum was as follows:
a—3 months; 6 months; 1 year; 1 year, 9 months; 2 years, 6 months.
b—3 months; 9 months; 1 year, 3 months; 1 year, 9 months; 2 years, 3 months; 2 years, 9 months; 3 years, 3 months; 4 years.
c—6 months; 1 year; 1 year, 6 months; 2 years; 2 years, 6 months; 3 years; 3 years, 6 months; 4 years.
d—6 months: 1 year; 1 year, 6 months; 2 years; 2 years, 6 months; 3 years; 3 years, 6 months; 4 years; 4 years, 6 months.
e—3 months; 6 months; 9 months; 1 year; 1 year, 6 months; 2 years; 2 years, 6 months; 3 years.
f—3 months; 6 months; 1 year; 1 year, 6 months; 2 years; 2 years, 6 months; 3 years, 3 months; 4 years.
g—3 months; 6 months; 1 year; 1 year, 6 months; 2 years; 2 years, 6 months; 3 years; 3 years, 6 months; 4 years.
h—6 months; 1 year; 1 year, 6 months; 2 years; 2 years, 6 months; 3 years; 3 years, 6 months.
i—3 months; 6 months; 1 year; 1 year, 6 months; 2 years, 3 months; 3 years.

C—Related Wage Practices

Effective date	Provision	Applications, exceptions, and other related matters
	Shift Premium Pay	
Apr. 1, 1962 (agreement dated July 12, 1962).	Increased to: 15 cents an hour (was 12 cents).	
	Vacation Pay	
Apr. 1, 1962 (agreement dated July 12, 1962).	Increased: For workers with service of 12 years and 22 years or more, 2 additional workdays paid vacation; for workers with 13 years' service, 1 additional workday—resulting in a total of 15 days of vacation in the 12th, 13th, and 14th years of service (formerly 13, 14, and 15 days, respectively) and 24 days of vacation in the 22d year of service and thereafter (formerly 22 days).	Increased: Maximum vacation, to 24 workdays.
	Pay for Absence Because of Death in Family	
Apr. 1, 1962 (agreement dated July 12, 1962).	----------	Added: To definition of immediate family—grandchild.
	Jury-Duty Pay	
Oct. 1, 1945----------	----------	Clarification: Provision in effect and continued: All fees (in addition to regular rates paid by company) received for jury or court service to be retained by employee.

Prepared in the Division of Wage Economics.

The 1963 Railroad Arbitration Act

EDITOR'S NOTE.—*The following law, PL 88–108, provides procedures for settlement of the 4-year dispute between five operating brotherhoods and the Nation's major railroads. It was passed by Congress on August 28, 1963, and signed by President John F. Kennedy the same day.*

For further background, analysis of the dispute, and composition of the board, see Monthly Labor Review, August 1963, pp. iii–iv, April 1962, pp. 375–389, and this issue, p. 1201.

Whereas the labor dispute between the carriers represented by the Eastern, Western, and Southeastern Carriers' Conference Committees and certain of their employees represented by the Brotherhood of Locomotive Engineers, Brotherhood of Locomotive Firemen and Enginemen, Order of Railway Conductors and Brakemen, Brotherhood of Railroad Trainmen, and the Switchmen's Union of North America, labor organizations, threatens essential transportation services of the Nation; and

Whereas it is essential to the national interest, including the national health and defense, that essential transportation services be maintained; and

Whereas all the procedures for resolving such dispute provided for in the Railway Labor Act have been exhausted and have not resulted in settlement of the dispute; and

Whereas the Congress finds that emergency measures are essential to security and continuity of transportation services by such carriers; and

Whereas it is desirable to achieve the above objectives in a manner which preserves and prefers solutions reached through collective bargaining; and

Whereas, on August 2, 1963, the Secretary of Labor submitted to the carrier and organization representatives certain suggestions as a basis of negotiation for disposition of the fireman (helper) and crew consist issues in the dispute and thereupon through such negotiations tentative agreement was reached with respect to portions of such suggestions; and

Whereas, on August 16, 1963, the carrier parties to the dispute accepted and the organization parties to the dispute accepted with certain reservations the Secretary of Labor's suggestion that the fireman (helper) and crew consist issues be resolved by binding arbitration but the said parties have been unable to agree upon the terms and procedures of an arbitration agreement: Therefore be it

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That no carrier which served the notices of November 2, 1959, and no labor organization which received such notices or served the labor organization notices of September 7, 1960, shall make any change except by agreement, or pursuant to an arbitration award as hereinafter provided, in rates of pay, rules, or working conditions encompassed by any of such notices, or engage in any strike or lockout over any dispute arising from any of such notices. Any action heretofore taken which would be prohibited by the foregoing sentence shall be forthwith rescinded and the status existing immediately prior to such action restored.

SEC. 2. There is hereby established an arbitration board to consist of seven members. The representatives of the carrier and organization parties to the aforesaid dispute are hereby directed, respectively, within 5 days after the enactment hereof each to name two persons to serve as members of such arbitration board. The four members thus chosen shall select three additional members. The seven members shall then elect a chairman. If the members chosen by the parties shall fail to name one or more of the additional three members within 10 days, such additional members shall be named by the President. If either party fails to name a member or members to the arbitration board within the 5 days provided, the President shall name such member or members in lieu of such party and shall also name the additional three members necessary to constitute a board of seven members, all within 10 days after the date of enactment of this joint resolution. Notwithstanding any other provision of law, the National Mediation Board is authorized and directed (1) to compensate the arbitrators not named by the parties at

a rate not in excess of $100 for each day together with necessary travel and subsistence expenses, and (2) to provide such services and facilities as may be necessary and appropriate in carrying out the purposes of this joint resolution.

SEC. 3. Promptly upon the completion of the naming of the arbitration board, the Secretary of Labor shall furnish to the board and to the parties to the dispute copies of his statement to the parties of August 2, 1963, and the papers therewith submitted to the parties, together with memorandums and such other data as the board may request setting forth the matters with respect to which the parties were in tentative agreement and the extent of disagreement with respect to matters on which the parties were not in tentative agreement. The arbitration board shall make a decision, pursuant to the procedures hereinafter set forth, as to what disposition shall be made of those portions of the carriers' notices of November 2, 1959, identified as "Use of Firemen (Helpers) on Other Than Steam Power" and "Consist of Road and Yard Crews" and that portion of the organizations' notices of September 7, 1960, identified as "Minimum Safe Crew Consist" and implementing proposals pertaining thereto. The arbitration board shall incorporate in such decision any matters on which it finds the parties were in agreement, shall resolve the matters on which the parties were not in agreement, and shall, in making its award, give due consideration to those matters on which the parties were in tentative agreement. Such award shall be binding on both the carrier and organization parties to the dispute and shall constitute a complete and final disposition of the aforesaid issues covered by the decision of the board of arbitration.

SEC. 4. To the extent not inconsistent with this joint resolution, the arbitration shall be conducted pursuant to sections 7 and 8 of the Railway Labor Act, the board's award shall be made and filed as provided in said sections and shall be subject to section 9 of said Act. The United States District Court for the District of Columbia is hereby designated as the court in which the award is to be filed, and the arbitration board shall report to the National Mediation Board in the same manner as arbitration boards functioning pursuant to the Railway Labor Act. The award shall continue in force for such period as the arbitration board shall determine in its award, but not to exceed 2 years from the date the award takes effect, unless the parties agree otherwise.

SEC. 5. The arbitration board shall begin its hearings 30 days after the enactment of this joint resolution or on such earlier date as the parties to the dispute and the board may argee upon and shall make and file its award not later than 90 days after the enactment of this joint resolution: *Provided, however*, That said award shall not become effective until 60 days after the filing of the award.

SEC. 6. The parties to the disputes arising from the aforesaid notices shall immediately resume collective bargaining with respect to all issues raised in the notices of November 2, 1959, and September 7, 1960, not to be disposed of by arbitration under section 3 of this joint resolution and shall exert every reasonable effort to resolve such issues by agreement. The Secretary of Labor and the National Mediation Board are hereby directed to give all reasonable assistance to the parties and to engage in mediatory action directed toward promoting such agreement.

SEC. 7. (a) In making any award under this joint resolution, the arbitration board established under section 2 shall give due consideration to the effect of the proposed award upon adequate and safe transportation service to the public and upon the interests of the carrier and employees affected, giving due consideration to the narrowing of the areas of disagreement which has been accomplished in bargaining and mediation.

(b) The obligations imposed by this joint resolution, upon suit by the Attorney General, shall be enforcible through such orders as may be necessary by any court of the United States having jurisdiction of any of the parties.

SEC. 8. This joint resolution shall expire 180 days after the date of its enactment, except that it shall remain in effect with respect to the last sentence of section 4 for the period prescribed in that sentence.

SEC. 9. If any provision of this joint resolution or the application thereof is held invalid, the remainder of this joint resolution and the application of such provision to other parties or in other circumstances not held invalid shall not be affected thereby.

Technical Note

Intercity Differences in Family Food Budget Costs

JEAN C. BRACKETT*

How do city-to-city variations in food prices and regional preferences for specific food items of comparable nutritional adequacy affect the cost of a family's food budget? What are the effects on place-to-place comparisons of family living costs of using a single set of weights reflecting U.S. preference patterns or weights based on regional preferences for specified food items in estimating food budget costs? Answers to these questions were obtained as a byproduct of research by the Bureau of Labor Statistics for the revision of its standard budgets for a family of four and an elderly couple living in metropolitan areas.[1] The findings are summarized in this article.

When the same two lists of individual food items were used in 20 different cities to estimate the weekly cost of two food plans—a "low-cost" and a "moderate-cost" plan—for a family of four, the food budget varied by only $2.96 and $3.67 for the low- and moderate-cost plans, respectively, in October 1959 (table 1). When standards of nutritional adequacy were held constant but the lists of individual food items were altered to reflect regional preferences, the intercity variation in the low-cost food budget for a family of four was $6.86, and in the moderate-cost plan $7.19. Thus, regional preference patterns in choices of food to meet the nutritional standards doubled the range in costs resulting from differences in prices only.

Variation in the costs of the low and moderate food budgets for a retired couple showed a similar pattern. An identical market basket of groceries for a retired couple, such as urban families on a moderate-cost food plan might select, cost $18.37 in Seattle and $16.50 in Kansas City at October 1959 prices—a difference of only $1.87 per average week (table 2). When the market baskets were varied to reflect regional preferences, however, the range in weekly costs increased to $3.59, from $15.35 in Atlanta and Houston to $18.94 in Boston. In the low-cost plan for a retired couple, price differences in the 20 cities varied the cost of the food budgets by only $1.44 per week; differences in food habits and tastes increased this range to $3.44 weekly.

Description of the Food Budgets

The food plans on which these cost estimates are based were developed by the U.S. Department of Agriculture.[2] The plans are guides for estimating the quantities of foods in 11 groups [3] needed each week to provide healthful meals for individuals in different sex-age categories. Although no systematic compilation of data has been made that shows consumption of food by persons of different age and sex, the U.S. Department of Agriculture estimated quantities at the group level for different sex-age categories from a general knowledge of food consumption habits and adjusted these estimates by comparing them with the nutritive content of the food in each group according to the National Research Council (NRC) allowances by age and sex. Food plans for families of varying size and composition can be constructed from the suggested quantities for individuals. The criteria used in developing the plans are nutritional adequacy,[4] the relative nutritional economy of food,[5]

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[1] See "The Interim City Worker's Family Budget" and "The BLS Interim Budget for a Retired Couple," *Monthly Labor Review*, August 1960, pp. 785–808, and November 1960, pp. 1141–1157, respectively.

[2] The 1955 Household Food Consumption Survey was the source of information on the kinds and quantities of food consumed weekly by families at different income levels; from these data, the suitability of the food for family meals was determined. For a detailed description of the plans, see *Family Food Plans and Food Costs* (Washington, U.S. Department of Agriculture, Agricultural Research Service, 1962), Home Economics Research Report 20.

[3] The 11 food groups are: Milk, cheese, ice cream; meat, poultry, fish; eggs; dry beans, peas, nuts; flour, cereals, baked goods; citrus fruits, tomatoes; dark-green and deep-yellow vegetables; potatoes; other vegetables and fruits; fats and oils; and sugars and sweets.

[4] The standards for nutritional adequacy of the five food plans at different cost levels are based on the dietary allowances for specific age-sex groups recommended by the Food and Nutrition Board of the National Research Council in 1958. These allowances are used as minimum goals for eight nutrients and as ceilings for calories. While all the plans are nutritionally adequate, the higher cost plans provide greater margins of safety and a wider selection of foods.

[5] The relative nutritional economy of food is the nutritive return for money spent for different groups of food, calculated from survey data on consumption and prices paid and from average nutritive values of food as compiled by the U.S. Department of Agriculture.

and the suitability of the food in relation to meal patterns common in the United States.

Food plans for families at different economic levels were developed by considering both the nutritional economy of different food groups and the survey information on food patterns and prices that families at different income levels pay for groups of food.[6] The judgment of nutrition specialists was used to modify the quantities of major food groups actually consumed in order to develop plans at different cost levels for families with varying amounts of money to spend for food.

Differences in the two food plans discussed in this article are: Compared with the moderate-cost plan, the low-cost plan has larger quantities from the food groups for which the relative economy of nutrients is high—potatoes, dry beans and peas, and flour and cereal—and smaller amounts of milk, eggs, meat, poultry, fish, fruits, and vegetables other than potatoes. Also, under the low-cost plan users are assumed to select the less expensive foods within the group. An additional calorie allowance of 8 and 15 percent above the NRC requirement is made for waste and discard in the low- and moderate-cost plans, respectively. Finally, the food group quantities in the low-cost plan deviate from the quantities actually consumed by families in the $2,000–$2,999 income class (the low third of the distribution) to a much greater extent than the food group quantities in the moderate-cost plan deviate from the quantities actually reported by families in the $4,000–$4,999 income class (the middle third of the income distribution). As shown in the following tabulation, for example, the per capita consumption of meat, poultry, and fish in urban families in the low- and middle-income thirds amounted respectively to 4.02 and 4.26 pounds per week in the spring of 1955. In the low- and moderate-cost food plans, however, the per capita allowances are 2.6 and 4.1 pounds.

	Per capita weekly quantity—			
	Used at home by urban families in spring 1955		*Provided in food plans* [1]	
	Low-income third	*Middle-income third*	*Low-cost*	*Moderate-cost*
Milk, cheese, ice cream [2]—quart	3.77	4.50	4.6	4.7
Meat, poultry, fish—pound	4.02	4.26	2.6	4.1
Eggs—dozen	.55	.57	.5	.5
Dry beans, peas, nuts—pound	.39	.35	.3	.2
Flour, cereals, baked goods [3]—do	2.65	2.41	2.9	2.6
Citrus fruits, tomatoes—do	1.75	2.19	2.1	2.5
Dark-green and deep-yellow vegetables—pound	.67	.63	.7	.7
Potatoes—do	1.60	1.71	2.1	1.9
Other vegetables and fruits—do	4.57	5.07	4.4	5.1
Fats, oils—do	.83	.81	.5	.6
Sugars, sweets—do	1.24	1.23	.6	.8

[1] Based on population weights of 1960.

[2] Fluid whole milk or its equivalent in cheese, evaporated milk, dry milk, or ice cream.

[3] Weight in terms of flour and cereal.

SOURCE: U.S. Department of Agriculture, op cit., tables 12 and 13, p. 24.

The quantities of the 11 food groups in each of the two food plans are applicable to nonfarm families in all regions of the United States. At the major food group level, regional differences in food consumption patterns were not considered significant for two of the economic levels (middle- and high-income thirds). For the low third of the income distribution, the U.S. Department of Agriculture developed a separate plan reflecting differences in Southern patterns of consumption in the meat and grain products groups in contrast with the remainder of the country. However, BLS used the U.S. nonfarm group quantities for the South, as well as for the other regions.[7]

Within each of the 11 food groups, the group quantities had to be expressed in terms of specific foods which could be priced; and survey data on consumption by regions, as well as for the United States as a whole, were used to derive these within-group weights. Four sets of weights, reflecting regional preference patterns in the Northeast, North Central, South, and West were developed. Since there are no data on age and sex differences in actual consumption of specific food items, the distributions of individual food items for the United States and the four regions are the same for all family members. In practice, the within-group U.S. or regional weights for individual foods are applied to an average price in a city and these quantity-weighted prices are summed to obtain the average price for the food group.

[6] The representative classes were those containing the median incomes of the low, middle, and high third of the national income distribution. The classes respectively were $2,000–$2,999, $4,000–$4,999, and $6,000–$7,999. See also footnote 7.

[7] Data from the $2,000–$2,999 income class were used for the low-cost plan in all regions, including the South. The class containing the median for the low third of the income distribution for nonfarm families in the South, from which the separate plan was developed, was $1,000–$1,999.

Effects of Using U.S. or Regional Weights

When the Bureau of Labor Statistics was developing cost estimates for the interim revisions of its budgets for a city worker's family of four and for a retired couple, it decided to use the regional weights appropriate to each city, rather than a single set of weights representing U.S. preference patterns, in the food cost estimates. Both sets of weights are shown in table 3. Some of the notable regional variations are the higher ratio in the South, in comparison with other regions, of canned to fresh milk, pork to beef, flour and meal (for home baking) to commercially baked goods, and lard to butter.

When the costs of the food budgets were estimated with regional weights, costs were lowest for both four-person families and retired couples in Houston and Atlanta. Costs were highest for both family types in the Northeast—in Pittsburgh for the low-cost plan and in Boston for the moderate-cost plan. When only price differences were allowed to affect the costs of the food plans, however, the cities in the South were not among the least expensive. Costs were lowest in the North Central cities—in Cleveland for the low-cost plan, and in Minneapolis and Kansas City for the moderate-cost plan. Costs were highest in Boston for the low-cost plan and in Seattle for the moderate-cost plan.[8]

In comparison with the preference patterns of families in the Northeast, North Central, and West, food choices of families in the South included more items from the foods which were less expensive not only in the South but in all parts of the country. For example, in the low-cost food plan, the cost in Boston for a pound of grain products or their flour equivalent, composed of items representing southern preferences, was 24 cents at October 1959 prices. The cost of grain products items of the same nutritional adequacy based on the food choices of established families in Boston was 36 cents per pound, or $1.53 more per week for a family of four. In Chicago, the flour, cereals, and baked foods group with choices representing North Central preferences averaged 33 cents per pound; with southern preferences, 22 cents a pound. In Seattle, western choices in this food group cost 32 cents; southern choices, 25 cents.

The economy in the food preference pattern of the South may be explained in part by the fact that it is derived from the consumption data for families with lower per capita income than the families whose expenditures were the basis for the weights for other regions. Families in the South were larger; consequently, average per capita income at the level used to derive the regional weights for the low-cost food plan was considerably less in the South than in other parts of the country. At the income level used for the weights for the moderate-cost plan, however, there was less difference in per capita income in the South and other regions, as shown in the following tabulation:

	Average per capita income after taxes, 1954	
	Income class	
	$2,000–$2,999 (low-cost plan)	*$4,000–$4,999 (moderate-cost plan)*
Northeast	$795	$1, 222
North Central	782	1, 212
South	626	1, 174
West	877	1, 244

SOURCE: U.S. Department of Agriculture, Agriculture Research Service Household Food Consumption Survey, 1955, Reports 2–5, p. 9.

The relative economy of the food choices in the regional preference pattern of the South, in comparison with other regions, is much more pronounced at the low-cost than at the moderate-cost level of dietary. Low-cost diets for a four-person family in the 16 cities outside of the South, estimated with the appropriate regional weights, cost from 14 to 29 percent more than an equally nutritious diet in Washington, D.C., when the latter was based on the regional preference patterns of the South. In all but five of these cities, the cost was 20 percent or more than Washington costs. However, the range in costs of the moderate food plans in these 16 cities was only from 4 to 20 percent more than the moderate-cost plan in Washington. The data suggest that regional differences in food patterns lessen with rising income, and buying habits come closer to the U.S. pattern.

[8] Similarities in the differences in food cost estimates computed with U.S. or regional weights between the budgets for a four-person family and a retired couple are to be expected, since the same regional quantity weights for individual food items and the same prices are used in computing costs for both budgets. The variation between the budgets is in the total quantities allowed for each food group. See also footnote 7.

Suitability of Regional Patterns

Regional weights were considered more appropriate because the standard budgets were intended, among other purposes, to measure differences in living costs from place to place and not simply differences in prices. Thus intercity indexes based on the budgets are comparative living cost indexes,[9] not indexes of price differences from city to city.

These intercity living cost indexes for the individual components of the budgets, as well as for all items combined, measure the differences in costs for established families in each city. They are applicable only to families for whom the regional preference patterns for specific food items, from which the index weights were derived, are a reasonable approximation of food habits and tastes. Intercity indexes based on the regional preference pattern are not an appropriate measure of differences in costs for the newly migrated family, since it is unlikely to acquire or adopt new preferences immediately.

Of course, regional food preference patterns are not an equally appropriate description of the food habits and tastes of families in all of the cities within the region. The preference pattern developed for the South, for example, is probably a better description of the food patterns of families in Atlanta than of those in Baltimore.[10] In general, however, the regional pattern should be more

[9] In addition to the food component of the budgets, the estimates for fuel and clothing and the proportion of families who were considered to be automobile owners were based on regional variations in requirements.

[10] In the cost estimates of the budgets for a city worker's family and a retired couple, the U.S. pattern was used for Washington, D.C. It was considered more appropriate than the pattern of the South because the population in Washington comes from all parts of the United States. Also, Washington serves as the base city in the computation of intercity indexes based on the budgets.

TABLE 1. WEEKLY COSTS OF A LOW- AND MODERATE-COST FOOD PLAN [1] FOR A FAMILY OF FOUR,[2] WITH REGIONAL AND U.S. PREFERENCE PATTERNS FOR SPECIFIC FOOD ITEMS [3] AND INDEXES, OCTOBER 1959

Region and city	Weekly costs				Indexes (Washington, D.C.=100)			
	Low-cost plan, with preference pattern of—		Moderate-cost plan, with preference pattern of—		Low-cost plan, with preference pattern of—		Moderate-cost plan, with preference pattern of—	
	Region	United States	Region	United States	Region	United States	Region	United States
NORTHEAST								
Boston	$28.18	$25.95	$36.52	$34.10	128	105	120	101
New York	28.19	24.97	36.26	34.02	128	101	119	101
Philadelphia	27.89	24.57	36.08	33.65	127	99	118	100
Pittsburgh	28.30	25.12	36.51	34.19	129	102	120	101
Scranton	26.69	23.54	34.45	32.23	121	95	113	95
Range	$1.61	$2.41	$2.07	$1.96				
NORTH CENTRAL								
Chicago	26.97	24.75	33.56	33.58	123	100	110	99
Cincinnati	26.25	24.07	32.88	32.92	119	97	108	97
Cleveland	25.76	22.99	32.09	32.08	117	93	105	95
Detroit	27.09	24.74	33.80	33.78	123	100	111	100
Kansas City	25.41	23.11	31.69	31.64	116	94	104	94
Minneapolis	25.06	23.05	31.53	31.54	114	93	104	93
St. Louis	26.32	23.99	32.88	32.85	120	97	108	97
Range	$2.03	$1.76	$2.27	$2.24				
SOUTH								
Atlanta	21.60	24.31	29.35	33.26	98	98	96	98
Baltimore	21.91	24.37	30.38	33.43	100	99	100	99
Houston	21.44	24.01	29.33	32.71	97	97	96	97
Washington, D.C.	21.99	24.70	30.45	33.78	100	100	100	100
Range	$0.55	$0.69	$1.12	$1.07				
WEST								
Los Angeles	26.34	24.85	33.77	33.85	120	101	111	100
Portland	26.11	24.51	33.39	33.37	119	99	110	99
San Francisco	27.19	24.85	34.79	34.75	124	101	114	103
Seattle	27.41	25.67	35.18	35.21	125	104	116	104
Range	$1.30	$1.16	$1.79	$1.84				
20-city range	6.86	2.96	7.19	3.67				

[1] Providing 84 meals per week at home.

[2] Prepared for the Interim City Worker's Family Budget; see p. 791 of source cited in text footnote 1.

[3] Food plans for the United States and 4 regions developed by the U.S. Department of Agriculture. For a detailed description of the plans, see source cited in text footnote 2.

TABLE 2. WEEKLY COSTS OF A LOW- AND MODERATE-COST FOOD PLAN[1] FOR A RETIRED COUPLE,[2] WITH REGIONAL AND U.S. PREFERENCE PATTERNS FOR SPECIFIC FOOD ITEMS[3] AND INDEXES, OCTOBER 1959

Region and city	Weekly costs				Indexes (Washington, D.C.=100)			
	Low-cost plan, with preference pattern of—		Moderate-cost plan, with preference pattern of—		Low-cost plan, with preference pattern of—		Moderate-cost plan, with preference pattern of—	
	Region	United States	Region	United States	Region	United States	Region	United States
NORTHEAST								
Boston	$14.45	$13.31	$18.94	$17.72	127	105	119	101
New York	14.39	12.76	18.72	17.56	127	100	117	100
Philadelphia	14.27	12.61	18.70	17.46	126	99	117	99
Pittsburgh	14.47	12.90	18.89	17.71	127	101	119	101
Scranton	13.63	12.05	17.82	16.67	120	95	112	95
Range	$0.84	$1.26	$1.12	$1.05				
NORTH CENTRAL								
Chicago	13.78	12.66	17.31	17.37	121	100	109	99
Cincinnati	13.50	12.41	17.09	17.17	119	98	107	98
Cleveland	13.27	11.87	16.65	16.71	117	93	104	95
Detroit	13.91	12.72	17.52	17.57	122	100	110	100
Kansas City	13.09	11.92	16.50	16.50	115	94	104	94
Minneapolis	13.00	11.96	16.50	16.54	114	94	104	94
St. Louis	13.52	12.36	17.07	17.12	119	97	107	97
Range	$0.91	$0.85	$1.02	$1.07				
SOUTH								
Atlanta	11.13	12.49	15.35	17.26	98	98	96	98
Baltimore	11.32	12.51	15.90	17.34	100	98	100	99
Houston	11.03	12.31	15.35	16.98	97	97	96	97
Washington, D.C.	11.36	12.71	15.94	17.58	100	100	100	100
Range	$0.33	$0.40	$0.59	$0.60				
WEST								
Los Angeles	13.56	12.81	17.60	17.67	119	101	110	101
Portland	13.43	12.63	17.36	17.37	118	99	109	99
San Francisco	14.01	12.75	18.11	18.11	123	100	114	103
Seattle	14.15	13.29	18.33	18.37	125	105	115	104
Range	$0.72	$0.66	$0.97	$1.00				
20-city range	3.44	1.44	3.59	1.87				

[1] Providing 42 meals per week at home.
[2] Prepared for the Interim Budget for a Retired Couple; see p. 1149 of source cited in text footnote 1.
[3] See footnote 3, table 1.

TABLE 3. QUANTITY WEIGHTS WITHIN FOUR MAJOR FOOD GROUPS FOR PRICING FOOD PLANS AT TWO COST LEVELS,[1] BY REGION

Food group	Low-cost plan					Moderate-cost plan				
	United States	Northeast	North Central	South	West	United States	Northeast	North Central	South	West
Milk and milk products	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Fresh milk and cream	.684	.729	.765	.606	.682	.768	.797	.788	.716	.722
Canned and dry milk	.156	.116	.075	.239	.129	.085	.060	.061	.150	.108
Cheese, ice cream, etc.	.159	.155	.159	.155	.188	.147	.144	.151	.134	.170
Meat, poultry, and fish	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Beef, veal, lamb	.345	.439	.389	.254	.454	.405	.427	.410	.309	.468
Pork, bacon, ham	.266	.203	.266	.314	.192	.240	.191	.244	.343	.203
Frankfurter, lunch meats	.119	.108	.142	.112	.137	.112	.101	.123	.119	.098
Chicken	.162	.143	.106	.202	.143	.159	.189	.144	.140	.153
Fresh and canned fish	.107	.107	.097	.118	.074	.085	.092	.078	.089	.078
Grain products	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Flour, corn meal	.480	.274	.311	.606	.405	.308	.202	.257	.483	.255
Prepared flour mix	.019	.020	.032	.011	.041	.032	.028	.031	.027	.043
Rice, rolled oats	.072	.045	.038	.091	.063	.043	.043	.033	.050	.051
Ready-to-eat cereals	.074	.136	.146	.058	.094	.106	.156	.157	.084	.143
Bread, crackers, cookies, etc.	.354	.524	.473	.234	.397	.511	.572	.522	.356	.508
Fats and oils	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Butter	.156	.252	.244	.092	.130	.206	.288	.257	.091	.120
Margarine	.247	.346	.216	.218	.272	.256	.261	.229	.251	.318
Vegetable shortening	.156	.091	.192	.159	.187	.188	.121	.199	.231	.220
Lard and oil	.259	.151	.134	.356	.234	.157	.155	.116	.222	.142
Salad dressing	.181	.161	.215	.176	.177	.194	.175	.198	.204	.200

[1] Adapted by the Bureau of Labor Statistics (to account for changes in the imputation of unpriced to priced items) from weights derived by the U.S. Department of Agriculture based on average consumption of all nonfarm households of 2 persons or more at the indicated income levels, reported in its 1955 Household Food Consumption Survey.

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

applicable to the majority of cities in the region than the more highly generalized pattern for the United States. Also, when the objective is the measurement of the cost of equivalent standards of living, as was the case with the food budget cost estimates prepared by the Bureau, the regional preference patterns are preferred over food expenditure data for the individual city as a basis for allocating the quantities of major food groups to individual food items. While the U.S. preference patterns are too broad to serve as a "specification" for a standard food budget, the actual expenditure patterns, which reflect past income levels, educational background, ethnic origins, etc., of the city's population, are likely to differ markedly in nutritional content from city to city.

The relative differences in costs of the two food plans in cities within regions is about the same, whether costs are estimated with regional or U.S. weights. In the seven North Central cities, for example, the ranges in costs for the low-cost food plans estimated with regional and U.S. weights were $2.03 and $1.76 and for the moderate-cost plan $2.27 and $2.24, respectively. Since the same regional preference patterns are used for all of the cities within a region, both the regional and U.S. weighted estimates reflect only price differences among the cities within a region.

Revision of Establishment Employment Statistics, 1963

DOROTHY HINTON*

WITH THE INITIAL PUBLICATION of August 1963 data in this issue,[1] the Bureau of Labor Statistics has adjusted its employment, hours, earnings, and labor turnover statistics derived from establishment reports to new benchmark levels for March 1961 and March 1962. Since the monthly data are estimates based on reports by a sample of establishments, they are revised periodically to a benchmark, or complete count.

Benchmark Source Material

The most important source of benchmark data is the compulsory unemployment insurance program. Reports compiled from this program provide almost three-fourths of the nonagricultural employment total. Other important sources of benchmark data include the Social Security Administration (for small firms and nonprofit organizations), Bureau of the Census (for State and local government), the Civil Service Commission (for Federal civilian employment), the Interstate Commerce Commission (for interstate railroads).[2]

Estimates Compared With Benchmarks

Compared with the benchmark count of 54.4 million workers on establishment payrolls in March 1962, the total nonagricultural estimate based on the sample was lower by only 386,000, less than 1 percent. Of the eight industry divisions, six, accounting for 80 percent of nonfarm employment, differed by less than 1 percent—mining; manufacturing; transportation and public utilities; trade; finance, insurance, and real estate; and government. Of the two remaining divisions,

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[1] See Current Labor Statistics, tables A–2, A–3, A–4, A–5, B–1, C–1, C–2, C–3, C–4, C–5, and C–6.

[2] For a detailed description of benchmark preparation and sources, see "The 1959 Benchmarks for the BLS Payroll Employment Statistics," *Monthly Labor Review*, December 1962, pp. 1385–1392.

COMPARISON OF BLS NONAGRICULTURAL EMPLOYMENT ESTIMATES WITH MARCH 1962 BENCHMARKS, BY INDUSTRY DIVISION

[Workers in thousands]

Industry division	Employment		Difference between benchmarks and estimates	
	Benchmark	BLS estimate	Number	Percent
Total	54,442	54,056	−386	−.7
Mining	645	640	−5	−.8
Contract construction	2,480	2,328	−152	−6.1
Manufacturing	16,618	16,525	−93	−.6
Transportation and public utilities	3,865	3,880	15	.4
Wholesale and retail trade	11,213	11,223	10	.1
Finance, insurance, and real estate	2,757	2,754	−3	−.1
Service and miscellaneous	7,731	7,573	−158	−2.0
Government	9,133	9,133	0	0

service and miscellaneous industries were 2 percent lower and contract construction was 6 percent lower. The latter division presents the most difficult problem in the field of employment estimation. The accompanying table shows the amount of revision made in the series for each of the major industry divisions.[3]

About a third of total nonagricultural employment is in manufacturing. Because turns in the business cycle are frequently led by changes first occurring in this sector, the small revision of 0.6 percent in the employment estimates for manufacturing is particularly important. Of the 21 major manufacturing industries for which estimates are published, 13 groups with almost 60 percent of manufacturing employment differed from the benchmark by 2 percent or less.

Estimates differ from benchmarks primarily because changes actually occurring in employment for the industry as a whole are not precisely reflected by the experience of establishments in the reporting sample, or because plants change their primary product, causing a shift in their classification from one industry to another. These shifts in industry classification are not reflected in the BLS estimates until they are revised to new benchmark levels. For example, differences between estimates and benchmarks in the ordnance and aircraft industries were large because the estimates had not previously reflected the shifting of several large plants from aircraft to missile manufacture. In contract construction, independent variations in employment among firms, many of which are small, and the frequency of their formation and dissolution, all contribute to the difficulty of obtaining reliable estimates without inordinate delay or expense.

Data for 98 additional individual manufacturing industries for August, advancing the currency of the series by 1 month, are being published in this issue of the *Monthly Labor Review*. Samples for these preliminary estimates are now sufficiently reliable to permit their publication.

[3] For greater detail on the benchmark revision, see *Employment and Earnings*, September 1963, pp. 1–16.

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Significant Decisions in Labor Cases*

Labor Relations

Duty to Bargain. A U.S. court of appeals has ruled that an employer may not unilaterally change the terms of employment after a bargaining deadlock which resulted, in part, from the employer's unfair labor practices.[1]

During negotiations for a new collective bargaining contract, the employer, in proposing various changes in the contract terms, insisted particularly on altering the grievance procedure to require the signature of the aggrieved employee in each case. Three days before the expiration of the old contract, the company informed the union that unless an agreement were reached by the expiration date, it would—among other unilateral changes—abrogate the existing grievance procedure and preferential seniority rights for union representatives. When bargaining remained deadlocked 2 weeks later, the company, on 2 days' notice, unilaterally effectuated all of its original proposals regarding the terms and conditions of employment. Subsequently, the union called a strike and filed charges with the National Labor Relations Board.

The union contended that the company's insistence on an individual-signature provision, its abrogation of seniority rights and grievance procedure, and its unilateral imposition of its other proposals constituted unfair labor practices prohibited by the Labor Management Relations Act. The Board ruled in favor of the union on the first two points: It held that insistence on the individual-signature provision was improper since such a provision was not a mandatory subject of bargaining; and that the abrogation of seniority rights and grievance procedure, on insufficient notice, was an unfair labor practice because these items were mandatory subjects of bargaining. However, the Board ruled that the employer's unilateral action in effecting the other changes was justified since the parties had reached a bargaining impasse.

The court of appeals affirmed the Board on the first two points and reversed it on the third. It said that there could be no "legally cognizable impasse" justifying unilateral action if a cause of the impasse was the failure of one party to bargain in good faith. Since the company had contributed to the impasse by its earlier actions found to be refusals-to-bargain, the court held that this could not be considered a deadlock in negotiations which justifies unilateral changes.

To the Board's contention that it alone is competent to determine whether an impasse really exists, the court replied that the Board can certainly find that the parties are deadlocked, but "whether such a deadlock legally justifies a unilateral alteration in the conditions of employment is, at the very least, a mixed question of law and fact."

Subcontracting. A U.S. court of appeals, reversing the NLRB, held [2] that the LMRA does not require the employer to bargain on subcontracting work of economic strikers when he does so to keep his business operating during the strike. Consequently, the court held, the employer's decision in this case to make the subcontracting arrangement permanent did not change the strike to an unfair-labor-practice one.

When several attempts to reach agreement with a certified union of its employees failed and a strike was probable, the company negotiated with an independent contractor to perform its delivery service work in the event the strike was called. When the strike did occur, the contractor rented the company's trucks and supplied truckdrivers, truck helpers, and auto mechanics to run the delivery service. The company told the strikers if they did not resume work they would be permanently replaced, and announced the subcontracting. When the strike continued, the company reiterated its statement and added that the delivery jobs no longer existed. Later the union requested that the strikers be reinstated, but the company

*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] *Industrial Union of Marine and Shipbuilding Workers* v. *NLRB; Bethlehem Steel Co.* v. *Same* (C.A. 3, July 30, 1963).

[2] *Hawaii Meat Co.* v. *NLRB* (C.A. 9, July 22, 1963).

refused and informed the union that its subcontracting arrangement was permanent.

The Board held that section 8(a)(5) of the LMRA requires the employer to bargain with the union about his decision to subcontract even though the decision was made for economic reasons. The Board said this does not mean that the company must notify the union of its intention to subcontract its work in case of strike, but the union must have an opportunity to bargain about the proposal after the strike begins. Since the Board held that the letters to the employees had converted the strike into an unfair labor practice strike, it ordered the reinstatement of the strikers with back pay.

In reviewing the Board's decision, the court said that an employer has a legal right to keep his business operating when he is confronted with a strike. Although the presence of a strike does not permit the employer to commit unfair labor practices, it does in some cases permit him to engage in activities which, in the absence of a strike, would be unfair labor practices. The court said that if the employer were required to bargain on such matters, the union could render ineffective the employer's efforts to avoid the interruption of operations by simply agreeing to bargain.

The court cited an earlier opinion of the U.S. Supreme Court that ". . . economic pressure by the parties to a labor dispute is not a grudging exception to some policy of completely academic discussion enjoined by the act; it is part and parcel of the process of collective bargaining." [3]

Pointing to an earlier Supreme Court decision [4] that an employer is under no duty to bargain on permanently replacing individual strikers, the court of appeals held that since the Board cannot interfere with the employer's decision on replacement, it is no less improper for it to interfere when the employer decides to keep his business going by subcontracting.

Hot-Cargo Agreements. The NLRB invalidated a provision held over in a 1961 agreement between the Teamsters and the Chicago meat packers from the old contract, requiring that deliveries originating in Chicago be made by the packers' own employees, and that "all effort" be made to subcontract overflow cartage only to carriers employing members of the union. The appendix to the new contract, moreover, contained a proposed "New Addendum" whose validity was specifically to be determined by the NLRB. The addendum provided that deliveries from outside the city be transported and delivered locally by members of the bargaining unit, and that overflow cartage be subcontracted only to carriers whose employees enjoy wages and other benefits at least equal to those provided by the primary employer.

Upon review of the contract, the Board ruled [5] that the provisions of the proposed addendum violated the LMRA's ban on hot-cargo agreements.

Both the old contract provision and the new addendum were challenged by the packers as violative of section 8(e) of the LMRA, in that they limited the employer's freedom to choose with whom to do business. The union, on the other hand, contended that the provisions were intended to protect the work and wages of employees within the bargaining unit.

All members of the Board agreed that the original contract's provision violated section 8(e), since the practical effect of requiring the packers to use "all effort" to employ a union carrier would be to preclude them from doing business with nonunion carriers.

A majority of the Board concluded that section 8(e) also barred both provisions of the new addendum. The first provision, requiring that all deliveries originate from the packers' Chicago terminal, would disrupt existing business relationships with outside shippers. The second provision, relating to subcontracting of overflow cartage, also violated section 8(e) in that it limited the employer's choice of persons with whom he might deal, and in that the union's primary purpose was shown by the history of the negotiations to be to protect the working conditions of all its members in the Chicago area, rather than those of members of the bargaining unit.

Chairman McCulloch dissented from the holding that the first provision of the new addendum was invalid. He argued that since the number of shipments originating within Chicago had declined as a result of a transfer of packing plants to points outside the city, any deliveries into the

[3] *NLRB* v. *Insurance Agents' Union,* 361 U.S. 498 (1960); see *Monthly Labor Review,* April 1960, p. 392.

[4] *NLRB* v. *Mackay Radio & Telegraph Co.,* 304 U.S. 333 (1938); see *Monthly Labor Review,* July 1938, pp. 82–85.

[5] *Teamsters Union Local 710* and *Wilson & Co., Inc.; Same* and *Frozen Food Express,* 143 NLRB No. 117 (Aug. 6, 1963).

city of Chicago could be considered as work traditionally performed by the unit. Since the union could properly insist on provisions to retain work traditionally done by members of the unit, even if such provisions would affect the employer's business relationships, the provision should have been upheld.

Member Brown, agreeing with Chairman McCulloch on the first provision of the addendum, argued that the subcontracting provision of that addendum was also valid since it was intended to discourage the use of subcontracting to undermine the work standards of the packers' own employees.

Recognitional Picketing. Upon reconsideration, the NLRB held [6] that organizational or recognitional picketing under the LMRA is privileged if it is for the publicity purposes specified by the law [7] and does not affect delivery, but it may not be for the purpose of inducing organized labor's response.

Electrical workers began to picket a contractor when he refused to sign a contract with the union, their signs indicating that the employer did not employ union members. Picketing was frequently carried on near the delivery entrance of the building away from the public observation. After 30 days of picketing, during which no election petition was filed, the signs were changed to allege low salaries and other austere labor conditions. The contractor brought charges against the union for violating section 8(b)(7)(C).

In reviewing the original decision, the court of appeals had ruled that the Board should not have relied on the wording of the picketing signs and a previous finding that the union's ultimate objective was recognition. Rather, the Board should have made a finding on whether the union's purpose was to signal economic action by organized labor or to advise the public as permitted by the publicity proviso. The court remanded the case for reconsideration.

Upon reconsidering the case, the Board found that the change of legends on the picket signs had not changed the nature of the picketing since the union's objective had been the same throughout—to force or require the contractor to recognize it as the bargaining representative of the electrical workers. Referring to the appellate court's statement that the proviso "is intended . . . to exclude the invocation of pressure by organized labor groups or members of unions," the Board pointed out that the union had concentrated much of its picketing activities at delivery entrances, where the public could not observe it, and attempts had been made by the pickets to prevent the deliveries, with the obvious intention of inducing organized labor to pressure the contractor. Thus the picketing had not been privileged under the proviso, the Board concluded, affirming its original decision.

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[6] *Local 3, International Brotherhood of Electrical Workers* and *Jack Picoult*, 144 NLRB No. 9 (Aug. 19, 1963).

[7] The purposes named in the second proviso of section 8(b)(7)(C) are: To advise the public that an employer "does not employ members of, or have a contract with, a labor organization . . . ."

Chronology of Recent Labor Events

August 1, 1963

UNITED AIR LINES and the Air Line Pilots announced an agreement after 2½-year negotiations, which had been complicated by United's acquisition of Capital Airlines in October of 1962, effective for 18 months and retroactive to July 1, 1963. New monthly pay scales range to $2,655 for pilots, $1,687 for copilots, and $1,433 for second officers. Furlough pay and retirement allowances were also increased. (See also p. 1202 of this issue.)

August 6

THE OIL, CHEMICAL AND ATOMIC WORKERS UNION ratified a contract covering about 2,000 workers at the Shell Oil Co.'s Houston refinery, ending a year-old strike. The settlement included a 5-percent wage increase, an early retirement plan, limitations on subcontracting, and a work force reduction. (See also p. 1205 of this issue.)

August 7

ACTING UNDER PROVISIONS of the Walsh-Healey Public Contracts Act, Secretary of Labor W. Willard Wirtz set a minimum wage of $1.70 an hour for persons employed in the manufacture or furnishing of conveyors or conveying equipment.

August 13

A 3-YEAR CONTRACT signed by the Marine and Shipbuilding Workers Union and the Bethlehem Steel Co.'s shipbuilding division covering more than 15,000 workers at six yards in Boston, New York, and Baltimore provided a general wage increase of 6 cents an hour retroactive to August 1, 1963, and increases of 5 cents on the same date in 1964 and 1965. Fringe benefit improvements totaled 13 cents an hour. (See also p. 1204 of this issue.) The union had previously settled with Todd Shipyards on a 28-cent package for 4,000 workers. (See MLR, September 1963, p. 1077.)

August 14

AFL–CIO President George Meany named Alexander E. Barkan as director of the Committee on Political Education to replace the late James L. McDevitt. Mr. Barkan became deputy director of the committee in 1957 and has been acting director since Mr. McDevitt's death on March 19, 1963.

August 15

THE AFL–CIO Executive Council closed its session at Unity House, Pa., after referring to constituent unions the decision on participation in the August 28 civil rights demonstration. The Council also passed resolutions calling for tax cuts and liberalization of workers' eligibility for benefits under the Trade Expansion Act. The AFL–CIO annual contribution to the International Confederation of Free Trade Unions was cut from $1,225,000 to $716,600. (See also pp. 1206 of this issue.)

THE U.S. SENATE confirmed the appointment of Howard Jenkins, Jr., to the National Labor Relations Board to replace Philip Ray Rodgers, whose term expires August 27, 1963. Mr. Jenkins was Assistant Commissioner of the Labor Department's Bureau of Labor-Management Reports.

August 16

THE NATIONAL MARITIME UNION extended its agreement with the American Merchant Marine Institute covering 25,000 jobs for 34 passenger and freight shipping companies to June 15, 1969. Effective in 1965, pensions are to be increased $25, to $150 a month, after 20 years' service, regardless of age, and members will begin receiving 60 days' vacation annually. The employers are to contribute 25 cents a day per man to an automation fund. Wage reopenings are provided. (See also p. 1201 of this issue.)

August 18

RATIFICATION OF 3-year contracts containing 30½-cent wage packages by members of the Lumber and Sawmill Workers and the International Woodworkers with 6 Pacific Northwest fir lumber and plywood companies substantially ended an industrywide strike and lockout which had commenced June 6. The two unions had settled in late July with the Simpson Lumber Co. and earlier in August with the Georgia Pacific Corp. The "Big Six" settlement was followed by settlements with the Timber Operators Council and other major operators in the industry. The strike-lockout had involved 29,000 workers. (See also pp. 1204 of this issue.)

August 24

DELEGATES TO THE CONVENTION of the 20,000-member Photo Engravers' Union in Miami Beach adjourned after approving plans for merger with the independent 40,000-member Lithographers Union and reelecting its principal officers without opposition. The proposed merger plan, if approved in September at the Lithographer's Montreal convention, will be submitted to mail referendums of both memberships. (See also p. 1206 of this issue.)

August 28

A NATIONWIDE rail strike was averted when President John F. Kennedy signed a bill providing for arbitration in the dispute between major carriers and the five operating unions. The issues to be resolved for a 2-year period by a tripartite seven-man arbitration board are the use of firemen in freight and yard service and the size of train crews. The law directed the parties to resume bargaining immediately on all other issues in the 3½-year-old dispute. (See also pp. 1201 and 1187 of this issue.)

THE ECONOMIC OPPORTUNITY goals of 200,000 civil rights marchers in Washington, D.C., included a massive Federal program to train and place unemployed workers, an extension of the Fair Labor Standards Act to excluded employment with an increase in the minimum wage to $2 an hour, a Federal Fair Employment Practices Act, and the withholding of Federal funds from programs where discrimination exists. The demonstrators also sought desegregation of all public schools, a stronger Executive order prohibiting discrimination in housing, and a reduction in congressional seats in States where citizens are disenfranchised.

August 30

SECRETARY OF LABOR Wirtz amended the general regulations of the Walsh-Healey Act to permit student-learner employment at wages lower than the prevailing minimum wage, in accordance with procedures for student-learners under the Fair Labor Standards Act. The amendments apply to students employed part time as part of a vocational training program and authorize the Administrator of the Wage and Hour and Public Contracts Divisions of the Department of Labor to issue certificates for their employment at lower rates.

Developments in Industrial Relations*

Wages and Collective Bargaining

Transportation. Following a last-minute breakdown in negotiations [1] between the parties over arbitration procedures, President John F. Kennedy on August 28 signed a bill that delayed introduction of new work rules by the Nation's railroads and averted a threatened strike of some 200,000 operating employees belonging to five unions. The measure called for binding arbitration by a tripartite seven-man panel of the two issues that had been the crux of the 3½-year-old dispute—the use of firemen in freight and yard service and the size of train crews.[2] An award binding for 2 years was to be made within 90 days after enactment of the law; the award becomes effective 60 days later. In effect, this postponed a shutdown over other issues for 6 months and reopening on these two for at least 2 years.

Members of the panel were J. E. Wolfe, chairman of the National Railway Labor Conference, and Guy W. Knight, vice president of the Pennsylvania Railroad, chosen by the carriers; H. E. Gilbert, president of the Locomotive Firemen and Enginemen, and R. H. McDonald, vice president of the Railroad Trainmen, chosen by the unions; and Ralph T. Seward, permanent arbitrator for the Steelworkers and Bethlehem Steel, Benjamin Aaron, director of the Institute of Industrial Relations of the University of California at Los Angeles, and James J. Healy, professor of industrial relations at Harvard University, chosen by President John F. Kennedy. Mr. Seward was designated chairman of the board.

Collective bargaining would be resumed on other issues, including pay structure changes, revision of the 100-mile standard for a day's pay, performance of yard and road work by the same crew, and the manning of self-propelled vehicles.

The American Merchant Marine Institute, Inc., and the National Maritime Union on August 16 extended their current agreement which affects approximately 15,000 jobs, from June 15, 1965, to June 15, 1969. The employers agreed to give all unlicensed seamen a 60-day annual vacation beginning in June 1965, regardless of how many member companies they had worked for. Previously, they received only 30 days unless they had worked for a single employer during the year. The companies also agreed to contribute an additional 86½ cents a man-day to the pension and welfare fund, effective also in June 1965, and to increase monthly pensions to $150 a month after 20 years' service, from $125 at age 65. On June 13, 1963, the parties had agreed to divert the 2¼-percent wage increases due in 1963 and 1964 to the same fund, in addition to the $1.91 per man-day previously contributed.[3] Beginning in June 1965, the companies also agreed to pay an additional 25 cents per man-day to the Employment Security Fund "for the purpose of meeting the impact of automation and mechanization." The union obtained provision for service fees equivalent to dues and initiation fees from nonmembers. The agreement also gave the union a choice between one wage review in 1967 or a wage review in 1966 and one in 1968; the former would consider changes in other segments of the industry as "guidelines" and the latter, wage and benefit developments in other major industries. If the parties can neither complete negotiations within 30 days nor agree to extended periods of bargaining, the issues will be sent for final decision to permanent arbitrator Theodore W. Kheel.

The Tanker Service Committee, Inc., subsequently reached agreement with the same union on similar terms.

The American Merchant Marine Institute, Inc., also reached agreement with the Marine Engineers' Beneficial Association on July 26 as a result of an annual review of their basic contract signed in 1961.[4] The memorandum of understanding provided wage increases of up to 4½ percent for all chief engineers and some first assistant engineers. The companies will contribute an additional $1.48

*Prepared in the Division of Wage Economics, Bureau of Labor Statistics, on the basis of published material available in mid-September.

[1] See *Monthly Labor Review,* Sept. 1963, p. 1079.

[2] For the text of the legislation, see pp. 1187–1188 of this issue.

[3] Ibid., p. 1080.

[4] That contract had provided that the annual reviews would be subject to 3½-percent maximum increases. See *Monthly Labor Review,* October 1961, p. 1120.

per day beginning prior to June 16, 1964, to the pension fund for increasing the existing $200 monthly pension to $300 after 20 years' service in the industry. The contract was extended a year to June 15, 1965, and provided a wage review in 1964 subject to a maximum change of 3½ percent of basic monthly wages.

The Air Line Pilots Association announced on August 1 an 18-month agreement with United Air Lines, Inc., covering about 3,000 employees and establishing monthly maximum pay for captains with 9 years or more service ranging from $1,973 on some piston aircraft to $2,655 on some jets. The contract, signed June 11, 1963, and effective July 1, 1963, replaced separate contracts with United and the former Capital Airlines, which had merged on June 1, 1961. Because of use of different types of aircraft, maximum captain's pay under the previous United contract ranged from $1,775 to $2,501 and under Capital from $1,484 to $2,090. Retroactive pay was also provided—captains and jet copilots received $75 a month for the period June 1, 1961, to May 31, 1962, and $150 a month for June 1, 1962, to June 30, 1963; second officers received half these amounts, while copilots on props received $87.50 and $175, for the same periods. Other changes included improved vacations, company assumption of pilot contributions to the pension fund, and assumption of 25 percent of the group accident and sickness plan. Furlough pay ranging from 1 to 4½ months' allowance, depending on length of service, was also established. The contract also contained a new provision that the jet crew complement be three pilots, but this reflected past practice on both United and Capital.[5]

Utilities. A number of Bell Telephone companies reached agreement with the Communications Workers by early September on 38-month contracts similar to the pattern-setting Michigan Bell settlement.[6] Weekly wage rates were increased $2 to $5 a week for 51,000 employees of Southern Bell Telephone Co. in nine southern States, effective September 5, and from $2 up to $8 a week in some areas for 17,000 employees of Pacific Telephone and Telegraph Co. in northern California and Nevada, effective August 18. Earlier settlements provided for wage-rate increases of $2 to $3 a week for 6,200 traffic department employees of the New Jersey Bell Telephone Co., effective July 28, and for 6,250 traffic department employees of Illinois Bell Telephone Co. outside Chicago on July 25. Weekly general wage-rate increases of $1.50 to $5 for 6,700 plant and traffic department employees of the Chesapeake and Potomac Telephone Co. of Virginia were effective August 4; in addition, there were numerous town reclassifications resulting in a total $6-a-week increase to some employees, while 6,000 Indiana Bell Telephone Co. plant and traffic department employees received pay increases of up to $4.50 a week, effective August 11. The latter company had proposed split schedules for repairmen, linemen, and accounting division employees, but this change was not adopted. About 10,000 employees of Pacific Northwest Telephone Co. received $2 to $5 weekly increases, effective August 18. Wage increases of $2 to $5 a week were negotiated by the Bell Telephone Co. of Pennsylvania and the independent Federation of Telephone Workers on August 15 for 9,700 plant department employees and 2,000 in the accounting division. All the contracts incorporated changes in supplemental benefits similar to those adopted in Michigan.

Metalworking. Western Electric Co., manufacturing affiliate of American Telephone and Telegraph Co., reached full agreement during August with the International Brotherhood of Electrical Workers for 3,500 workers in Omaha, Nebr., generally following the telephone industry pattern. The company and union had previously agreed on a wage increase but had continued negotiations on supplementary benefits.[7] The final settlement included an additional wage increase. The company also signed similar contracts with the IBEW, representing 3,300 workers at Columbus, Ohio, and with the CWA for 1,800 workers at Western Electric's North Tonawanda, N.Y., plant.

Professional engineers employed by Western Electric voted 4,375 to 2,582 in a National Labor Relations Board election during July against representation by the independent Council of Western Electric Engineers. Results, announced in mid-August, affirmed a similar vote in 1960. The engineers had not been represented by any association since 1960.

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[5] See *Monthly Labor Review*, June 1962, pp. III–IV.
[6] See *Monthly Labor Review*, September 1963, pp. 1080–1081.
[7] See *Monthly Labor Review*, July 1963, pp. 830–831.

After completing negotiations with unions representing its production workers,[8] the Aluminum Company of America improved health and welfare and vacation benefits for its 14,000 salaried employees. The new vacation plan provided employees with at least 1 year's service 1.6 weeks' additional pay each year for the 5-year period beginning January 1, 1964. They were also given the choice of accumulating the additional compensation in stock as part of the present savings plan, receiving it in cash each year, or taking up to 3 weeks' extra vacation time during the 5 years, with the remainder in cash or stock. Hospitalization was extended from 120 to 365 days and life insurance increased to $5,500 from $5,000. Sickness and accident and maternity benefits were also improved.

Collective bargaining settlements by small steel companies continued to follow the pattern set by the 11 major basic steel producers in late June.[9] Among the companies concluding agreements during August were Babcock & Wilcox Tubular Products Division at Beaver Falls, Pa., employing 3,600 workers; Latrobe Steel Co. of Latrobe, Pa., with 1,250 workers; Weirton Steel Division of National Steel Co. of Weirton, W. Va., and Stubenville, Ohio, employing 10,000 workers; and Granite City Steel Co. of Granite City, Ill., with 3,100 workers. Weirton Steel Co. workers were represented by the Independent Steelworkers Union; the other workers were represented by the United Steelworkers.

The Armco Steel Corp. announced application of extended vacation benefits and improved insurance to more than 4,000 salaried employees throughout all divisions and offices of the corporation. The benefits, which apply to employees who are subject to the hours provisions of the Fair Labor Standards Act, are similar to those in the recent settlements with the Armco Employees Independent Federation and the Butler Armco Employee Representatives.[10]

The Allis-Chalmers Manufacturing Co. announced on August 15 a salary merit increase plan to replace annual general increases and quarterly cost-of-living adjustments for 5,400 salaried nonunion employees at eight plants. The current cost-of-living allowance was permanently added to existing pay rates.

On August 14, the Lockheed Aircraft Corp. and the Engineers and Scientists' Guild (Ind.), representing 2,700 employees at various company facilities in California, agreed on a 27-month contract, retroactive to August 5, providing pay increases of $5 to $8 a week for salaried employees, who now average $11,000 a year, and 8 to 10 cents for hourly workers. A major point of disagreement was resolved when the company withdrew a proposal that would have limited seniority rights in case of layoff to individual project units. Instead, the parties agreed that an employee with 10 years or more of service and subject to layoff could bump into another company unit and displace an employee with less seniority. Other improvements included premium pay for salaried engineers working on holidays, an increase in extended layoff benefits from $50 to $75 for each year of service up to a maximum of 15 years, and improved medical insurance for dependents. The agreement can be reopened November 1, 1964.

A 2½-percent general increase in salary levels, which range from $7,000 to $22,000 a year, and increased job security were provided by an agreement reached early in August between the independent Association of Scientists and Professional Engineers in Personnel and the Radio Corporation of America, after reopening of a contract expiring June 1964. The agreement, covering 2,000 workers in Camden and Moorestown, N.J., revised the existing layoff plan. It provided additional credit for graduate degrees, and required the company to give 6 weeks' notice of mass layoffs, with information as to the approximate number of workers to be laid off, and 3 weeks' notice of the names of those to be laid off, those to be retained out of order (with information about the qualifications of both groups and a description of the work performed by those retained out of order). The plan gave the association the right to immediately seek an adjustment or file a grievance if it were not satisfied with the decisions about choices of those to be laid off. Dissatisfaction over layoff procedure had precipitated a 3-hour protest strike in April 1963.[11] In addition, RCA agreed by letter to establish a continuing joint committee to study "retraining methods and ob-

[8] See *Monthly Labor Review*, September 1963, p. 1076.
[9] See *Monthly Labor Review*, August 1963, pp. 959–960.
[10] See *Monthly Labor Review*, September 1963, pp. 1076–1077.
[11] See *Monthly Labor Review*, June 1963, p. 709.

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jectives as related to layoff" in response to an ASPEP proposal to establish a retraining program for senior engineers subject to layoff because their skills were not needed.

The American Radiator and Standard Sanitary Corp. and the Steelworkers, representing over 1,000 workers at the company's Bond plant in Buffalo, agreed in July on 2-year contracts covering production and maintenance workers and office employees. The pacts, effective August 1, granted general wage increases of 5 cents an hour the first contract year and 3 cents the second. An eighth paid holiday, Christmas Eve, was provided, as well as improvements in hospitalization, sickness and accident benefits, and life insurance.

Bethlehem Steel Co.'s shipbuilding division and the Marine and Shipbuilding Workers union in mid-August signed a 3-year contract covering over 15,000 workers in the company's Atlantic Coast shipyards. It provided a 6-cent-an-hour general wage increase retroactive to August 1, 1963, with 5-cent increases effective both August 1, 1964, and August 1, 1965, raising the base rate for first-class mechanics to $3.21 in the final contract year. Among the supplemental benefits were: eighth and ninth paid holidays—Columbus Day and Veterans Day, 365 days' hospitalization instead of the previous 120 days, a $10 increase in weekly sickness and accident benefits, and a $500 increase in life insurance. Negotiations began in early May and were continued under an extension of the contract scheduled to expire May 31.

The Kaiser Jeep Corp. (formerly Willys Motors, Inc.) of Toledo, Ohio, reached agreement in mid-July with the Automobile Workers; the previous agreement expired April 1, 1962, but work had continued under repeated extensions. Union negotiators agreed during the year to forgo a raise while the company prepared to introduce a new line of vehicles, although an agreement in November 1962 did reduce some wage-rate inequities. The contract, affecting about 6,000 workers, provided a 4-cent-an-hour wage-rate increase, effective July 15. A company spokesman termed the pact noninflationary and said it would make it "possible for the corporation to remain competitive in the automotive industry." The agreement also liberalized pensions and insurance, and company contributions to the severance pay fund were increased 1 cent to 6 cents an hour. Among the increases in insurance were liberalized daily hospital allowances and weekly sickness and accident benefits, as well as increased hospital benefits for retired workers under a contributory insurance program. The contract is subject to reopening after completion of negotiations between the Auto Workers and the Big Three auto producers—Ford, General Motors, and Chrysler—whose contracts run until the fall of 1964.[12]

Lumber. Following agreement between the Simpson Lumber Co. and the Lumber and Sawmill Workers and the Woodworkers in July,[13] agreements were reached during August in the remainder of the Pacific Northwest fir lumber and plywood industry, thus ending the dispute which, at its height, had idled 29,000 workers. Early in the month, the Georgia-Pacific Corp. agreed with the unions on 3-year contracts covering about 7,200 workers. The 30½-cent wage package included across-the-board wage increases in each of the contract years and other benefits. (The Simpson settlement reportedly was valued at about 33½ cents.)

Within a week, the Willamette Valley Lumber Co., Pope and Talbot, Inc., Edward Hines Lumber Co., and Santiam Lumber Co., employing a total of 5,000 union workers, reached accord with the unions, following the Georgia-Pacific pattern.

The "Big Six" association[14]—Weyerhaeuser Co., Crown Zellerbach Corp., International Paper Co., Rayonier, St. Regis Paper Co., and United States Plywood Corp.—with 22,000 employees, followed by the Timber Operators Council, Inc., next agreed to the 30½-cent "package" with the two unions. Agreements were also reached by the Woodworkers and Potlatch Forests, Inc., covering 3,000 workers in eastern Washington and northern Idaho and by the LSW and the Pine Industrial Relations Council, representing 15 companies in northern California with 4,000 workers. All of the agreements provided wage increases of 15 cents in 1963—10 cents effective June 1 and 5 cents effective December 1—with additional increases in 1964 and 1965. The additional pay benefits included classification ad-

[12] See *Monthly Labor Review*, October, November, and December 1961, pp. 1117–1118, 1245, and 1377–1378.
[13] See *Monthly Labor Review*, September 1963, p. 1678.
[14] See *Monthly Labor Review*, August 1963, p. 961.

justments for skilled workers and travel time for woods workers.

Employers withdrew attempts to establish a variable workweek. The provision would have eliminated premium pay for Saturday and Sunday work as such—a benefit gained by the unions in 1942.

Other Manufacturing. Wage increases ranging from 5½ to 10½ cents an hour effective August 26 were agreed to by Minnesota Mining and Manufacturing Co. and the Oil, Chemical and Atomic Workers under a contract negotiated in 1962 [15] providing for wage increases based on surveys of wage adjustments in other Twin Cities firms. The agreement covered 2,000 employees at St. Paul and 700 at Hastings, Minn.

Hourly wage increases of 5 to 8 cents were agreed to by E. I. du Pont de Nemours & Co. and independent unions at two Virginia plants on August 13. The settlements covered 2,900 production and clerical employees at Martinsville and 2,000 at Waynesboro.

In July and August, five major cement companies—Alpha Portland Cement Co., Ideal Cement Co., Lehigh Portland Cement Co., Lone Star Cement Corp., and Marquette Cement Manufacturing Co.—with plants in 26 States, and the Cement Workers Union, representing approximately 12,000 employees, agreed to 2-year contracts, retroactive to May 1, 1963.

Wage increases averaging 7 cents an hour are effective in each of the 2 contract years. Overtime work will be restricted during slack periods. Benefits include 4 weeks' vacation after 20 years' service instead of 25, effective in 1964; establishment of up to 3 days paid funeral leave; company assumption of the full cost of dependents' group insurance; and weekly sickness and accident benefits liberalized to begin on the fourth day of illness. Pension improvements included reduction of the hours required for a full year of credited service, an increase in monthly benefits to $2.75 per year of credited service, with a minimum credit of 10 years and no maximum (instead of the former $2.50 monthly for each year up to 30 and $1.25 a year for up to 5 additional years of service), and vesting after 15 years regardless of age and after 10 years at age 40. Early retirement and total and permanent disability pensions were also improved and permanent shutdown or layoff pensions made available to employees with 10 years or more of service and age 55 or over, whose age and service total 75, or any employees whose age and service total 80.

In early August, the United Hatters, Cap and Millinery Workers at Sunbury, Pa., and Winchester, Tenn., and the Hat Corp. of America signed a 3-year contract ending a 3-week strike. The 700 workers at Winchester received wage increases totaling 40 cents an hour over the contract period while the 400 workers at Sunbury, where wage rates are higher, will receive a 25-cent increase in three installments. The contract also called for longer vacations, more paid holidays, and additional welfare contributions.

Workers at the Norwalk, Conn., plant of the company had signed a 4-year contract in July, granting a 7-cent increase to lower paid employees; a third week of vacation (to be taken during Christmas week); an eighth paid holiday (Washington's Birthday); and a clause prohibiting any work from being diverted to other plants.

A year-long strike ended August 5 with a settlement between the Oil, Chemical and Atomic Workers representing 2,200 workers and the Shell Oil Co. refinery and chemical plant at Deer Park, Tex., near Houston. The terms of the 1-year contract, which covers all hourly employees except bricklayers, included a 5-percent wage increase for those employees returning to work; union agreement to permit operators to do more maintenance work and craftsmen to do more "incidental" work as well as to cut 390 employees from the work force (the company had notified 227 of these during the strike that they would not be recalled; it agreed to reinstate the other 163 but will not replace them if they leave the work force); company agreement to introduce an early voluntary retirement plan for workers over age 50; to confine minor maintenance work to employees' operating areas; and to limit contracting out of major maintenance work.

During the strike which began August 18, 1962, operations at the plant reportedly had been kept at nearly full capacity by 1,200 supervisors and technicians, 600 members of building trades unions primarily engaged in new construction, and 48 members of the bargaining unit who stayed on the job.

[15] See *Monthly Labor Review*, November 1962, p. 1283.

Conventions and Meetings

The Oil, Chemical and Atomic Workers Union held its seventh biennial convention in Chicago August 19–24. President O. A. Knight and three other incumbent officers were reelected to office. In his report to the delegates, President Knight stated that automation had permitted employers to reduce the work force drastically, citing the Standard Oil plant at Whiting, Ind., where the youngest man in the labor gang has 15 years' seniority. He also hailed the tenacity of strikers in recent long strikes. (See preceding paragraph.) Senator Wayne L. Morse called for a Senate investigation of management's use of so-called supervisors as strikebreakers, stating that industry is developing a strikebreaking force of "technicians with supervisory labels" and that he had observed such tactics in the maritime industry during the dock strike earlier this year.[16] The delegates resolved to initiate a merger with the Chemical Workers Union by drafting a new constitution and a merger timetable. The unions total close to 300,000 members. A Chemical Workers spokesman said his union would name a merger committee when official word of the OCAW action was received. The convention also resolved to raise per capita dues payments by locals to the international from $2 to $2.55 a month, with 40 cents of the increase allocated for operating expenses and 15 cents to the defense fund.

The International Typographical Union held its 105th annual convention in Long Beach, Calif., August 3 through 9. President Elmer Brown predicted agreement on "a practicable and acceptable plan for the economic merger of the unions in the printing, publishing, and related industries" in the near future. He reported to the delegates that their union had attained an average weekly wage scale of $130.09 and a workweek averaging below 37.5 hours; that the union's antistrikebreaker law campaign had helped passage of two State laws and 20 city ordinances, and that the ITU training center in Colorado Springs, Colo., had doubled its capacity and had retrained 1,500 printers in the newest techniques since opening in 1962. The delegates adopted resolutions calling for exemption of pensions from income tax, continuation of merger talks with other printing and publishing unions, and action by the AFL–CIO to bring into the Federation the independent railway operating brotherhoods and other unaffiliated unions and to organize unorganized workers in the United States and Canada.

The annual convention of the Photo-Engravers Union at Miami Beach, August 19–24, reelected President William J. Hall and Secretary-Treasurer Ben G. Schaller without opposition. A proposal for merger with the Amalgamated Lithographers (Ind.), which had the approval of AFL–CIO President George Meany, was adopted by the delegates. A merger would bring the Lithographers, who left the Federation in August 1958, back into the AFL–CIO. At its September convention in Montreal, the Lithographers voted to merge with the Photo-Engravers. The issue was now subject to a mail referendum of both unions' members. The Lithographers have approximately 40,000 members and the Photo-Engravers 20,000.

The AFL–CIO Executive Council at its quarterly meeting at Unity House, Pa., August 12–15, adopted a resolution expressing sympathy with the aims of the August 28, 1963, civil rights demonstration in Washington, D.C., but leaving to individual unions the decision whether to participate in the demonstration or not. The resolution stated that the AFL–CIO will focus on legislation and on efforts in major cities, particularly with the building trades, to advance civil rights. The Council also urged a substantial tax reduction in the low- and medium-tax brackets, and criticized the Tariff Commission for its "rigidly technical interpretation" of the Trade Expansion Act of 1962, which resulted in preventing the granting of adjustment assistance to workers whom unions had claimed were adversely affected by increased imports. It voted to reduce its contribution to the International Confederation of Free Trade Unions from $1,225,000 to $716,000, but reportedly planned to increase its support of the American Institute for Free Labor Development,[17] which trains Latin American union leaders. The Council praised the record of the U.S. Employment Service and asked Congress to investigate the practices of private employment agencies. President Meany appointed Alexander Barkan Director of the Committee on Political Education, to succeed James L. McDevitt who died last March.

[16] See *Monthly Labor Review*, March 1963, p. 310.
[17] See *Monthly Labor Review*, September 1962, p. 1037.

The American Teachers Association, a 75,000-member organization of Negro educators, mostly from the Southern States, held its 60th annual convention on July 31–August 3 in Dallas. Dr. Jeanne L. Noble, Associate Professor in the New York University School of Education, told the delegates that if they are to maintain rapport with their students they must actively participate in the civil rights movement even at the risk of losing their jobs. She stated that students who resort to controversial steps to change their situation are entitled to the help of competent teachers.

The National Alliance of Postal Employees (Ind.), most of whose 18,000 members are Negroes, held its 50th anniversary convention in New York City in late August. Its president, Ashby G. Smith, although conceding there had been a number of promotions for Negro postal employees, charged that discrimination persisted in the original evaluation of supervisory candidates and in the actions of promotion advisory boards, despite efforts of the President and the Postmaster General. Mr. Smith proposed that the man achieving the highest score on supervisory promotion tests be given a conditional appointment to the first vacancy, and the appointment be made permanent unless specific charges of unfitness are proved. He criticized the AFL–CIO Postal Clerks for seeking to prevent recognition to the Alliance under the President's labor-management program [18] and for opposing promotion of nonwhites. He stated that "Many of the ills from which our society is suffering arise from the fact that the AFL–CIO has lost much of its vision, its idealism and with it, its power to exercise any major influence over the course that our society takes. Its voice, with pitifully few exceptions, is indistinguishable from the voice of other conservative organizations."

Frederick C. Belen, Assistant Postmaster General, told the convention that neither Negroes nor any other group will be given preference in jobs or promotions nor will there be any quota system for minority personnel as a part of the post office's equal employment opportunity policy. He denounced as false, charges that there was discrimination in reverse in promoting three Negroes in Dallas, and denied existence of discrimination in the Philadelphia Post Office.

[18] See *Monthly Labor Review*, May 1963, pp. 559–560.
[19] See *Monthly Labor Review*, September 1963, p. 1084.

Civil Rights

Although the AFL–CIO did not participate officially in the August 28 march in Washington for "jobs and freedom," large numbers of individual unions were represented. Among those sending delegations were the Auto Workers, the Steelworkers, the International Union of Electrical, Radio, and Machine Workers, the Amalgamated Clothing Workers, the International Ladies' Garment Workers, the Meat Cutters, the Retail, Wholesale and Department Store Union, the Transport Workers, and the Hotel and Restaurant Employees. The march was directed by A. Phillip Randolph, president of the Sleeping Car Porters. Among the proposals urged by the leaders of the march in meetings with the President and with congressional leaders were a Federal fair employment practices act, a Federal program to train and place unemployed workers, an increase in the Federal minimum wage to $2 an hour, and extension of coverage of the Fair Labor Standards Act.

The Bureau of Public Roads of the U.S. Department of Commerce on August 6 announced that it had commenced stricter enforcement of antidiscrimination contract clauses in the $4 billion federally financed road program.

On August 16, at the 10th National Apprenticeship Contest held at Purdue University in Lafayette, Ind., the participating organizations (the Plumbers and Pipefitters Union, the National Joint Plumbing Apprenticeship Committee, the National Association of Plumbing-Heating-Cooling Contractors, the National Joint Steamfitter-Pipefitter Apprenticeship Committee, the National Joint Sprinkler Fitting Committee, and the National Automatic Sprinkler and Fire Control Association, Inc.) approved a joint policy statement expressing unwillingness to comply with Bureau of Apprenticeship and Training standards issued in July which were aimed at eliminating discrimination in apprenticeship and training.[19] The statement claimed that the BAT standards would be impossible to comply with and that to impose Government sanctions for violating them would result in quotas that would destroy the present apprenticeship program and "plunge our industry into chaos." Instead, it subscribed to the policy adopted on August 8 by the Construction Industry

Joint Conference (composed of the AFL–CIO Building and Construction Trades Department and the national associations of contractors) that qualifications of the applicant be the sole standard for choice as an apprentice.

The National Association for the Advancement of Colored People, on behalf of Negro contractors, journeymen, and prospective apprentices, on August 4 persuaded the 1,400-member local of the Plumbers and Pipefitters Union in Cleveland to permit the hiring of two Negro journeymen for work in the construction of the Cleveland municipal auditorium and to sign contracts with Negro plumbing contractors. Employees of these contractors will become members of the Plumbers Union if they pass the journeyman examination. The applicant may appeal to a review committee if he feels the test was unfairly administered or graded and in the interim will continue to work. The apprenticeship program will be open to Negro applicants on the same basis as to other applicants. Reportedly, there are 39 Negro plumbing contractors with 150 employees in the Cleveland area.

Earlier, civil rights groups had threatened to picket the site of the auditorium unless Negro workers were hired. When two Negro plumbers were hired in late July, white workmen walked out, but returned to work upon the urging of international union officials and Cleveland Mayor Ralph Locher. Renewed picketing threats after the two Negroes were discharged by the contractor and mediation of Under Secretary of Labor John F. Henning brought about the August 4 agreement.

A meeting called by Mayor Theodore A. McKeldin August 23 resulted in promises to eliminate racial discrimination in union apprenticeship programs in the Baltimore area. The meeting was attended by representatives of the Baltimore AFL–CIO, the Baltimore Building Trades Council, and representatives of the building trade locals and the Interdenominational Ministers' Alliance, which represented 200 Negro ministers in the Baltimore area. Lists of Negroes qualified for selection for apprenticeship training were to be provided the unions.

The National Urban League announced August 1 the receipt of a $100,000 grant from the Rockefeller Brothers Fund to help finance the organization of a "Negro skills bank." The League planned to recruit skilled applicants in the 65 cities in which it has offices; in New York City, it expected to have a list of 2,500 Negroes with business or engineering training.

Other Developments

Local 515 of the Transport Workers Union in Boston protested in early August to the White House, the Congress, and the Civil Aeronautics Board over the decision of the CAB to take away the New York City-Miami route of Northeastern Airlines, which is headquartered in Boston. The decision reportedly would force Northeastern, in financial difficulties, to lay off or downgrade as many as 2,000 of its 3,000 employees. The Transport Workers represent the ground service personnel. Later, AFL–CIO President Meany, in a letter to CAB Chairman Allan S. Boyd, urged reconsideration of the ruling, partly on the ground that it would have a depressing effect on the New England economy.

On August 9, a New York City jury returned the first Federal court conviction under the 1962 amendments to the Welfare and Pension Plans Disclosure Act,[20] which made embezzlement of welfare funds a criminal offense. Max Davis of Brooklyn, an officer and trustee of Local 10 of the International Brotherhood of Production, Maintenance and Operating Employees (Ind.), was indicted first for obstructing justice after absconding with records subpenaed by a Federal grand jury and then, after investigation, for a shortage of $16,500. Mr. Davis was sentenced, on September 12, to 5 years in prison and fined $25,000.

[20] For text of the amendments, see *Monthly Labor Review*, March 1962, p. 536.

Book Reviews and Notes

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

Special Reviews

The Economics of Labor. By E. H. Phelps Brown. New Haven, Conn., Yale University Press, 1962. 278 pp., bibliography. (Studies in Comparative Economics, 1.) $6, cloth; $1.45, paper.

This is the first study issued under the auspices of the Inter-University Committee on Comparative Economics. [For a review of the second study, *Foreign Trade and the National Economy* by Charles P. Kindleberger, see *Monthly Labor Review*, July 1963, pp. 834–844.] The general aim of the Committee is to encourage exploration of the relevance of modern economics, a product largely of the West, to an understanding of economic activity in countries with different institutional arrangements or at different stages of industrial development. The Committee has no preconceived notions for the achievement of this objective. Each author has been given freedom to determine his own approach and method of treatment.

Professor Phelps Brown of the London School of Economics, who has made many distinguished contributions to knowledge of the economics of labor, has produced an original and highly useful essay. His approach is to employ the conventional tools of the economist's trade to fashion a framework within which to consider basic aspects of labor as a productive factor. His illustrative material ranges widely in time, from the ancient world to the present, and, for the contemporary period, over a broad spectrum of economies in terms of institutions and stages of growth. He is more concerned with analysis than with description; the analysis, however, is interlaced with and supported by much detail on the conditions under which men now work or have worked. In an introductory chapter, he observes that "the economist who has set out simply to study labor as a factor of production, and pay as a price, will find his attention drawn inescapably to matters commonly pertaining to psychology and sociology."

The substance of the book is organized into six chapters. The first deals historically with the rise of contractual employment, including an interesting analysis of the connections between occupation and social status. The second is concerned with questions of the quality of the labor force, with attention to the problems of work discipline, education, and training in emerging industrial societies, and to problems arising out of the dispersion of human capacities. The third considers the distribution of the labor force among broad regions, industries, and occupations, and the functioning of labor markets. An analysis of the use of compulsion as against individual choice in the allocation of labor suggests "why the planned economies of the Russian sphere have now tacitly abandoned most forms of the direction of labor and rely mainly on the same incentives and deterrents as guide the deployment of labor in the market economies."

The final three chapters of the book are devoted to wages, which constitute the heart of the labor bargain. Professor Phelps Brown analyzes conventional (opinions of equity) and market forces in pay determination and concludes, generally, that market factors are the more powerful. He devotes considerable attention to collective bargaining, noting the many influences that unions exert on the pay structure. But he concludes that the record gives no clear answer to the key question of whether unions have the power generally to raise the wages of their members above the level that would otherwise have been attained. Finally, he deals with the problem of the general level of pay, including the relation between population and other resources and the question of labor's share in national income.

This perceptive book deserves wide reading, perhaps particularly among those concerned with economic development. It should serve admirably as supplementary reading in college courses in labor economics; and it should appeal to the intelligent layman who wants a broad and largely nontechnical introduction to the subject.

—H. M. DOUTY
Associate Commissioner for Program Planning and Publications, Bureau of Labor Statistics

Collective Bargaining in Sweden: A Study of the Labor Market and its Institutions. By T. L. Johnston. Cambridge, Mass., Harvard University Press, 1962. 358 pp. $7.50.

Mr. Johnston has given us a detailed and thoroughly documented description of the collective bargaining process in Sweden. The serious student of the Swedish labor market will find it extremely useful, especially if he reads Swedish and wants to follow up on the many references to original documents. The writing and the organization of the material are such that the less serious student can feel equally rewarded.

A lecturer in political economy at the University of Edinburgh, Mr. Johnston devoted several years to his study of the Swedish labor market and came away with more than mere facts. He shows an appreciation of the less tangible elements involved and is careful to point out—as are the Swedes themselves—that he is not advocating the wholesale adoption of Swedish methods and programs by others. He is equally careful in his attempt, as an outsider, to assess for the Swedes the value of their collective bargaining system, finding himself confronted with a "dilemma of choice between a general eulogy—such as the ILO provided for the Swedish system at its 1961 conference—and a diffuse barrage of praise and condemnation, all selected according to one's particular national or academic perspective. There are no absolute standards in assessing the competence or maturity of a collective bargaining system."

In his eclectic approach to the problem, he gives good marks for "a nexus of extremely powerful organizations, with clearly formulated rules," for "well regulated grievance handling," and for "the habit of positive discussion" fostered by the various Basic Agreements arrived at by management and labor, beginning in 1938. He ventures the opinion that the social conscience of these powerful labor market organizations is not as spontaneous as it may appear, that formal agreements for the protection of third parties and the public combine with the ever-present threat of legislation to maintain a just peace.

Mr. Johnston shares with many others an appreciation of the part played by the original 1938 Basic Agreement but he adds a note of warning against "the excessive enthusiasm of some foreign commentators." He points out that the agreement was "the culmination of many years of experience, sometimes good but frequently bad." The product may not be for export but the methods involved in its production are worth serious study.

—Oliver A. Peterson
School of International Service
American University

Organized Labor in Japan: Part I, Postwar Developments in Organized Labor, 1945–1952; Part II, Organized Labor in Present-Day Japan, 1953–1961. By Iwao Ayusawa. Tokyo, Foreign Affairs Association of Japan, 1962. 108 and 232 pp. $7.50.

In the first part of his discussion, the author describes the postwar developments in organized labor up to the time the Japanese nation regained the status of independence in 1951. He tells of the tremendous change in the status of labor that occurred in postwar Japan under the directives of the U.S. occupation forces and calls this change the "MacArthur Revolution." He describes the content of the basic laws, in particular, the Trade Union Law, the Labor Relations Adjustment Law, and the Labor Standards Law. Chapters of Part I deal also with the structure and strength of the trade unions and their characteristics.

In the second part, a historical review is given of the emergence of a strong labor movement in the light of the boom generated by the Korean conflict from 1950 to 1953 and the nationwide prosperity which started in 1955. Mr. Ayusawa leads the reader through the opposition of labor to the San Francisco Peace Treaty, the birth of the Zenro federation, and through what he calls the "Energy Revolution." He presents the platforms of three major trade union federations—Sohyo, Zenro, and Shin Sanbetsu—and explains the structure of Japanese industry with special emphasis on the effect of the great number of smaller enterprises on both the economy and trade union activities. He emphasizes the "tremendous" growth of the national product in the last few years. He relates the continuing boom to the rise in general wage levels, the diminution of wage differentials in enterprises of varying scales, the improvement in the labor market, and the rise in the level of consumption. In concluding the second part, the author emphasizes

that his treatment of organized labor in present-day Japan is in the nature of an introductory rather than an analytical or critical study. He felt the need for such a study but believed that it should be left for a later and separate publication.

A number of valuable appendixes are enclosed including a list of major trade union organizations as of January 1, 1961, a chronology of major events affecting labor from 1945 to 1961, the Constitution of Japan, the Potsdam Declaration, and the text of the principal labor laws.

The two parts presented by Mr. Ayusawa have valuable descriptive material, but, as the author himself points out, there is a lack of analysis which, to a certain extent, weakens the value of the interesting material presented to the reader who may want to study the pragmatic basis for the political and economic objectives and alinements of the trade union movement in the postwar period.

—Arnold L. Steinbach
Special Assistant to the Administrator
Bureau of International Labor Affairs

Automation and Industrial Relations. By Edward B. Shils. New York, Holt, Rinehart and Winston, Inc., 1963. 360 pp. $4.75.

Automation, as the term is used in this text, describes all the so-called "new technology" rather than particular limited types and methods of production. In either sense, automation has created a new dimension to problems of displacement and dislocation for labor and management alike. Although threats to job security are not completely novel in industrial relations, certainly the rapid acceleration of the "new technology" is having a revolutionary influence on business organizations, plant management, and labor relations.

For some time to come, Professor Shils' new volume will provide a basic source book of recent developments in technology and their implication for the student and practitioner in the industrial relations field. One limiting factor is, however, the rapid pace of developments in this field. While Professor Shils' book covers an unusually broad range of recent developments, the reader soon becomes aware that some very significant changes have taken place since the volume's publication, e.g., the New York newspaper strike, last year's longshore strike, and the current controversy in the railroad industry. All these reflect the rapid change of relationships in this area.

The volume covers a broad range of problems related to automation, briefly touching on such factors as job evaluation, wage administration, restrictive work practices, education, training and retraining programs, management prerogatives, implication of occupational shifts and health and safety—to note a few. The result is that the advanced student and practitioner in a limited area will possibly find the coverage lacking in depth. Nevertheless, Professor Shils accomplishes his purpose admirably by providing a broad survey of the impact of the "new technology" and giving considerably more detail and historical perspective than might be expected in an overview volume of this type. The excellent bibliographical references provided at the end of each chapter are of particular value. The sources are carefully documented and in themselves provide an excellent guide to the available literature in this field. This book should be very valuable to students at the graduate level, as well as to labor leaders and the administrators in personnel and industrial relations.

—Herbert Bienstock
Director, Middle Atlantic Region
Bureau of Labor Statistics

Traditional Cultures: And the Impact of Technological Change. By George M. Foster. New York, Harper & Row, Publishers, 1962. 292 pp., bibliography. $6.50.

Dealing primarily with the problems of cultural change in the developing areas of the world, this book has already been used to orient government personnel and others preparing for work in programs of technical assistance. The author draws upon his own extensive experience and that of other anthropologists to illustrate the problems likely to be encountered in modernizing the less advanced areas of the world. He points out that the nature and structure of a society may prevent the achievement of the goals sought and that the urge for development and willingness to change are not equally present in all peoples. In formulating programs of economic development, too often we fail to recognize that factors generally classified as noneconomic frequently determine whether the cumulative processses of economic

change can be effective. Any economic innovation will have far-reaching repercussions on the whole social system. Similarly, the social system will determine whether economic changes will be accepted and what forms they will take. New production techniques may be rejected because of the fear that they will interfere with traditional family, kinship, or community relations. Unfortunately for social change, many of the peoples in the less developed areas of the world desire the material advantages of industrialization but reject the attitudes and values associated with it. Burma is a case in point.

Industrialization and changes in methods of agriculture usually require alterations in other aspects of the social structure. In most developing countries, there are more workers than jobs but they do not possess needed skills and work habits nor do they share the Western attitude toward work. Modernization programs require literate workers, yet, as Foster points out, many rural people have little or no interest in learning to read or write because they cannot see any tangible benefits to be derived from education. Since one of the basic considerations is the motivation of workers, the training of technical experts, he says, should be in terms of problems rather than programs. To this end, the social scientist can be invaluable in gathering and utilizing specific information about cultures, in making comparative cross-cultural analytical studies and in securing basic knowledge concerning social processes. He can also provide a point of view and research techniques appropriate to the task, and he should work cooperatively with the technical experts in facilitating the progress of the action program. Unfortunately, most programs are designed for action only and the necessity of encouraging and supporting research studies is not always fully appreciated by government officials and others. The social scientist has an obligation, Foster says, not only to determine how social change can be facilitated, but also to point out to the peoples concerned all of the consequences of their choices. Industrialization leads to new societal patterns that cannot be rejected, and in accepting the one, the developing nations must be ready to accept the others.

—Harold L. Geisert
Department of Sociology and Anthropology
George Washington University

What Keynes Means: A Critical Clarification of the Economic Theories of John Maynard Keynes. By Anatol Murad. New York, Bookman Associates, 1962. 223 pp. $4.50.

Professor Murad's purpose in this book, which grew from 10 university lectures he delivered in Germany in 1958, is to clarify Keynes' principal ideas and theories. As a reasonably sophisticated review of Keynes' work, he believes, it will be of value to teachers and students who need "more substantial fare than is dished out by 'popular' presentations of this subject."

The materials are organized conventionally. Broad features of the *General Theory* are summarized first; detailed explanations and restatements of key concepts such as saving are then presented; these are followed by a review of economic policies associated with Keynes.

In general, Murad's approach to Keynesianism is more sympathetic than critical. Nowhere does he challenge the basic framework of Keynes' theories, and his solutions to the "ambiguities" and "contradictions" in Keynes' own writing are relatively innocuous and likely to command assent. For example, he observes that Keynes defined demand in terms of expected expenditures but usually discussed it in terms of actual expenditures despite noting that the two may diverge. Murad proposes that the concept be restricted to actual proceeds and that entrepreneurial expectations be regarded as mere estimates of demand, which may prove incorrect and thus provide an additional cause for fluctuations in employment and income.

Similarly, Murad would short circuit many of the problems in Keynes' interest theory by substituting a more direct analysis of the demand for and supply of media of payment, interest being a payment for creating liquidity (a service income) rather than a "reward" for parting with liquidity.

The appearance of a book of this type—nearly 30 years after the publication of Keynes' major work—is a tribute not only to Keynes' eminence as an economist, but also to the controversial character of his teachings. Undoubtedly, much of the controversy which has continued to surround Keynesianism originated in Keynes' poor writing and unsystematic thought, as even his admirers willingly acknowledge. Murad's efforts may contribute something to reducing this form of controversy, although its extent has already been

substantially reduced by other appreciative and well-written amplifications and clarifications dedicated to Keynes. Moreover, his book—good as it is—does not adequately replace the more outstanding of these publications: Seymour Harris' biography is still needed by those particularly interested in a thorough but nontechnical review of the evolution of Keynes' thought. Dillard's handbook is indispensable because it is more impersonal and thus closer to the *General Theory*, and also because it contains a complete bibliography of Keynes' publications. Finally, no student of Keynes can afford to overlook Schumpeter's provocative biographical sketch of Keynes.

Indeed, the basic fault in the book is that it is directed almost exclusively toward communicating Keynes' ideas clearly and objectively—a job which has already been well done—and almost wholly neglects the differences in ideology which account for most of the remaining public and professional misunderstanding of Keynes. To communicate the meaning of Keynes today requires more than relatively sterile debates involving definitions and the like. More to the point would be removing some of the ideological and practical roadblocks to applying the theory because its ultimate meaning and verification must lie in demonstrations of its consequences in practice.

—Joseph A. Brackett
Office of the Economic Consultant
Bureau of Labor Statistics

The Progress of Economics: A History of Economic Thought. By Warren B. Catlin. New York, Bookman Associates, 1962. 788 pp. $8.50.

This volume is a history of the evolution of economic theory differing from most standard texts in that the author, who treats his subject topically, injects his own opinions and contributions into the discussion.

Points of interest lie, not in such traditional subjects as value, rent, interest, and wages or in the long discourse on money and business cycles, but in those chapters incidental to economics, relating to writing style, biographical influences, religion, economic history, and the role of government in economic life.

Professor Catlin's section on "Money, Credit, and Business Cycles" is among the most important as well as the most controversial. The reader is provided with a historical background on the subject of money, together with a detailed account of the various business cycle theories.

Although several parts of the book are difficult to follow, those interested in economic theory will find that the volume provides a perspective on many economic questions. Nevertheless, perhaps what the author fails to say is of greater importance than what he does say. Although Professor Catlin asserts that the welfare of the consumer is the first concern of the economist, the extent of poverty in America depicted by such observers as Michael Harrington in *The Other America* is not even mentioned in this book.

In addition, few will quarrel with the author's desire for stable prices and wages. But perhaps stability alone is not enough. Prices and wages were statistically stable for more than 6 years prior to the 1929 crash. Surprisingly, one might study the long discourse on the history of prices and yet be unaware of this fact.

Finally, perhaps many are guilty of advocating "half-baked proposals" for the control of the business cycle. But is it better to wait 10 years following a collapse, as Professor Catlin suggests, for a new generation of entrepreneurs and risk-takers, not traumatized by the event, to lead us to recovery?

—David Hirschberg
Division of Industry Employment Statistics
Bureau of Labor Statistics

A Standard List of Subject Headings in Industrial Relations. Prepared by the Subcommittee on Subject Headings, Committee of University Industrial Relations Librarians. Princeton, N.J., Princeton University, Industrial Relations Section, 1963. 136 pp. 2d ed. $4.25.

Although designed for the use of librarians, this subject heading list may be of value to many others. It is a listing of the different subjects under which one would have to file material in order to have a complete file on industrial relations.

Each main subject heading has a note of explanation and these are specific and clearly worded. For example, "Immigration: Use for materials on the voluntary movement of people into a country as permanent settlers and its effect

on the labor supply. See also: Foreign Born Employees; Labor Force."

Beside the main headings are "see" references. These references are usually from a general subject to a more particular one. The user can employ the main heading or the "see" reference as the main subject heading.

Where the subject area is detailed, the editors have done an excellent job of developing subject headings in adequate number, carefully defined and distinguished. "Wages," for example, has 28 subject headings and each heading has one or more cross references.

Names of industries and occupations are listed alphabetically with the other subjects while at the back of the list is a separate listing of the major Federal labor laws. It is in looseleaf format and will be kept up to date with new pages.

The list can be of value to anyone organizing material in the field of industrial relations; it is a must for librarians, and may be of use as well to students and others as a framework in organizing ideas.

—Edwin H. Kaye
Librarian, Institute of Industrial Relations
University of California, Los Angeles

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	Report No.	Pages
Small Cities in the Western Region, 1960 (Gallup, N. Mex., Klamath Falls, Oreg.)	237–26	7
Small Cities in the North Central Region, 1960 (Devils Lake, N. Dak., Findlay, Ohio, LaSalle, Ill., Niles, Mich., and Owatonna, Minn.)	237–27	10

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Occupational Wage Survey: Spokane, Wash., May 1963. Washington, U.S. Department of Labor, Bureau of Labor Statistics, 1963. 26 pp. (Bulletin 1345–66.) 25 cents, Superintendent of Documents, Washington. Other bulletins in this series include:

	Bulletin No.	Pages	Price (cents)
Lubbock, Tex., June 1963	1345–72	16	20
Portland, Oreg.–Wash., May 1963	1345–73	22	25
Boise, Idaho, May 1963	1345–74	18	20
Norfolk–Portsmouth and Newport News–Hampton, Va., June 1963	1345–75	26	25
Paterson–Clifton–Passaic, N.J., May 1963	1345–76	20	20
Lawrence–Haverhill, Mass.–N.H., June 1963	1345–77	18	20
San Antonio, Tex., June 1963	1345–78	28	25

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Current Labor Statistics

TABLES

A.—Employment

B.—Labor Turnover

C.—Earnings and Hours

D.—Consumer and Wholesale Prices

E.—Work Stoppages

F.—Work Injuries

[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]														
	1963								1962					Annual average	
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1961	1960
Total, both sexes															
Total labor force	77,167	77,917	77,901.	75,864	74,897	74,382	73,999	73,323	74,142	74,532	74,923	74,914	76,554	74,175	73,126
Civilian labor force	74,418	75,173	75,165	73,127	72,161	71,650	71,275	70,607	71,378	71,782	72,187	72.179	73,695	71,603	70,612
Unemployment	3,857	4,322	4,846	4,066	4,063	4,501	4,918	4,672	3,817	3,801	3,294	3,512	3,932	4,806	3,931
Unemployment rate seasonally adjusted [2]	5.5	5.6	5.7	5.9	5.7	5.6	6.1	5.8	5.6	5.8	5.5	5.8	5.8	6.7	5.6
Unemployed 4 weeks or less	1,670	1,907	2,802	1,833	1,597	1,553	1,814	1,996	1,697	1,960	1,546	1,681	1,702	1,897	1,799
Unemployed 5–10 weeks	806	1,221	806	679	672	963	1,315	1,162	840	684	654	630	940	964	823
Unemployed 11–14 weeks	430	260	222	262	371	598	485	361	300	292	229	295	358	411	353
Unemployed 15–26 weeks	439	376	502	649	743	696	684	612	525	469	418	428	341	728	502
Unemployed over 26 weeks	510	557	514	643	681	691	619	541	453	397	447	477	593	804	454
Employment	70,561	70,851	70,319	69,061	68,097	67,148	66,358	65,935	67,561	67,981	68,893	68,668	69,762	66,796	66,681
Nonagricultural	65,065	64,882	64,365	63,883	63,424	62,812	62,309	61,730	63,495	63,098	63,418	63,103	63,993	61,333	60,958
Worked 35 hours or more	47,678	47,214	49,804	50,383	46,505	48,669	47,063	48,480	49,175	45,107	48,047	49,684	47,264	47,257	46,388
Worked 15–34 hours	6,985	6,556	7,015	7,261	10,455	7,588	8,573	7,235	7,932	11,894	9,426	7,265	6,849	7,522	8,249
Worked 1–14 hours	3,261	3,332	3,580	4,144	3,856	4,119	4,238	3,845	4,143	4,074	3,811	3,475	3,222	3,610	3,279
With a job but not at work [3]	7,142	7,780	3,966	2,093	2,608	2,436	2,432	2,172	2,243	2,021	2,133	2,680	6,657	2,946	3,042
Agricultural	5,496	5,969	5,954	5,178	4,673	4,337	4,049	4,206	4,066	4,883	5,475	5,564	5,770	5,463	5,723
Worked 35 hours or more	3,702	4,130	4,199	3,489	3,198	2,587	2,261	2,522	2,352	3,262	3,688	3,693	3,900	3,540	3,811
Worked 15–34 hours	1,155	1,237	1,226	1,196	1,041	1,042	1,040	987	907	1,069	1,232	1,310	1,285	1,245	1,279
Worked 1–14 hours	444	466	413	415	305	467	483	444	490	398	426	462	404	477	444
With a job but not at work [3]	196	137	119	80	129	241	267	249	316	153	129	101	182	200	190
Males															
Total labor force	52,060	52,477	52,204	50,483	50,010	49,675	49,503	49,269	49,574	49,719	49,974	50,110	51,657	49,918	49,507
Civilian labor force	49,342	49,765	49,500	47,778	47,306	46,975	46,816	46,585	46,841	47,001	47,269	47,406	48,830	47,378	47,025
Unemployment	2,224	2,516	2,779	2,434	2,600	3,013	3,293	3,080	2,522	2,259	1,881	1,991	2,327	3,060	2,541
Employment	47,118	47,249	46,722	45,345	44,706	43,962	43,523	43,505	44,319	44,743	45,387	45,415	46,503	44,318	44,485
Nonagricultural	42,733	42,538	42,078	41,205	40,762	40,251	39,994	39,839	40,782	40,703	41,131	41,052	41,899	39,811	39,807
Worked 35 hours or more	34,007	33,791	35,283	35,055	32,806	33,648	32,710	33,648	33,946	31,704	33,774	34,769	33,483	32,984	32,511
Worked 15–34 hours	3,345	3,060	3,256	3,161	4,941	3,439	4,026	3,251	3,612	6,130	4,428	3,261	3,316	3,587	4,100
Worked 1–14 hours	1,441	1,437	1,551	1,795	1,658	1,688	1,779	1,593	1,760	1,618	1,628	1,433	1,449	1,511	1,360
With a job but not at work [3]	3,941	4,250	1,988	1,193	1,357	1,476	1,481	1,351	1,461	1,250	1,302	1,588	3,652	1,729	1,836
Agricultural	4,385	4,711	4,644	4,140	3,945	3,711	3,529	3,666	3,537	4,040	4,256	4,363	4,604	4,508	4,678
Worked 35 hours or more	3,232	3,591	3,634	3,071	2,888	2,383	2,074	2,281	2,181	2,908	3,168	3,180	3,327	3,132	3,365
Worked 15–34 hours	669	681	637	702	700	730	786	751	656	692	694	780	819	827	792
Worked 1–14 hours	315	329	276	296	247	384	423	400	424	307	281	309	293	370	348
With a job but not at work [3]	168	111	96	68	112	216	246	232	276	133	114	92	165	179	172
Females															
Total labor force	25,108	25,440	25,697	25,381	24,886	24,707	24,492	24,054	24,568	24,812	24,949	24,804	24,897	24,257	23,619
Civilian labor force	25,076	25,408	25,665	25,349	24,854	24,675	24,460	24,022	24,537	24,781	24,918	24,773	24,865	24,225	23,587
Unemployment	1,633	1,806	2,067	1,632	1,463	1,489	1,625	1,592	1,295	1,543	1,413	1,520	1,605	1,747	1,390
Employment	23,443	23,602	23,598	23,717	23,391	23,186	22,835	22,430	23,242	23,238	23,505	23,253	23,260	22,478	22,196
Nonagricultural	22,332	22,344	22,287	22,679	22,663	22,560	22,315	21,890	22,714	22,395	22,287	22,051	22,094	21,523	21,151
Worked 35 hours or more	13,672	13,424	14,522	15,327	13,699	15,022	14,356	14,835	15,228	13,404	14,273	14,914	13,782	14,273	13,877
Worked 15–34 hours	3,640	3,496	3,760	4,099	5,515	4,149	4,547	3,983	4,319	5,763	4,998	4,004	3,533	3,934	4,149
Worked 1–14 hours	1,819	1,895	2,029	2,352	2,198	2,430	2,459	2,252	2,383	2,457	2,184	2,042	1,773	2,098	1,919
With a job but not at work [3]	3,202	3,529	1,978	900	1,251	960	950	820	782	771	832	1,092	3,005	1,217	1,206
Agricultural	1,111	1,258	1,310	1,038	728	625	520	540	528	843	1,219	1,201	1,166	955	1,045
Worked 35 hours or more	467	539	564	418	311	204	187	243	172	355	520	512	573	408	445
Worked 15–34 hours	485	556	590	493	341	312	255	236	252	377	538	529	466	419	486
Worked 1–14 hours	129	137	135	117	59	83	57	44	66	91	145	152	110	107	96
With a job but not at work [3]	28	26	23	12	17	26	20	17	40	27	15	9	17	22	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. 1228.**

Industry	1963								1962					Annual average	
	Aug.[2]	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962	1961
Total employees	57,603	57,437	57,609	56,967	56,505	55,714	55,374	55,409	57,044	56,828	56,953	56,872	56,329	55,841	54,224
Mining	648	642	650	643	632	616	618	622	634	644	652	657	663	652	672
Metal mining	-------	84.6	84.0	83.0	81.5	78.7	79.5	77.9	76.8	77.5	78.0	78.8	82.1	82.8	87.4
Iron ores	-------	27.7	26.9	26.5	24.4	23.1	22.9	21.5	22.4	23.1	23.9	24.4	26.1	25.5	26.9
Copper ores	-------	27.5	27.9	27.9	28.5	28.0	28.0	28.0	28.0	27.8	27.7	27.9	28.8	28.5	29.0
Coal mining	-------	126.0	138.8	141.5	142.8	141.7	147.3	148.1	147.9	150.0	151.5	150.1	149.1	151.7	161.3
Bituminous	-------	114.5	128.0	130.5	131.9	130.5	135.8	136.6	136.2	138.1	139.8	138.8	137.7	139.8	147.1
Crude petroleum and natural gas	-------	302.6	300.3	295.0	289.7	288.1	287.8	289.1	295.6	294.5	297.4	301.6	303.5	299.2	303.1
Crude petroleum and natural gas fields	-------	167.6	166.3	163.0	162.9	162.3	163.1	163.4	163.7	164.3	165.0	167.8	170.4	167.4	171.3
Oil and gas field services	-------	135.0	134.0	132.0	126.8	125.8	124.7	125.7	131.9	130.2	132.4	133.8	133.1	131.8	131.8
Quarrying and nonmetallic mining	-------	128.6	127.0	123.3	118.1	107.7	103.8	106.8	113.2	121.9	124.9	126.5	128.5	118.7	119.8
Contract construction	3,411	3,361	3,232	3,049	2,846	2,556	2,470	2,584	2,776	3,057	3,195	3,235	3,288	2,909	2,816
General building contractors	-------	1,027.2	984.6	916.0	864.0	768.6	741.7	781.2	837.8	916.7	944.9	959.0	985.7	881.1	874.9
Heavy construction	-------	721.1	691.0	635.7	551.0	451.0	420.7	448.4	511.4	620.3	690.0	709.1	727.1	593.8	583.3
Highway and street construction	-------	393.0	377.6	341.5	274.9	203.8	181.9	197.7	239.2	317.3	367.1	381.7	392.1	298.1	291.5
Other heavy construction	-------	328.1	313.4	294.2	276.1	247.2	238.8	250.7	272.2	303.0	322.9	327.4	335.0	295.7	291.8
Special trade contractors	-------	1,612.3	1,556.1	1,497.2	1,430.9	1,336.5	1,308.0	1,354.2	1,427.0	1,520.2	1,559.6	1,567.2	1,575.6	1,434.5	1,357.9
Manufacturing	17,160	17,057	17,111	16,960	16,845	16,756	16,683	16,687	16,862	17,023	17,157	17,249	17,040	16,859	16,327
Durable goods	9,583	9,670	9,738	9,673	9,593	9,508	9,474	9,481	9,546	9,606	9,633	9,638	9,455	9,493	9,072
Nondurable goods	7,577	7,387	7,373	7,287	7,252	7,248	7,209	7,206	7,316	7,417	7,524	7,611	7,585	7,367	7,255
Durable goods															
Ordnance and accessories	279.2	276.9	275.5	274.5	273.9	277.9	279.2	279.8	280.7	281.0	279.4	279.2	280.3	270.7	234.7
Ammunition, except for small arms	193.7	191.8	189.3	187.7	186.9	189.8	190.6	190.2	191.0	190.8	189.8	189.3	190.7	183.4	153.3
Sighting and fire control equipment	-------	26.6	27.7	28.6	29.4	30.1	30.9	31.5	31.5	31.9	31.9	32.2	32.5	32.1	33.6
Other ordnance and accessories	58.5	58.5	58.5	58.2	57.6	58.0	57.7	58.1	58.2	58.3	57.7	57.7	57.1	55.1	47.8
Lumber and wood products, except furniture	611.2	587.8	584.9	594.6	571.9	560.9	556.1	561.2	572.5	589.8	601.5	610.5	620.5	588.7	582.9
Logging camps and logging contractors	89.9	82.1	78.5	82.4	74.1	71.1	72.6	74.7	78.5	84.3	87.3	90.8	94.4	83.0	84.6
Sawmills and planing mills	263.8	256.9	255.4	257.1	248.3	244.9	241.8	244.0	246.4	253.9	258.7	262.1	265.0	255.7	257.9
Millwork, plywood, and related products	156.1	148.8	149.9	155.1	151.7	148.0	146.4	147.3	150.8	154.1	156.6	158.3	160.6	151.9	143.2
Wooden containers	35.9	36.5	36.6	36.0	35.0	34.3	34.0	34.2	35.2	35.6	36.4	36.2	37.1	36.4	38.4
Miscellaneous wood products	65.5	63.5	64.5	64.0	62.8	62.6	61.3	61.0	61.6	61.9	62.5	63.1	63.4	61.8	59.0
Furniture and fixtures	393.6	385.5	387.7	382.8	382.6	383.0	382.3	384.2	387.8	391.8	393.1	392.6	391.6	385.1	367.5
Household furniture	284.8	278.5	280.7	278.0	278.9	278.6	277.3	276.7	279.8	282.1	283.1	281.7	278.8	276.0	262.0
Office furniture	-------	25.6	26.9	26.6	26.8	27.0	27.2	28.3	28.9	29.0	27.0	26.8	28.7	27.8	26.6
Partitions; office and store fixtures	-------	40.4	39.0	38.2	37.8	38.7	38.9	39.6	39.0	39.9	42.1	42.4	42.0	40.6	38.2
Other furniture and fixtures	41.5	41.0	41.1	40.0	39.1	38.7	38.9	39.6	40.1	40.8	40.9	41.7	42.1	40.7	40.7
Stone, clay, and glass products	634.3	630.2	626.8	615.3	599.6	574.1	563.2	567.7	583.1	601.9	612.0	616.4	618.8	594.0	582.0
Flat glass	-------	30.3	30.2	30.1	29.9	29.3	29.5	29.7	30.7	31.5	31.0	30.8	30.5	30.4	29.9
Glass and glassware, pressed or blown	116.0	116.0	115.6	113.6	112.6	110.9	109.5	107.6	108.7	109.4	110.9	111.7	112.1	109.6	106.6
Cement, hydraulic	42.7	42.6	42.3	41.0	40.0	36.3	35.4	37.0	38.7	41.1	41.6	42.2	42.4	40.1	40.2
Structural clay products	71.5	71.3	71.1	69.8	67.7	63.9	62.9	64.2	66.8	68.8	69.6	70.8	71.4	68.3	70.4
Pottery and related products	-------	43.5	43.5	43.7	43.6	43.0	42.7	42.8	43.2	44.2	45.0	44.4	43.8	43.8	42.9
Concrete, gypsum, and plaster products	186.7	185.3	183.3	177.3	168.0	154.8	148.6	150.8	157.9	168.2	174.4	177.0	178.9	164.4	158.5
Other stone and mineral products	122.7	121.7	121.3	120.3	118.5	116.5	115.5	116.2	117.7	119.0	119.8	120.3	120.8	118.9	116.4
Primary metal industries	1,176.2	1,197.9	1,209.1	1,191.6	1,174.8	1,151.9	1,136.4	1,123.0	1,123.2	1,117.4	1,122.3	1,135.0	1,133.0	1,163.8	1,142.7
Blast furnace and basic steel products	595.0	618.1	623.9	612.2	597.9	578.5	564.3	550.6	550.3	545.8	550.1	561.1	562.2	591.9	595.5
Iron and steel foundries	198.0	198.8	200.5	198.4	197.2	195.1	194.4	193.4	193.5	193.0	193.8	194.7	191.9	193.6	186.7
Nonferrous smelting and refining	71.0	70.3	69.6	68.4	67.6	66.7	66.5	67.0	67.8	68.3	68.8	68.7	68.4	68.1	66.6
Nonferrous rolling, drawing, and extruding	183.9	182.6	185.4	183.1	182.0	181.4	181.0	180.9	180.9	180.9	181.6	181.8	180.9	181.3	174.4
Nonferrous foundries	70.8	70.7	71.4	71.3	71.5	71.5	71.5	71.9	71.9	70.8	70.6	70.6	70.6	70.0	63.7
Miscellaneous primary metal industries	57.5	57.4	58.3	58.2	58.6	58.7	58.7	59.2	58.8	58.6	57.4	58.1	59.0	58.9	55.7
Fabricated metal products	1,158.4	1,148.9	1,163.0	1,147.6	1,133.7	1,121.5	1,119.7	1,123.0	1,133.8	1,140.5	1,145.0	1,146.7	1,126.8	1,127.5	1,084.5
Metal cans	67.1	65.0	64.6	63.0	62.0	60.2	58.8	58.1	57.4	57.7	60.7	65.0	65.1	61.3	59.9
Cutlery, handtools, and general hardware	129.6	130.1	135.5	134.6	134.8	134.8	135.7	136.2	137.0	137.3	136.1	134.8	131.4	134.8	127.7
Heating equipment and plumbing fixtures	79.4	77.6	77.0	75.9	74.8	74.3	74.5	73.4	74.4	75.3	76.4	76.1	76.4	74.9	73.2
Fabricated structural metal products	349.8	346.4	344.3	335.9	327.5	320.8	319.7	322.6	328.0	332.0	336.6	340.7	339.6	331.5	332.7
Screw machine products, bolts, etc	89.3	87.7	89.1	88.5	88.3	88.9	88.8	88.4	88.5	88.4	88.2	87.7	87.6	87.9	82.1
Metal stampings	187.5	188.6	196.8	196.1	194.4	192.7	193.1	196.1	197.9	197.1	197.1	193.8	180.6	190.4	177.2
Coating, engraving, and allied services	70.5	69.3	70.2	69.7	68.7	66.9	67.1	66.8	67.9	70.4	69.8	69.1	67.6	67.2	62.5
Miscellaneous fabricated wire products	57.5	56.9	57.9	57.7	57.3	57.3	56.8	57.0	57.7	58.0	58.2	57.2	56.1	56.7	53.3
Miscellaneous fabricated metal products	127.7	127.3	127.6	126.2	125.9	125.6	125.2	124.4	125.0	124.3	121.9	122.3	122.4	122.9	115.8

See footnotes at end of table.

TABLE A–2. Employees in nonagricultural establishments, by industry [1]—Continued

[In thousands]

Revised series; see box, p.1228.

Industry	1963								1962					Annual average	
	Aug.[2]	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962	1961
Manufacturing—Continued															
Durable goods—Continued															
Machinery	1,509.2	1,513.3	1,523.1	1,516.4	1,518.8	1,514.4	1,506.4	1,501.8	1,496.8	1,495.9	1,495.1	1,498.4	1,494.4	1,489.8	1,419.0
Engines and turbines	85.3	84.6	84.5	84.4	85.7	85.7	85.9	86.2	84.9	84.3	84.6	84.8	84.9	84.0	79.3
Farm machinery and equipment	-------	117.8	120.0	122.6	125.0	125.1	123.4	118.5	114.5	111.4	112.0	112.9	111.8	112.4	108.8
Construction and related machinery	215.8	214.1	215.1	212.3	211.6	210.8	210.4	210.3	210.8	210.5	210.0	213.6	214.7	210.7	200.9
Metalworking machinery and equipment	267.2	268.3	271.0	269.4	269.4	268.4	266.8	265.7	265.3	263.8	261.5	260.1	257.8	261.7	247.5
Special industry machinery	167.4	167.5	168.5	168.0	168.5	168.1	167.5	168.0	169.0	169.0	169.8	169.8	170.5	169.0	161.6
General industrial machinery	231.2	231.4	231.1	229.2	229 5	229.3	228.6	229.7	227.9	230.0	230.7	230.3	230.0	227.6	217.2
Office, computing, and accounting machines	154.5	153.5	153.0	152.3	153.5	153.9	153.8	154.8	155.1	155.5	155.6	156.8	157.1	156.3	152.0
Service industry machines	98.3	100.1	102.9	103.3	101.9	100.1	98.8	98.3	98.4	99.2	99.3	100.0	99.5	100.8	95.4
Miscellaneous machinery	177.0	176.0	177.0	174.9	173.7	173.0	171.2	170.3	170.9	172.2	171.6	170.1	168.1	167.4	156.4
Electrical equipment and supplies	1,571.7	1,565.5	1,580.4	1,572.8	1,572.4	1,577.4	1,586.9	1,597.3	1,610.4	1,614.3	1,613.6	1,607.8	1,590.3	1,579.2	1,474.7
Electric distribution equipment	168.6	168.2	168.5	167.8	167.6	167.4	168.0	168.9	170.3	170.6	170.4	170.0	169.7	167.8	162.8
Electrical industrial apparatus	187.6	187.7	188.2	186.8	186.1	185.7	186.3	186.6	187.5	187.6	187.1	187.1	185.7	185.4	176.6
Household appliances	154.4	152.5	155.0	153.4	151.9	149.2	149.8	150.0	150.8	150.7	151.7	150.9	148.2	150.2	148.2
Electric lighting and wiring equipment	150.7	147.1	147.4	146.0	147.0	147.2	146.7	146.1	146.9	147.2	147.6	146.7	143.8	143.2	135.6
Radio and TV receiving sets	119.0	113.5	112.1	106.9	103.7	104.9	106.3	108.7	112.1	116.1	118.4	117.9	115.2	110.7	102.8
Communication equipment	423.7	426.8	432.0	435.8	441.0	447.1	452.1	455.5	458.6	456.8	453.8	451.3	448.8	445.0	404.7
Electronic components and accessories	264.0	261.0	265.7	265.2	264.7	265.5	265.9	268.9	271.0	272.1	272.0	272.5	270.8	266.8	243.0
Miscellaneous electrical equipment and supplies	103.7	108.7	111.5	110.9	110.4	110.4	111.8	112.6	113.2	113.2	112.6	111.4	108.1	110.0	101.0
Transportation equipment	1,468.2	1,604.3	1,620.7	1,620.4	1,616.5	1,603.7	1,607.5	1,612.7	1,609.2	1,600.2	1,590.2	1,575.0	1,430.5	1,542.3	1,458.8
Motor vehicles and equipment	593.1	731.9	747.0	745.8	738.9	727.4	730.8	740.3	741.5	734.7	726.8	712.2	574.3	691.6	633.1
Aircraft and parts	647.5	646.5	644.9	644.5	647.6	649.4	653.0	655.1	653.7	650.7	644.6	643.8	636.0	634.6	619.2
Ship and boat building and repairing	143.6	142.3	144.0	148.9	149.4	149.3	147.2	145.6	142.4	141.5	143.3	141.9	141.9	141.3	141.6
Railroad equipment	-------	44.4	44.7	42.3	43.0	42.3	41.6	40.0	39.3	39.4	40.5	42.1	42.8	40.6	34.7
Other transportation equipment	-------	39.2	40.1	38.9	37.6	35.3	34.9	31.7	32.3	33.9	35.0	35.0	35.5	34.2	30.3
Instruments and related products	376.5	372.5	373.5	368.1	367.3	366.0	364.8	364.8	365.3	365.3	364.8	364.2	363.9	360.4	347.4
Engineering and scientific instruments	-------	73.4	73.9	73.4	73.6	74.1	74.1	75.2	75.3	75.2	75.2	75.1	74.5	73.9	74.4
Mechanical measuring and control devices	99.0	98.0	97.9	97.0	97.4	97.5	97.3	96.8	96.3	96.0	95.5	95.4	95.5	95.0	89.7
Optical and ophthalmic goods	42.0	41.1	42.0	41.5	41.0	40.9	40.9	40.4	40.5	40.4	40.7	40.6	40.5	40.6	39.2
Surgical, medical, and dental equipment	53.2	52.5	53.6	53.0	52.7	52.3	52.1	51.7	51.4	51.4	51.2	51.0	50.9	50.1	48.1
Photographic equipment and supplies	-------	77.4	76.0	74.3	73.8	73.1	72.7	72.9	73.4	73.5	73.4	73.3	74.0	72.4	69.4
Watches and clocks	-------	30.1	30.1	28.9	28.8	28.1	27.7	27.8	28.4	28.8	28.8	28.8	28.5	28.3	26.4
Miscellaneous manufacturing industries	404.6	387.3	393.2	388.7	381.2	377.0	371.6	365.7	383.1	407.7	416.3	412.4	405.3	391.2	378.2
Jewelry, silverware, and plated ware	40.6	38.6	41.7	41.5	41.6	41.5	41.9	41.7	42.6	43.6	43.4	43.0	42.3	42.3	42.4
Toys, amusement, and sporting goods	-------	106.0	105.2	103.6	96.8	92.3	86.7	82.2	92.4	111.5	118.1	114.8	112.4	102.5	97.7
Pens, pencils, office and art materials	-------	31.3	31.9	32.1	31.7	31.4	30.8	30.9	31.6	32.2	32.4	32.0	31.6	31.0	30.0
Costume jewelry, buttons, and notions	-------	55.9	58.0	56.1	55.2	56.1	56.4	55.8	58.3	60.1	59.9	59.6	58.8	57.8	56.7
Other manufacturing industries	159.9	155.5	156.4	155.4	155.9	155.7	155.8	155.1	158.2	160.3	162.5	163.0	160.2	157.6	151.4
Nondurable goods															
Food and kindred products	1,855.7	1,779.0	1,732.0	1,679.9	1,659.4	1,658.2	1,648.7	1,671.1	1,724.0	1,764.3	1,842.2	1,912.6	1,894.8	1,759.9	1,775.2
Meat products	310.7	310.8	307.8	303.6	300.6	299.1	301.8	305.4	313.1	318.0	318.2	315.5	317.5	312.9	319.5
Dairy products	305.5	307.7	305.2	297.5	294.2	292.0	290.6	291.4	294.6	296.3	299.9	305.9	314.0	303.4	310.5
Canned and preserved foods, except meats	-------	263.6	227.4	203.2	197.5	197.4	190.1	196.3	210.6	234.9	304.7	383.2	364.1	253.7	249.7
Grain mill products	136.6	136.1	134.1	131.1	127.8	128.6	127.6	128.4	128.8	128.5	132.4	134.6	135.5	130.8	131.0
Bakery products	296.7	296.4	294.0	290.7	289.4	290.6	289.7	290.8	294.2	296.4	296.1	295.2	296.0	293.6	295.9
Sugar	-------	30.7	30.9	30.6	28.9	28.4	29.8	36.2	47.1	48.7	46.5	33.3	31.2	35.3	36.4
Confectionery and related products	77.2	69.4	72.6	70.8	71.3	75.0	75.4	76.6	80.6	83.8	81.7	79.6	73.9	75.4	76.9
Beverages	223.7	224.5	219.9	213.2	209.5	206.7	202.4	204.6	210.3	211.8	215.6	220.8	219.6	212.3	213.1
Miscellaneous food and kindred products	141.1	139.8	140.1	139.2	140.2	140.4	141.3	141.4	144.7	145.9	147.1	144.5	143.0	142.4	142.3
Tobacco manufactures	101.5	74.9	75.6	76.5	78.6	80.8	86.1	89.1	94.8	96.7	111.2	117.5	103.1	91.0	90.7
Cigarettes	-------	38.2	38.1	37.5	37.6	37.6	37.1	37.4	37.5	37.3	37.3	38.2	38.3	37.5	38.0
Cigars	-------	21.9	22.8	22.8	23.0	23.3	23.3	23.2	24.2	24.0	23.6	23.8	23.6	23.9	25.5
Textile mill products	897.6	883.2	895.1	887.6	886.9	884.8	881.2	881.4	893.1	901.9	906.4	908.1	909.6	902.6	893.4
Cotton broad woven fabrics	234.1	232.4	233.0	232.5	233.0	233.5	233.4	234.9	236.8	237.7	237.8	238.8	239.6	240.4	243.6
Silk and synthetic broad woven fabrics	85.1	82.3	83.6	82.6	82.1	81.9	81.9	82.3	82.8	82.3	82.0	82.4	82.4	81.7	82.6
Weaving and finishing broad woolens	48.8	49.5	50.4	50.2	50.7	50.8	50.7	49.1	49.3	50.1	51.3	52.0	52.7	51.8	51.9
Narrow fabrics and smallwares	27.1	26.2	27.2	26.9	26.8	26.7	26.8	26.9	27.5	27.8	27.5	27.7	27.5	27.6	26.6
Knitting	219.7	215.7	218.3	215.3	213.3	212.1	208.8	207.1	212.5	219.7	223.6	224.2	226.2	219.4	214.3
Finishing textiles, except wool and knit	75.6	73.6	74.5	74.1	74.5	74.4	74.1	74.3	75.3	75.1	75.1	74.6	74.5	74.9	73.4
Floor covering	-------	37.1	37.1	37.1	37.7	37.7	38.3	38.6	38.9	39.0	38.5	37.8	36.5	37.4	35.7
Yarn and thread	105.3	102.1	104.9	103.6	103.1	102.4	102.4	102.2	103.4	103.4	103.9	103.8	104.4	103.3	99.3
Miscellaneous textile goods	64.5	64.3	66.1	65.3	65.7	65.3	64.8	66.0	66.6	66.8	66.7	66.8	65.8	66.3	65.9

See footnotes at end of table.

TABLE A–2. Employees in nonagricultural establishments, by industry [1]—Continued

[In thousands] **Revised series; see box, p. 1228.**

Industry	1963								1962					Annual average	
	Aug.[2]	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962	1961
Manufacturing—Continued															
Nondurable goods—Continued															
Apparel and related products	1,322.0	1,280.5	1,289.2	1,288.2	1,280.2	1,301.2	1,284.0	1,251.2	1,267.8	1,284.8	1,290.3	1,297.1	1,298.9	1,266.7	1,214.5
Men's and boys' suits and coats	116.3	113.8	118.8	117.9	116.3	117.7	117.9	117.9	118.5	117.9	118.7	119.6	119.2	117.2	114.3
Men's and boys' furnishings	335.7	329.5	334.1	330.3	326.8	323.6	322.5	319.4	323.6	326.8	327.1	328.6	328.5	319.0	296.3
Women's, misses', and juniors' outerwear	402.2	385.4	380.2	388.4	390.5	404.8	396.0	375.1	376.7	379.8	378.3	386.4	393.7	381.7	368.6
Women's and children's undergarments	121.0	114.0	116.0	116.1	116.4	116.5	115.8	114.5	117.7	120.2	120.8	119.1	117.9	116.5	114.3
Hats, caps, and millinery	-------	32.7	30.7	29.5	31.2	35.8	35.4	33.2	31.2	29.9	32.7	33.0	33.6	32.8	32.4
Girls' and children's outerwear	80.6	80.9	82.3	79.6	75.4	81.3	80.6	77.8	76.6	78.4	79.0	78.7	80.1	78.4	76.1
Fur goods and miscellaneous apparel	-------	72.5	73.0	71.4	71.0	71.5	69.4	67.8	73.7	78.0	78.8	77.8	76.7	73.9	71.6
Miscellaneous fabricated textile products	158.4	151.7	154.1	155.0	152.6	150.0	146.4	145.5	149.8	153.8	154.9	153.9	149.2	147.2	140.9
Paper and allied products	632.5	621.0	624.1	615.8	614.5	613.2	609.9	613.0	618.2	618.9	621.4	623.4	622.9	614.5	601.3
Paper and pulp	220.5	217.6	217.8	213.6	212.9	212.2	212.2	214.1	215.4	216.3	217.5	218.9	221.4	217.3	219.6
Paperboard	67.8	68.1	67.9	67.7	66.8	67.4	67.2	67.5	67.4	67.1	67.1	66.4	65.4	65.8	66.3
Converted paper and paperboard products	151.8	147.5	147.9	146.7	147.5	146.6	145.2	145.2	146.3	145.8	146.6	146.6	146.3	144.5	137.1
Paperboard containers and boxes	192.4	187.8	190.5	187.8	187.3	187.0	185.3	186.2	189.1	189.7	190.2	191.5	189.8	186.9	178.3
Printing, publishing, and allied industries	936.2	931.5	932.8	927.9	925.3	907.7	903.3	906.0	913.7	938.0	936.9	933.4	925.9	924.9	917.3
Newspaper publishing and printing	326.1	326.6	325.9	323.4	321.3	303.0	302.2	302.1	305.4	329.1	327.6	326.5	327.2	324.1	325.9
Periodical publishing and printing	-------	68.4	68.8	69.9	70.3	71.2	71.0	71.7	71.3	71.6	70.8	70.4	67.9	70.3	70.7
Books	-------	73.6	74.4	74.1	73.7	72.8	72.4	72.7	72.6	73.0	73.2	73.6	73.0	72.5	70.9
Commercial printing	297.2	296.6	297.7	296.8	296.5	297.5	295.2	297.3	300.6	299.5	299.1	297.2	293.6	296.0	292.4
Bookbinding and related industries	53.1	52.1	51.6	50.4	50.1	49.7	49.0	49.3	49.7	49.5	49.8	50.4	50.7	49.1	47.7
Other publishing and printing industries	114.8	114.2	114.4	113.3	113.4	113.5	113.5	112.9	114.1	115.3	116.4	115.3	113.5	113.0	109.6
Chemicals and allied products	871.8	872.7	870.2	869.4	870.1	858.1	850.1	846.2	846.4	847.8	849.8	852.0	853.8	846.0	827.2
Industrial chemicals	287.8	288.4	287.6	285.2	284.6	283.2	282.2	282.2	282.5	282.8	282.6	283.0	285.4	283.4	281.8
Plastics and synthetics, except glass	171.6	172.5	170.9	168.7	166.0	164.7	164.2	164.4	163.7	164.0	163.6	164.7	163.8	161.2	153.4
Drugs	117.9	117.8	116.8	115.4	115.1	114.6	114.0	113.4	113.4	112.8	112.2	112.0	112.9	111.3	108.5
Soap, cleaners, and toilet goods	100.8	99.6	99.2	97.7	98.3	98.2	97.6	97.3	98.0	99.0	99.6	99.6	99.2	96.9	94.5
Paints, varnishes, and allied products	66.1	66.1	65.3	64.1	63.6	62.8	62.4	61.8	61.9	62.2	63.0	63.8	64.9	62.9	62.1
Agricultural chemicals	45.7	46.2	48.9	56.8	61.3	53.4	49.3	47.3	45.8	45.0	46.6	46.2	44.1	48.3	46.9
Other chemical products	81.9	82.1	81.5	81.5	81.2	81.2	80.4	79.8	81.1	82.0	82.2	82.7	83.5	81.9	80.0
Petroleum refining and related industries	193.1	191.1	190.4	188.9	187.0	185.7	185.6	184.8	186.2	188.4	190.0	191.6	198.9	195.0	201.9
Petroleum refining	156.1	154.4	153.9	153.4	153.6	154.3	153.7	152.1	152.5	153.4	153.9	155.4	162.4	160.5	168.4
Other petroleum and coal products	37.0	36.7	36.5	35.5	33.4	31.4	31.9	32.7	33.7	35.0	36.1	36.2	36.5	34.5	33.6
Rubber and miscellaneous plastic products	405.0	401.9	412.4	410.4	408.1	406.6	406.0	412.1	413.1	416.0	417.8	415.1	409.5	405.8	375.3
Tires and inner tubes	93.0	98.0	98.7	98.4	98.3	98.1	98.4	99.3	99.8	99.6	99.8	100.4	99.4	99.2	97.7
Other rubber products	161.2	155.2	162.1	161.1	160.6	160.9	161.3	163.7	164.2	164.3	164.5	164.1	161.5	160.5	148.6
Miscellaneous plastic products	150.8	148.7	151.6	150.9	149.2	147.6	146.3	149.1	149.1	152.1	153.5	150.6	148.6	146.0	128.9
Leather and leather products	361.4	350.7	350.7	342.6	342.0	351.5	353.9	350.9	358.5	359.7	357.7	360.0	367.7	360.3	358.2
Leather tanning and finishing	31.2	30.6	31.5	30.9	30.6	30.8	31.2	32.0	32.2	32.2	32.1	32.0	32.0	31.9	32.3
Footwear, except rubber	241.5	236.1	235.7	232.3	232.1	237.4	239.9	238.4	240.7	237.9	235.6	239.0	245.7	241.2	239.6
Other leather products	88.7	84.0	83.5	79.4	79.3	83.3	82.8	80.5	85.6	89.6	90.0	89.0	90.0	87.2	86.3
Transportation and public utilities	3,966	3,971	3,954	3,897	3,859	3,847	3,844	3,775	3,914	3,912	3,935	3,932	3,934	3,903	3,903
Railroad transportation	-------	788.5	788.9	779.7	768.9	761.0	757.3	755.4	783.2	778.3	788.9	780.6	806.9	797.1	816.8
Class I railroads	-------	695.0	694.7	684.5	674.4	666.9	664.4	663.4	681.6	683.1	692.8	684.7	710.9	700.2	717.5
Local and interurban passenger transit	-------	258.5	268.9	274.4	273.2	275.7	276.6	277.4	276.4	273.9	273.7	270.8	256.8	271.1	276.9
Local and suburban transportation	-------	87.0	87.7	88.1	87.3	87.8	87.8	88.2	88.4	88.7	89.1	89.3	89.1	90.5	98.5
Taxicabs	-------	111.4	111.7	112.7	113.9	116.9	117.6	117.0	116.3	113.7	112.4	111.6	109.5	113.2	114.3
Intercity and rural buslines	-------	43.4	42.7	41.6	40.5	39.7	39.9	41.1	40.8	40.9	41.4	42.4	42.7	41.4	40.9
Motor freight transportation and storage	-------	918.3	912.3	877.3	868.3	858.6	856.7	853.8	893.0	906.4	915.2	910.0	895.9	879.9	845.1
Air transportation	-------	211.4	210.7	209.4	208.4	207.8	207.3	207.7	205.9	205.3	206.9	205.4	194.9	200.5	195.7
Air transportation, common carriers	-------	190.9	189.5	187.8	186.7	186.5	186.6	187.0	185.4	184.6	185.8	184.8	174.3	179.5	175.4
Pipeline transportation	-------	20.5	20.4	19.9	20.0	20.0	20.0	20.3	20.6	20.7	20.9	21.3	21.7	21.3	22.2
Other transportation	-------	306.1	302.4	305.6	294.0	297.9	302.2	236.0	304.8	295.3	294.2	296.7	298.0	297.1	303.5
Communication	-------	842.5	831.5	824.4	823.7	821.2	819.2	819.2	822.9	823.8	825.4	830.0	835.2	824.7	828.9
Telephone communication	-------	701.3	691.8	685.8	684.5	683.1	681.0	681.6	684.1	685.7	686.5	691.4	697.3	687.7	693.3
Telegraph communication	-------	34.0	34.1	34.7	35.0	35.0	35.3	35.6	36.3	36.4	36.4	36.9	37.3	37.0	37.5
Radio and television broadcasting	-------	102.9	101.3	99.6	99.9	98.8	98.6	97.7	98.2	97.4	98.2	97.4	96.3	95.8	93.9
Electric, gas, and sanitary services	-------	625.6	619.1	606.7	602.8	605.2	605.0	605.6	607.4	608.4	609.9	616.9	624.2	611.1	613.7
Electric companies and systems	-------	251.8	249.2	243.8	240.9	244.7	244.7	244.7	244.8	244.9	245.5	248.6	251.0	246.5	248.6
Gas companies and systems	-------	158.3	156.9	153.5	153.1	152.9	153.0	153.3	154.0	154.6	154.7	156.3	158.3	155.1	155.6
Combined utility systems	-------	175.7	173.8	171.0	170.8	170.4	170.5	170.9	171.7	172.0	172.6	174.8	176.7	172.7	175.0
Water, steam, and sanitary systems	-------	39.8	39.2	38.4	38.0	37.2	36.8	36.7	36.9	36.9	37.1	37.2	38.2	36.7	34.5

See footnotes at end of table.

TABLE A–2. Employees in nonagricultural establishments, by industry [1]—Continued

[In thousands]

Revised series; see box, p. 1228.

Industry	1963								1962					Annual average	
	Aug.[2]	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962	1961
Wholesale and retail trade	11,858	11,828	11,848	11,720	11,740	11,497	11,433	11,535	12,420	11,856	11,704	11,656	11,592	11,582	11,337
Wholesale trade	3,191	3,166	3,132	3,085	3,075	3,069	3,065	3,073	3,118	3,100	3,109	3,107	3,111	3,061	2,993
Motor vehicles and automotive equipment		237.7	236.7	234.1	232.6	232.0	231.2	229.8	231.7	230.9	231.2	231.8	231.8	228.2	218.6
Drugs, chemicals, and allied products		190.8	190.2	188.5	189.1	189.2	188.8	188.5	190.5	190.5	189.8	188.5	188.8	187.0	181.5
Dry goods and apparel		134.6	134.1	131.9	131.7	131.9	131.5	132.2	132.7	132.6	133.2	132.7	133.5	131.5	129.4
Groceries and related products		508.7	497.1	475.6	472.4	476.9	474.4	477.9	489.0	488.6	493.1	495.5	496.0	487.1	485.6
Electrical goods		230.6	228.6	227.4	226.4	224.6	224.4	223.9	223.0	222.2	221.4	220.1	221.2	218.1	211.0
Hardware, plumbing and heating goods		147.7	145.8	144.1	144.1	142.9	142.3	142.1	143.0	143.3	144.0	144.0	144.3	142.3	140.4
Machinery, equipment, and supplies		544.6	538.9	533.5	532.1	528.3	525.8	521.7	521.4	518.7	518.2	520.9	519.4	511.8	486.4
Retail trade	8,667	8,662	8,716	8,635	8,665	8,428	8,368	8,462	9,302	8,756	8,595	8,549	8,481	8,521	8,344
General merchandise stores		1,580.0	1,605.4	1,590.2	1,617.5	1,537.2	1,514.5	1,588.6	2,112.3	1,757.5	1,645.1	1,611.0	1,566.1	1,627.0	1,578.1
Department stores		921.7	940.0	932.0	949.4	903.3	889.5	943.9	1,282.0	1,046.2	965.8	939.8	913.7	959.6	924.6
Limited price variety stores		306.4	311.2	312.0	328.1	307.5	300.2	311.2	414.2	346.5	328.9	326.5	311.5	325.3	323.4
Food stores		1,402.6	1,402.8	1,395.2	1,401.3	1,393.1	1,396.6	1,385.1	1,415.2	1,393.9	1,380.5	1,365.1	1,361.1	1,371.4	1,354.6
Grocery, meat, and vegetable stores		1,231.5	1,230.5	1,222.7	1,221.7	1,222.5	1,221.2	1,215.8	1,236.4	1,222.7	1,212.8	1,199.8	1,197.8	1,202.9	1,183.1
Apparel and accessories stores		584.7	610.7	608.5	665.7	586.5	576.9	602.8	731.4	636.2	618.9	610.0	581.2	617.2	611.8
Men's and boys' apparel stores		97.4	101.8	97.5	100.7	95.6	97.7	104.4	130.3	104.4	98.9	97.0	94.9	100.5	97.3
Women's ready-to-wear stores		217.2	228.2	229.3	238.6	221.9	215.4	223.3	269.6	238.3	231.6	225.9	216.6	229.3	228.5
Family clothing stores		89.7	91.2	90.0	92.9	88.9	88.5	94.3	121.0	98.9	94.6	94.1	89.2	96.1	95.8
Shoe stores		118.9	122.6	124.1	156.4	115.2	111.7	114.6	132.9	120.1	120.7	122.7	116.0	120.9	118.3
Furniture and appliance stores		390.7	389.7	387.2	387.5	388.9	386.8	390.2	405.4	393.7	389.5	388.6	385.3	389.5	389.0
Eating and drinking places		1,810.5	1,817.9	1,789.2	1,743.9	1,713.7	1,698.7	1,693.4	1,736.5	1,742.4	1,752.6	1,766.6	1,779.8	1,722.8	1,664.8
Other retail trade		2,893.3	2,889.6	2,864.2	2,849.2	2,808.5	2,794.7	2,801.5	2,901.1	2,831.9	2,807.9	2,807.7	2,807.2	2,792.5	2,745.2
Motor vehicle dealers		679.5	676.8	671.8	669.6	666.8	665.9	662.5	657.7	654.4	650.2	646.7	647.5	642.0	628.8
Other vehicle and accessory dealers		169.0	167.9	163.4	161.7	155.6	153.8	155.9	164.5	159.9	154.4	154.8	155.6	152.7	146.6
Drug stores		378.9	377.0	377.4	378.1	376.8	373.6	377.0	396.1	380.5	378.1	375.5	375.7	374.3	368.7
Finance, insurance, and real estate	2,923	2,919	2,885	2,858	2,842	2,825	2,813	2,806	2,811	2,813	2,814	2,821	2,849	2,798	2,731
Banking		749.1	739.3	730.8	730.6	729.2	727.3	723.1	723.8	721.4	720.4	720.2	729.3	714.0	693.5
Credit agencies other than banks		295.8	291.6	289.3	288.0	286.3	285.6	284.9	284.3	282.3	280.6	281.4	283.9	279.4	270.9
Savings and loan associations		89.4	87.0	85.4	85.1	84.4	84.1	84.3	83.1	82.7	82.3	81.9	82.3	81.0	75.3
Personal credit institutions		155.5	154.9	154.4	153.8	153.3	153.1	152.0	152.7	151.2	150.1	151.6	153.1	150.8	151.1
Security dealers and exchanges		125.6	124.3	123.5	123.0	123.6	122.9	122.0	123.1	123.8	125.6	128.3	133.8	131.8	128.5
Insurance carriers		874.6	865.3	861.6	860.0	861.3	859.3	855.7	856.5	856.0	854.4	855.6	860.7	851.4	843.7
Life insurance		466.0	461.2	460.0	459.0	460.1	458.9	457.2	456.2	455.9	455.1	455.4	456.7	454.1	455.6
Accident and health insurance		52.5	51.9	51.4	51.4	51.4	51.3	51.1	51.3	51.4	51.3	51.4	51.7	51.1	50.1
Fire, marine, and casualty insurance		314.0	310.8	309.3	308.8	309.0	308.3	306.8	308.3	308.1	307.4	308.2	310.8	305.7	298.5
Insurance agents, brokers, and services		222.1	219.2	217.4	216.6	216.1	216.1	215.0	215.0	214.7	213.2	213.1	215.9	211.9	203.9
Real estate		574.2	569.2	559.5	548.2	533.3	526.9	529.9	532.4	538.7	542.8	544.3	547.1	532.9	514.3
Operative builders		59.0	57.3	55.2	53.0	49.8	46.5	46.8	48.1	50.0	51.9	51.2	52.0	48.1	42.8
Other finance, insurance, and real estate		77.6	76.4	76.1	75.4	75.4	75.1	75.6	76.1	76.4	77.0	77.6	78.2	76.9	76.2
Services and miscellaneous	8,463	8,473	8,423	8,294	8,199	8,076	7,997	7,956	8,014	8,047	8,084	8,075	8,097	7,949	7,610
Hotels and lodging places		758.7	692.7	626.0	600.2	586.5	581.4	575.3	575.5	582.7	594.3	617.8	701.8	596.5	577.3
Hotels, tourist courts, and motels		654.4	633.8	575.7	554.7	545.1	540.7	534.8	532.2	538.7	547.3	560.8	595.6	539.9	521.2
Personal services: Laundries, cleaning and dyeing plants		517.6	519.9	513.6	511.1	501.7	498.9	504.5	506.3	510.1	515.4	515.9	516.7	516.2	517.2
Miscellaneous business services: Advertising		109.2	107.6	108.1	107.7	108.0	107.3	108.1	108.6	108.6	107.9	107.7	108.4	107.9	107.2
Motion pictures		180.8	177.6	171.2	170.2	162.4	160.1	162.6	166.0	169.3	175.2	182.4	185.7	176.3	186.5
Motion picture filming and distributing		36.3	34.3	33.0	32.9	35.0	35.8	37.7	38.8	38.5	38.4	39.5	38.9	39.4	46.8
Motion picture theaters and services		144.5	143.3	138.2	137.3	127.4	124.3	124.9	127.2	130.8	136.8	142.9	146.8	136.9	139.7
Medical services: Hospitals		1,313.0	1,302.9	1,290.7	1,289.0	1,287.1	1,280.4	1,268.5	1,265.3	1,266.2	1,260.4	1,256.2	1,255.6	1,246.7	1,188.9
Government	9,174	9,186	9,506	9,546	9,542	9,541	9,516	9,444	9,613	9,476	9,412	9,247	8,866	9,188	8,828
Federal Government [3]	2,373	2,375	2,365	2,340	2,344	2,334	2,332	2,327	2,492	2,348	2,333	2,336	2,365	2,340	2,279
Executive		2,344.5	2,334.4	2,311.0	2,314.7	2,304.3	2,302.3	2,297.5	2,462.4	2,318.8	2,303.7	2,306.4	2,335.5	2,310.6	2,250.9
Department of Defense		953.9	951.5	949.9	951.9	951.8	957.0	959.1	961.9	965.1	963.9	962.6	972.9	963.3	943.7
Post Office Department		588.7	585.7	582.8	583.3	582.2	580.6	582.5	742.7	587.8	583.9	587.1	589.2	597.2	596.7
Other agencies		801.9	797.2	778.3	779.5	770.3	764.7	755.9	757.8	765.9	755.9	756.7	773.4	750.2	710.5
Legislative		24.6	24.4	23.7	23.8	23.8	23.8	23.6	23.7	23.9	24.0	23.9	24.1	23.7	23.2
Judicial		5.7	5.7	5.6	5.6	5.7	5.6	5.6	5.6	5.6	5.6	5.5	5.5	5.5	5.1
State and local government [4]	6,801	6,811	7,141	7,206	7,198	7,207	7,184	7,117	7,121	7,128	7,079	6,911	6,501	6,849	6,548
State government		1,756.5	1,790.7	1,808.7	1,805.0	1,803.6	1,800.0	1,786.8	1,784.2	1,786.2	1,779.9	1,725.2	1,670.7	1,726.4	1,663.6
State education		532.9	588.0	634.8	631.9	636.5	627.6	619.2	619.7	625.1	615.1	543.5	475.5	567.7	530.8
Other State government		1,223.6	1,202.7	1,173.9	1,173.1	1,167.1	1,172.4	1,167.6	1,164.5	1,161.1	1,164.8	1,181.7	1,195.2	1,158.8	1,132.8
Local government		5,054.3	5,349.9	5,397.3	5,393.2	5,403.2	5,383.6	5,330.2	5,336.3	5,342.0	5,299.0	5,186.1	4,830.3	5,122.1	4,884.5
Local education		2,613.1	2,961.7	3,076.3	3,087.4	3,110.2	3,095.5	3,050.0	3,054.8	3,051.9	3,013.9	2,867.4	2,462.9	2,832.3	2,644.2
Other local government		2,441.2	2,388.2	2,321.0	2,305.8	2,293.0	2,288.1	2,280.2	2,281.5	2,290.1	2,285.1	2,318.7	2,367.4	2,289.8	2,240.3

[1] Beginning with the October 1963 issue, figures differ from those previously published. The industry series have been adjusted to March 1962 benchmarks (comprehensive counts of employment). For comparable back data, see *Employment and Earnings Statistics for the United States, 1909–62*, (BLS Bulletin 1312–1). Statistics from April 1962 forward are subject to further revision when new benchmarks become available.

These series are based upon establishment reports which cover all full- and part-time employees in nonagricultural establishments who worked during, or received pay for any part of the pay period ending nearest the 15th of the month. Therefore, persons who worked in more than 1 establishment during the reporting period are counted more than once. Proprietors, self-employed persons, unpaid family workers, and domestic servants are excluded.

[2] Preliminary.

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

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

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

TABLE A–3. Production or nonsupervisory workers in nonagricultural establishments, by industry [1]

[In thousands]

Revised series; see box, p. 1228.

Industry	1963								1962					Annual average	
	Aug.[2]	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962	1961
Mining	-------	504	512	506	496	481	482	485	498	508	514	518	524	514	532
Metal mining	-------	70.2	69.8	68.9	67.3	64.5	64.9	63.2	62.4	63.2	63.3	63.9	67.1	67.9	71.7
Iron ores	-------	23.8	23.1	22.6	20.5	19.2	19.0	17.6	18.4	19.1	19.9	20.4	22.0	21.3	22.3
Copper ores	-------	22.4	22.7	22.9	23.4	22.9	22.9	22.9	23.0	22.8	22.6	22.6	23.5	23.4	23.8
Coal mining	-------	110.3	122.3	124.0	125.8	124.7	129.8	130.6	130.3	132.1	133.5	131.7	131.2	133.4	141.8
Bituminous	-------	100.1	112.7	114.3	116.1	114.9	119.7	120.5	120.0	121.6	123.1	121.8	121.2	123.0	129.3
Crude petroleum and natural gas	-------	216.0	214.5	210.4	205.2	204.5	203.8	205.1	211.5	210.5	212.5	216.5	217.7	214.0	218.8
Crude petroleum and natural gas fields	-------	98.6	98.1	95.8	95.9	96.1	96.6	96.7	96.9	97.4	97.8	99.9	101.8	99.7	104.5
Oil and gas field services	-------	117.4	116.4	114.6	109.3	108.4	107.2	108.4	114.6	113.1	114.7	116.6	115.9	114.3	114.3
Quarrying and nonmetallic mining	-------	107.6	105.8	102.7	97.7	87.3	83.5	86.4	93.4	102.0	104.6	106.2	107.7	98.6	99.5
Contract construction	-------	2,902	2,777	2,600	2,398	2,114	2,029	2,142	2,331	2,611	2,746	2,788	2,837	2,468	2,390
General building contractors	-------	896.3	855.3	787.7	735.4	641.5	613.9	653.3	710.0	789.1	817.3	832.5	858.4	754.9	752.6
Heavy construction	-------	641.3	613.1	558.6	474.0	376.1	346.2	372.8	434.6	542.7	611.1	629.5	645.2	515.3	505.7
Highway and street construction	-------	359.9	345.4	309.8	243.5	173.4	151.9	167.8	208.9	286.6	335.7	350.4	360.4	267.7	261.2
Other heavy construction	-------	281.4	267.7	248.8	230.5	202.7	194.3	205.0	225.7	256.1	275.4	279.1	284.8	247.6	244.5
Special trade contractors	-------	1,364.8	1,308.6	1,253.5	1,188.5	1,096.7	1,069.3	1,115.8	1,186.2	1,279.4	1,317.3	1,325.5	1,333.7	1,197.5	1,131.3
Manufacturing	12,679	12,579	12,652	12,526	12.426	12,344	12,276	12,286	12,459	12,613	12,753	12,840	12,624	12,494	12,085
Durable goods	6,975	7,061	7,138	7,083	7,010	6,919	6,884	6,896	6,962	7,026	7,059	7,064	6,883	6,946	6,620
Nondurable goods	5,704	5,518	5,514	5,443	5,416	5,425	5,392	5,390	5,497	5,587	5,694	5,776	5,741	5,548	5,464
Durable goods															
Ordnance and accessories	119.4	118.6	118.4	118.1	117.5	119.8	120.3	121.4	122.7	123.3	122.4	122.9	124.0	119.7	106.8
Ammunition, except for small arms	68.7	68.1	67.0	66.4	65.7	67.3	67.8	68.0	69.1	69.3	68.9	69.4	70.9	68.2	58.9
Sighting and fire control equipment	-------	10.6	11.4	11.8	12.4	12.8	13.0	13.4	13.3	13.6	13.5	13.5	13.3	13.5	14.8
Other ordnance and accessories	40.0	39.9	40.0	39.9	39.4	39.7	39.5	40.0	40.3	40.4	40.0	40.0	39.8	38.0	33.1
Lumber and wood products, except furniture	550.0	525.7	522.9	532.9	511.0	500.5	496.0	500.9	511.6	528.6	539.6	548.5	557.4	526.2	518.4
Logging camps and logging contractors	85.0	77.2	73.3	77.3	68.9	66.5	67.9	69.9	73.7	79.9	82.9	86.4	89.8	78.2	78.7
Sawmills and planing mills	242.0	235.2	233.4	235.3	227.0	223.3	220.3	222.5	224.8	231.9	236.2	239.7	242.0	233.0	233.5
Millwork, plywood, and related products	133.4	125.0	126.7	132.0	128.7	125.3	124.0	124.9	127.9	130.9	133.1	134.7	136.8	128.6	120.9
Wooden containers	32.6	33.3	33.4	32.8	31.9	31.1	30.8	30.9	31.9	32.2	33.1	32.9	33.7	33.0	34.7
Miscellaneous wood products	57.0	55.0	56.1	55.5	54.5	54.3	53.0	52.7	53.3	53.7	54.3	54.8	55.1	53.5	50.7
Furniture and fixtures	327.8	320.5	322.5	317.3	317.8	317.7	316.7	319.0	322.7	326.2	327.7	326.7	326.4	319.7	303.9
Household furniture	243.8	238.2	240.0	237.4	238.7	238.0	236.4	236.1	239.2	241.2	242.5	240.9	238.6	235.7	223.5
Office furniture	-------	20.4	21.3	20.9	21.2	21.4	21.5	22.7	23.2	23.4	21.4	21.2	23.2	22.3	21.0
Partitions; office and store fixtures	-------	30.4	29.3	28.4	28.0	28.7	29.0	29.8	29.4	30.1	32.2	32.4	32.1	30.5	28.2
Other furniture and fixtures	32.0	31.5	31.9	30.6	29.9	29.6	29.8	30.4	30.9	31.5	31.6	32.2	32.5	31.3	31.2
Stone, clay, and glass products	515.4	511.5	508.1	496.7	482.4	457.7	447.2	451.8	466.7	486.0	495.9	500.2	501.8	479.1	469.4
Flat glass	-------	24.4	24.5	24.3	24.2	23.6	23.9	24.2	25.2	26.0	25.6	25.4	25.1	25.2	25.5
Glass and glassware, pressed or blown	100.3	100.4	100.1	98.0	96.9	95.0	93.6	91.8	92.6	93.6	94.8	95.6	95.2	93.2	89.5
Cement, hydraulic	34.4	34.3	34.0	32.7	31.8	28.4	27.5	29.1	30.7	33.1	33.6	34.1	34.5	32.1	32.3
Structural clay products	61.2	60.9	60.7	59.6	57.4	54.1	53.0	54.0	56.9	59.0	59.6	60.7	61.3	58.3	60.2
Pottery and related products	-------	37.0	36.9	37.1	37.2	36.4	36.0	36.2	36.4	37.4	38.3	37.8	37.3	37.2	36.4
Concrete, gypsum, and plaster products	149.3	147.8	145.6	139.8	131.1	118.2	112.4	114.7	121.6	131.9	137.8	140.4	142.3	128.9	124.7
Other stone and mineral products	91.4	90.8	90.5	89.3	88.0	86.1	85.2	85.9	87.3	88.7	89.8	90.3	90.6	88.8	86.8
Primary metal industries	954.2	972.5	984.4	969.6	952.6	929.2	914.1	899.8	899.3	893.3	896.7	909.5	904.3	935.8	914.6
Blast furnace and basic steel products	487.4	507.5	513.0	503.1	488.7	468.6	454.5	439.8	438.2	433.5	436.7	447.6	446.1	475.5	478.4
Iron and steel foundries	168.0	168.5	170.4	168.6	167.4	165.2	164.5	163.7	163.7	163.0	163.6	164.5	161.9	163.7	156.6
Nonferrous smelting and refining	54.9	54.4	54.0	52.8	52.2	51.4	51.1	51.5	52.5	52.8	53.4	53.4	52.6	52.6	51.0
Nonferrous rolling, drawing, and extruding	139.6	138.4	141.8	140.0	138.8	138.3	138.0	138.3	138.3	138.5	139.0	139.5	138.4	139.1	132.5
Nonferrous foundries	59.1	58.7	59.3	59.2	59.3	59.4	59.5	59.7	59.9	58.9	58.7	58.7	58.5	58.1	52.3
Miscellaneous primary metal industries	45.2	45.0	45.9	45.9	46.2	46.3	46.5	46.8	46.7	46.6	45.3	45.8	46.8	46.7	43.7
Fabricated metal products	888.5	879.1	893.9	880.0	867.6	855.4	853.6	857.2	868.7	874.1	880.1	881.2	860.0	863.8	826.0
Metal cans	57.0	54.8	54.4	52.8	51.8	49.8	48.5	47.7	47.1	47.3	50.2	54.5	54.6	51.2	51.1
Cutlery, handtools, and general hardware	100.9	101.2	106.4	105.6	105.9	105.9	106.5	107.0	108.4	108.6	107.5	106.0	102.5	106.2	99.8
Heating equipment and plumbing fixtures	59.9	58.3	57.9	56.8	55.9	55.8	55.7	54.6	55.4	56.3	57.3	57.0	57.0	55.6	54.0
Fabricated structural metal products	251.2	247.8	245.9	239.0	230.7	224.1	223.1	226.0	231.1	234.0	239.5	243.0	241.6	234.7	235.6
Screw machine products, bolts, etc	70.1	68.7	70.1	69.8	69.7	70.1	70.2	69.9	69.9	69.7	69.6	69.1	68.9	69.4	64.1
Metal stampings	150.1	151.0	159.4	158.9	157.4	155.7	155.9	158.9	160.8	160.0	159.7	156.8	143.7	153.8	142.0
Coating, engraving, and allied services	58.6	57.6	58.3	57.6	56.9	55.3	55.4	55.5	56.7	59.0	58.6	57.9	56.1	56.1	51.8
Miscellaneous fabricated wire products	45.9	45.3	46.3	45.8	45.5	45.4	45.0	45.1	46.0	46.4	46.6	45.7	44.5	45.1	41.9
Miscellaneous fabricated metal products	94.8	94.4	95.2	93.7	93.8	93.3	93.3	92.5	93.3	92.8	91.1	91.2	91.1	91.8	85.7

See footnotes at end of table.

TABLE A–3. Production or nonsupervisory workers in nonagricultural establishments, by industry [1]—Continued

[In thousands]

Revised Series; see box, p. 1228.

Industry	1963								1962					Annual average	
	Aug.[2]	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962	1961
Manufacturing—Continued															
Durable goods—Continued															
Machinery	1,038.3	1,042.1	1,054.8	1,052.1	1,055.5	1,050.8	1,046.1	1,043.2	1,039.8	1,039.0	1,040.0	1,041.7	1,035.7	1,036.0	976.7
Engines and turbines	56.1	55.6	55.4	55.4	56.7	56.7	56.9	57.5	56.2	55.7	56.0	55.7	56.1	55.7	50.3
Farm machinery and equipment	-------	84.5	86.7	89.6	91.9	91.9	90.4	86.4	82.6	79.7	80.3	80.9	79.6	80.5	76.2
Construction and related machinery	143.9	142.6	144.1	141.6	141.0	140.2	139.4	139.6	139.7	139.5	138.9	142.3	143.0	139.6	129.9
Metalworking machinery and equipment	198.4	199.3	202.4	201.3	201.4	199.5	199.2	197.9	197.9	196.8	195.2	193.5	191.1	195.4	182.9
Special industry machinery	114.4	114.5	115.6	115.3	116.0	115.4	114.9	115.5	116.9	116.8	117.8	117.4	117.5	116.8	111.9
General industrial machinery	153.6	153.3	153.8	152.8	153.2	153.3	153.1	154.3	152.5	155.1	155.8	155.7	155.5	153.8	146.6
Office, computing and accounting machines	90.3	89.1	89.8	90.3	92.1	93.0	93.5	94.9	95.7	96.2	96.4	97.3	97.3	97.4	96.3
Service industry machines	66.3	67.9	70.7	71.3	69.8	68.0	67.3	66.2	66.5	66.9	67.5	68.1	67.4	69.0	64,7
Miscellaneous machinery	136.3	135.3	136.3	134.5	133.4	132.8	131.4	130.9	131.8	132.3	132.1	130.8	128.2	128.0	117.9
Electrical equipment and supplies	1,046.3	1,040.0	1,056.9	1,048.8	1,047.7	1,049.9	1,057.7	1,069.1	1,080.0	1,086.5	1,087.7	1,084.5	1,066.4	1,060.3	980.5
Electric distribution equipment	111.2	111.0	111.4	110.8	110.9	110.4	111.1	112.3	113.3	113.9	113.6	113.5	113.1	111.3	106.7
Electrical industrial apparatus	127.9	127.9	128.5	127.8	127.3	126.5	127.1	127.3	128.0	128.3	127.6	127.9	126.4	126.7	119.1
Household appliances	117.8	116.4	119.1	117.8	116.5	113.9	114.5	114.9	115.6	115.6	116.5	116.0	112.6	114.8	112.9
Electric lighting and wiring equipment	117.3	114.3	115.0	113.4	114.4	114.4	114.3	114.0	114.7	115.0	115.4	115.1	111.7	111.6	105.1
Radio and TV receiving sets	91.0	86.0	84.8	78.7	75.2	76.4	77.6	79.9	83.7	87.8	90.0	89.4	87.0	82.8	75.4
Communication equipment	212.4	214.2	218.8	221.9	226.2	230.3	233.5	236.6	237.8	237.3	236.3	234.6	232.1	230.4	209.0
Electronic components and accessories	190.9	188.7	194.9	194.3	193.8	194.6	194.9	197.9	200.4	201.8	202.2	202.9	201.6	198.8	176.7
Miscellaneous electrical equipment and supplies	77.8	81.5	84.4	84.1	83.4	83.4	84.7	86.2	86.5	86.8	86.1	85.1	81.9	84.0	75.7
Transportation equipment	969.7	1,102.8	1,121.1	1,120.7	1,118.0	1,104.4	1,104.8	1,112.5	1,111.7	1,104.5	1,096.0	1,080.0	946.9	1,060.7	997.1
Motor vehicles and equipment	431.3	565.8	581.2	580.5	574.6	563.6	567.2	576.4	579.3	573.3	565.4	551.0	418.1	534.1	479.7
Aircraft and parts	352.1	351.9	352.1	350.3	353.3	352.8	354.7	358.8	358.3	356.2	351.8	350.0	348.7	350.6	351.5
Ship and boat building and repairing	120.1	119.4	121.0	126.3	127.1	127.5	124.0	122.8	119.5	118.8	120.5	119.2	119.2	118.6	117.6
Railroad equipment	-------	33.4	33.8	31.6	32.3	31.7	30.9	29.3	28.8	28.9	30.0	31.4	31.9	29.9	24.0
Other transportation equipment	-------	32.3	33.0	32.0	30.7	28.8	28.0	25.2	25.8	27.3	28.3	28.4	29.0	27.6	24.3
Instruments and related products	240.4	236.7	238.8	234.8	234.5	233.1	232.4	232.3	233.3	233.6	233.7	232.7	232.1	230.4	223.1
Engineering and scientific instruments	-------	38.5	39.2	38.8	38.9	39.4	39.3	40.1	40.3	40.3	40.2	39.9	39.4	39.3	40.7
Mechanical measuring and control devices	64.6	63.7	64.0	63.3	63.7	63.7	63.7	63.3	63.0	62.8	62.5	62.2	62.2	62.1	58.7
Optical and ophthalmic goods	30.2	29.4	29.8	29.5	29.6	29.5	29.5	29.1	29.3	29.2	29.7	29.3	29.5	29.6	29.1
Surgical, medical, and dental equipment	37.4	36.7	37.6	37.4	37.2	36.8	36.6	36.1	35.8	35.9	35.7	35.8	35.6	34.9	33.4
Photographic equipment and supplies	-------	43.7	43.7	42.3	41.8	41.2	41.1	41.3	42.2	42.2	42.3	42.2	42.4	41.6	40.2
Watches and clocks	-------	24.7	24.5	23.5	23.3	22.5	22.2	22.4	22.7	23.2	23.3	23.3	23.3	22.9	20.9
Miscellaneous manufacturing industries	325.4	311.1	316.3	312.0	304.9	300.3	294.6	288.6	305.5	331.0	339.5	335.6	328.3	314.6	303.5
Jewelry, silverware, and plated ware	31.0	29.4	32.0	31.9	32.3	31.9	32.4	32.3	33.1	34.1	34.0	33.6	32.7	32.9	33.2
Toys, amusement, and sporting goods	-------	88.6	88.2	87.1	80.1	75.5	70.1	65.4	75.0	94.7	100.9	97.6	95.2	85.5	81.6
Pens, pencils, office and art materials	-------	23.6	24.3	24.1	23.8	23.6	22.9	22.8	23.7	24.3	24.6	24.3	23.9	23.2	22.1
Costume jewelry, buttons, and notions	-------	46.4	48.2	46.4	45.6	46.3	46.6	46.1	48.3	50.3	49.9	49.8	49.0	48.0	46.8
Other manufacturing industries	126.4	123.1	123.6	122.5	123.1	123.0	122.6	122.0	125.4	127.6	130.1	130.3	127.5	125.0	119.8
Nondurable goods															
Food and kindred products	1,262.1	1,187.5	1,145.8	1,097.7	1,080.5	1,080.9	1,072.0	1,093.5	1,143.4	1,182.4	1,258.7	1,321.6	1,297.4	1,175.5	1,191.4
Meat products	249.6	250.3	247.5	243.0	240.3	239.0	241.3	244.6	253.0	257.0	257.4	253.8	255.9	251.6	256.8
Dairy products	153.5	155.1	153.6	147.3	145.4	143.0	142.0	142.4	144.5	145.9	148.2	152.9	158.7	152.2	161.4
Canned and preserved food, except meats	-------	224.5	189.4	165.6	159.8	159.8	152.9	158.8	172.7	196.9	266.2	341.5	322.4	214.9	211.7
Grain mill products	96.4	95.8	94.2	91.9	88.9	89.6	89.1	89.8	90.2	89.6	93.4	95.0	95.3	91.5	91.4
Bakery products	173.2	172.2	170.9	167.3	165.9	167.2	165.9	166.5	169.4	171.5	172.2	170.9	170.3	168.4	169.1
Sugar	-------	23.8	24.0	24.0	22.5	22.5	23.9	30.4	41.3	43.0	40.3	27.3	25.4	29.4	30.3
Confectionery and related products	61.9	54.5	57.4	55.7	56.1	59.7	60.1	61.1	65.0	68.1	66.5	64.4	58.8	60.1	60.4
Beverages	118.3	119.0	116.5	111.2	109.1	107.1	102.6	105.9	110.2	111.6	114.8	118.4	115.2	111.7	113.9
Miscellaneous food and kindred products	94.0	92.3	92.3	91.7	92.5	93.0	94.2	94.0	97.1	98.8	99.7	97.4	95.4	95.8	96.5
Tobacco manufactures	91.4	63.2	63.8	64.8	66.9	68.8	74.1	77.2	82.7	84.6	98.9	105.0	90.6	79.1	79.6
Cigarettes	-------	31.6	31.5	31.0	31.2	31.2	31.0	31.3	31.4	31.1	31.1	32.0	32.0	31.4	32.4
Cigars	-------	20.4	21.2	21.2	21.4	21.6	21.6	21.5	22.3	22.3	21.9	22.0	21.8	22.2	23.6
Textile mill products	804.1	791.0	802.5	796.0	795.3	793.6	790.1	790.1	801.6	810.4	814.9	817.3	819.4	812.4	805.0
Cotton broad woven fabrics	216.7	215.2	215.8	215.4	215.6	216.3	216.4	218.1	219.8	220.4	220.5	221.5	222.7	223.4	227.7
Silk and synthetic broad woven fabrics	76.8	74.1	75.4	74.5	74.0	73.8	73.9	74.3	74.8	74.5	74.0	74.7	74.6	73.9	74.7
Weaving and finishing broad woolens	43.0	43.7	44.5	44.4	44.7	45.0	44.9	43.2	43.4	44.2	45.3	46.1	46.7	45.9	45.8
Narrow fabrics and smallwares	23.8	22.9	23.8	23.6	23.5	23.4	23.4	23.6	24.2	24.4	24.2	24.3	24.1	24.2	23.2
Knitting	197.4	194.0	196.7	194.0	192.2	191.0	187.6	185.7	190.9	197.9	201.9	202.6	204.8	198.1	193.8
Finishing textiles, except wool and knit	64.8	62.8	63.6	63.2	63.6	63.4	63.3	63.4	64.3	64.3	64.3	64.0	63.9	64.3	63.1
Floor covering	-------	30.6	30.6	30.7	31.4	31.3	31.7	32.0	32.5	32.7	32.2	31.6	30.3	31.2	30.0
Yarn and thread	97.0	93.9	96.6	95.2	94.9	94.4	94.4	94.2	95.6	95.6	96.1	96.0	96.8	95.6	91.9
Miscellaneous textile goods	53.7	53.8	55.5	55.0	55.4	55.0	54.5	55.6	56.1	56.4	56.4	56.5	55.5	55.9	54.8

See footnotes at end of table.

TABLE A–3. Production or nonsupervisory workers in nonagricultural establishments, by industry [1]—Continued

[In thousands]

Revised series; see box, p. 1228.

Industry	1963								1962					Annual average	
	Aug.[2]	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962	1961
Manufacturing—Continued															
Nondurable goods—Continued															
Apparel and related products	1,174.1	1,133.3	1,139.6	1,141.7	1,135.3	1,157.2	1,141.2	1,109.0	1,125.5	1,141.4	1,146.2	1,153.9	1,156.3	1,125.4	1,079.6
Men's and boys' suits and coats	104.2	101.9	106.2	105.4	103.9	105.1	105.4	105.6	105.8	105.3	105.9	107.1	107.0	104.9	102.4
Men's and boys' furnishings	305.4	299.5	303.3	300.2	297.3	294.1	292.6	290.1	293.5	296.7	297.4	298.9	299.0	289.6	268.4
Women's, misses', and juniors' outerwear	359.2	343.1	336.8	346.1	349.0	364.2	356.0	335.0	337.3	339.6	337.4	346.1	353.7	342.2	331.8
Women's and children's undergarments	107.3	100.7	102.5	102.5	102.8	102.8	102.1	101.1	104.2	106.3	106.9	105.3	104.4	103.1	101.5
Hats, caps, and millinery	-------	28.5	27.0	26.0	27.3	31.9	31.3	29.2	27.5	26.3	28.9	29.3	29.8	29.2	29.0
Girls' and children's outerwear	72.0	72.1	73.6	71.1	66.9	72.6	72.4	69.3	68.6	70.3	70.8	70.6	72.0	70.2	68.0
Fur goods and miscellaneous apparel	-------	62.4	62.9	61.4	61.2	62.1	60.3	58.3	64.0	67.9	68.9	67.5	66.4	63.9	61.9
Miscellaneous fabricated textile products	131.8	125.1	127.3	129.0	126.9	124.4	121.1	120.4	124.6	129.0	130.0	129.1	124.0	122.4	116.7
Paper and allied products	499.0	487.6	491.5	484.3	483.0	482.3	479.6	482.7	487.7	488.8	492.0	493.7	492.3	486.0	478.0
Paper and pulp	178.2	174.7	175.6	172.1	171.3	170.5	170.8	172.4	173.8	174.5	175.6	176.7	178.5	175.2	177.6
Paperboard	54.1	54.4	54.3	54.1	53.1	53.7	53.6	54.0	54.0	53.8	53.9	53.4	52.3	52.9	53.6
Converted paper and paperboard products	113.4	109.5	110.1	109.2	109.9	109.7	108.2	108.2	109.0	108.8	110.0	109.9	109.6	108.5	104.3
Paperboard containers and boxes	153.3	149.0	151.5	148.9	148.7	148.4	147.0	148.1	150.9	151.7	152.5	153.7	151.9	149.4	142.6
Printing, publishing and allied industries	593.0	589.2	592.4	589.8	588.4	579.3	575.5	578.1	586.3	602.3	603.3	600.3	593.7	594.0	591.7
Newspaper publishing and printing	162.8	163.5	163.9	163.1	161.7	151.9	150.9	151.2	154.1	169.5	168.8	168.1	167.7	166.5	168.2
Periodical publishing and printing	-------	26.5	27.0	27.9	28.6	28.9	28.8	28.8	28.8	29.0	28.9	28.7	27.5	28.5	29.5
Books	-------	44.2	45.2	45.0	44.7	44.3	44.2	44.2	44.1	44.5	45.0	45.0	44.4	44.3	43.1
Commercial printing	232.3	232.2	233.2	232.5	232.2	233.7	231.6	233.7	237.3	236.4	236.4	234.9	231.6	233.8	232.2
Bookbinding and related industries	42.8	41.8	41.5	40.8	40.4	39.9	39.3	39.7	40.0	40.1	40.2	40.8	41.0	39.6	38.5
Other publishing and printing industries	81.7	81.0	81.6	80.5	80.8	80.6	80.7	80.5	82.0	82.8	84.0	82.8	81.5	81.4	80.3
Chemicals and allied products	524.7	525.6	527.3	530.0	531.9	521.5	515.9	513.8	513.6	516.0	518.1	520.7	520.8	517.2	504.3
Industrial chemicals	164.6	165.5	166.5	165.1	164.8	163.9	163.0	163.3	163.3	163.9	163.7	164.5	166.2	165.0	163.3
Plastics and synthetics, except glass	114.2	115.1	115.0	113.5	111.3	110.7	111.0	111.7	111.3	111.8	111.6	112.5	111.5	110.0	103.6
Drugs	63.5	63.6	63.2	62.5	62.2	61.5	61.4	61.1	61.0	60.8	60.1	60.0	60.8	60.0	59.1
Soap, cleaners, and toilet goods	61.6	60.3	59.7	58.7	59.3	59.6	59.3	58.9	59.5	60.3	60.9	61.3	60.5	58.6	56.7
Paints, varnishes, and allied products	38.1	38.2	37.6	36.8	36.4	35.6	35.2	34.9	34.9	35.3	35.9	36.7	37.6	36.0	35.4
Agricultural chemicals	29.4	29.3	32.3	40.3	44.9	37.4	33.4	31.5	30.2	29.6	31.2	30.6	28.5	32.9	32.2
Other chemical products	53.3	53.6	53.0	53.1	53.0	52.8	52.6	52.4	53.4	54.3	54.7	55.1	55.7	54.6	54.0
Petroleum refining and related industries	123.6	122.6	121.7	120.6	119.1	117.4	117.3	116.9	118.5	120.0	120.9	122.1	128.0	125.3	129.9
Petroleum refining	96.9	96.2	95.5	95.2	95.8	96.1	95.5	94.3	94.9	95.2	95.3	96.2	101.9	100.9	106.1
Other petroleum and coal products	26.7	26.4	26.2	25.4	23.3	21.3	21.8	22.6	23.6	24.8	25.6	25.9	26.1	24.3	23.8
Rubber and miscellaneous plastic products	311.4	308.6	319.1	317.0	315.2	313.9	313.1	318.9	320.2	323.2	325.4	322.5	316.9	314.3	288.3
Tires and inner tubes	66.5	71.1	71.9	71.5	71.4	71.3	71.4	72.3	72.6	72.4	72.5	73.1	72.1	72.1	70.6
Other rubber products	126.4	120.6	127.3	126.2	125.9	126.1	126.5	129.1	129.7	130.1	130.6	129.8	127.2	126.6	116.6
Miscellaneous plastic products	118.5	116.9	119.9	119.3	117.9	116.5	115.2	117.5	117.9	120.7	122.3	119.6	117.6	115.6	101.1
Leather and leather products	320.4	309.5	309.8	301.4	300.5	310.0	312.7	310.0	317.0	318.0	316.0	318.5	325.8	318.6	316.4
Leather tanning and finishing	27.3	26.8	27.7	27.0	26.8	27.0	27.5	28.1	28.5	28.3	28.3	28.1	28.1	28.0	28.3
Footwear, except rubber	216.1	210.6	210.3	206.6	206.2	211.5	214.0	213.2	215.2	212.3	210.0	213.5	220.0	215.7	214.0
Other leather products	77.0	72.1	71.8	67.8	67.5	71.5	71.2	68.7	73.3	77.4	77.7	76.9	77.7	74.9	74.1
Transportation and public utilities;															
Local and interurban passenger transit:															
Local and suburban transportation	-------	82.6	83.3	83.9	83.0	83.7	83.9	84.3	84.6	84.8	85.2	85.3	85.0	86.3	93.3
Intercity and rural buslines	-------	40.4	39.8	38.5	37.5	36.8	36.8	38.2	37.8	37.9	38.4	39.4	39.8	38.5	38.2
Motor freight transportation and storage	-------	835.7	829.6	796.0	787.2	777.9	775.9	773.7	814.1	828.4	837.6	833.6	820.1	803.9	772.9
Pipeline transportation	-------	17.6	17.6	17.1	17.2	17.2	17.1	17.4	17.7	17.8	17.9	18.3	18.6	18.2	18.7
Communication:															
Telephone communication	-------	565.2	559.5	555.3	554.1	552.8	551.9	552.5	555.4	556.8	557.6	562.0	567.8	559.5	567.5
Telegraph communication [3]	-------	24.3	24.3	24.7	24.9	25.1	25.3	25.7	26.3	26.4	26.5	26.8	27.2	26.9	27.2
Radio and television broadcasting	-------	85.5	83.6	81.5	81.3	81.2	80.9	80.4	80.3	80.8	81.9	81.1	80.6	79.9	79.5
Electric, gas, and sanitary services	-------	546.8	541.3	529.5	526.4	528.5	528.8	530.2	532.8	534.3	536.0	542.9	550.3	537.1	541.3
Electric companies and systems	-------	215.1	213.0	207.8	205.6	209.2	209.2	209.3	209.8	210.2	210.8	213.7	216.1	211.4	213.6
Gas companies and systems	-------	140.0	138.7	135.4	135.2	135.0	135.2	135.5	136.5	137.0	137.0	138.6	140.6	137.6	138.6
Combined utility systems	-------	156.7	155.3	152.7	152.3	151.9	152.3	153.3	154.4	155.0	155.7	158.1	160.1	156.2	159.1
Water, steam, and sanitary systems	-------	35.0	34.3	33.6	33.3	32.4	32.1	32.1	32.1	32.1	32.5	32.5	33.5	32.0	29.9

See footnotes at end of table.

TABLE A–3. Production or nonsupervisory workers in nonagricultural establishments, by industry [1]—Continued

[In thousands]

Revised series; see box below.

Industry	1963								1962					Annual average	
	Aug.[2]	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962	1961
Wholesale and retail trade [4]	-------	**8,911**	**8,926**	**8,829**	**8,898**	**8,687**	**8,646**	**8,760**	**9,601**	**9,039**	**8,886**	**8,824**	**8,753**	**8,805**	**8,674**
Wholesale trade	-------	2,714	2,680	2,636	2,630	2,625	2,621	2,633	2,681	2,665	2,674	2,671	2,675	2,630	2,584
Motor vehicles and automotive equipment	-------	202.0	201.0	198.3	197.1	196.3	195.5	194.3	195.7	195.2	195.7	196.0	195.9	192.8	184.7
Drugs, chemicals, and allied products	-------	158.4	157.8	156.5	157.1	157.1	156.8	156.5	158.8	159.0	158.4	157.6	158.2	156.4	153.0
Dry goods and apparel	-------	111.6	110.9	109.0	108.8	109.3	108.3	109.2	110.0	110.2	111.0	110.5	111.0	109.6	110.0
Groceries and related products	-------	449.1	437.8	418.4	415.9	420.2	418.5	421.8	433.5	433.0	436.2	437.9	438.3	431.1	430.2
Electrical goods	-------	199.7	197.9	197.0	196.7	195.6	195.5	195.3	195.1	194.4	193.5	192.6	194.1	191.0	185.0
Hardware, plumbing and heating goods	-------	128.2	126.3	124.7	124.7	123.8	123.4	123.0	124.0	124.3	124.5	124.9	125.3	123.2	122.1
Machinery, equipment, and supplies	-------	463.8	458.1	452.9	452.5	448.6	445.6	444.2	444.4	442.7	442.8	443.7	442.7	436.5	416.5
Retail trade [4]	-------	6,197	6,246	6,193	6,268	6,062	6,025	6,127	6,920	6,374	6,212	6,153	6,078	6,175	6,090
General merchandise stores	-------	1,444.5	1,469.4	1,453.0	1,480.1	1,401.2	1,379.6	1,453.4	1,972.1	1,618.8	1,512.4	1,479.7	1,437.1	1,496.8	1,453.9
Department stores	-------	842.0	860.3	851.7	869.9	824.1	810.7	863.7	1,200.4	964.5	886.3	860.9	835.9	881.4	850.4
Limited price variety stores	-------	283.4	288.2	289.2	304.2	283.2	276.8	287.8	388.1	321.7	307.4	305.0	290.7	304.1	303.2
Food stores	-------	1,307.6	1,308.6	1,301.3	1,305.6	1,296.5	1,301.3	1,291.1	1,319.5	1,298.6	1,287.2	1,271.7	1,269.2	1,280.2	1,269.9
Grocery, meat, and vegetable stores	-------	1,144.5	1,144.6	1,137.2	1,135.2	1,135.2	1,134.6	1,130.6	1,150.0	1,136.7	1,128.2	1,115.0	1,114.7	1,120.5	1,106.0
Apparel and accessories stores	-------	527.1	552.1	550.5	608.0	528.8	519.7	545.6	672.9	578.8	561.2	552.5	525.1	560.3	556.3
Men's and boys' apparel stores	-------	87.8	92.4	88.2	91.4	86.2	88.5	95.1	120.5	94.9	89.6	87.9	85.9	91.4	88.5
Women's ready-to-wear stores	-------	197.4	207.1	208.4	217.9	201.6	194.9	203.2	248.9	217.8	210.8	205.5	196.3	209.0	209.1
Family clothing stores	-------	82.8	84.4	83.4	86.0	82.0	81.6	87.3	113.8	92.0	87.6	86.8	82.5	88.9	88.8
Shoe stores	-------	104.3	108.2	110.0	142.6	101.4	98.2	100.9	119.3	106.6	107.2	109.1	102.5	107.6	104.9
Furniture and appliance stores	-------	347.5	346.7	343.8	344.0	345.3	343.8	346.8	363.1	351.0	346.6	345.9	342.8	347.2	349.4
Other retail trade	-------	2,570.4	2,568.8	2,544.5	2,530.7	2,490.5	2,480.9	2,489.9	2,592.5	2,526.7	2,504.9	2,502.7	2,503.8	2,490.5	2,460.3
Motor vehicle dealers	-------	592.0	589.1	585.2	582.2	580.8	579.7	577.3	573.4	570.6	567.5	564.2	565.0	559.9	552.0
Other vehicle and accessory dealers	-------	144.5	143.6	140.0	137.9	132.0	130.0	131.8	142.4	137.1	131.5	131.4	132.4	129.6	124.7
Drug stores	-------	350.2	348.8	349.6	349.7	348.5	346.7	350.0	368.6	353.5	351.3	348.9	348.5	348.0	344.5
Finance, insurance, and real estate:															
Banking	-------	635.5	626.3	618.2	618.2	617.1	615.0	611.7	614.1	612.3	611.7	611.5	620.6	606.7	591.1
Security dealers and exchanges	-------	115.5	114.3	113.4	112.9	113.6	113.0	112.2	113.1	114.0	115.9	118.8	124.1	122.3	120.6
Insurance carriers	-------	783.5	775.3	772.6	770.9	773.4	771.4	768.5	770.4	770.4	769.0	771.2	776.9	768.0	765.2
Life insurance	-------	420.3	416.4	415.6	414.5	416.2	415.1	413.8	413.7	413.1	412.7	413.9	415.6	413.0	417.1
Accident and health insurance	-------	46.8	46.2	45.8	45.6	45.8	45.6	45.5	45.6	46.0	45.9	46.1	46.5	45.8	44.9
Fire, marine, and casualty insurance	-------	280.1	277.1	276.1	275.6	276.1	275.6	274.1	275.9	276.0	275.1	276.1	278.7	273.9	268.3
Services and miscellaneous:															
Hotels and lodging places:															
Hotels, tourist courts, and motels	-------	616.4	597.4	541.8	521.5	512.7	509.1	502.5	500.7	507.2	516.4	530.0	563.8	509.2	494.0
Personal services:															
Laundries, cleaning and dyeing plants	-------	380.8	382.2	376.0	374.4	365.6	364.0	369.0	370.0	373.7	377.1	378.6	379.0	377.7	383.1
Motion pictures:															
Motion picture filming and distribution	-------	23.5	22.6	21.6	20.8	21.6	22.1	23.7	25.2	24.2	24.4	24.3	24.3	24.6	29.1

[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, manufacturing, and laundries, cleaning and dyeing plants, data refer to production and related workers; for contract construction, to construction workers; and for all other industries, to nonsupervisory workers.

Production and related workers include working foremen and all nonsupervisory workers (including 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.

Caution

The revised series on employment, hours and earnings, and labor turnover in nonagricultural establishments should not be compared with those published in issues prior to October 1963. (See footnote 1, table A–2, and "Technical Note, Revision of Establishment Employment Statistics, 1963," appearing in the October 1963 *Monthly Labor Review*, p. 1194.) 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, 1909–62* (BLS Bulletin 1312–1), which is available at depository libraries or which may be purchased from the Superintendent of Documents for $3.50. 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 adjusted [1]

[In thousands]

Revised series; see box, p. 1228.

Industry division and group	1963								1962				
	Aug. [2]	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.
Total	57,299	57,356	57,194	57,060	56,873	56,706	56,458	56,333	56,211	56,205	56,195	56,125	56,019
Mining	637	641	639	640	639	631	631	631	633	640	644	647	652
Contract construction	3,059	3,067	3,046	3,019	3,005	2,928	2,920	2,967	2,913	2,942	2,939	2,941	2,949
Manufacturing	16,993	17,110	17,075	17,095	17,037	16,948	16,872	16,871	16,851	16,858	16,910	16,921	16,867
Durable goods	9,624	9,706	9,685	9,683	9,660	9,586	9,546	9,542	9,518	9,509	9,543	9,542	9,492
Ordnance and accessories	278	278	278	276	274	278	279	280	279	280	280	279	279
Lumber and wood products, except furniture	580	563	559	592	588	597	590	593	586	588	585	585	589
Furniture and fixtures	390	391	390	388	387	388	386	389	386	386	384	385	387
Stone, clay, and glass products	614	615	612	612	607	597	590	595	591	596	599	597	599
Primary metal industries	1,181	1,210	1,202	1,184	1,174	1,145	1,133	1,124	1,126	1,121	1,125	1,133	1,138
Fabricated metal products	1,159	1,159	1,156	1,151	1,148	1,136	1,131	1,125	1,127	1,125	1,127	1,133	1,128
Machinery	1,518	1,513	1,508	1,506	1,504	1,501	1,499	1,503	1,501	1,513	1,512	1,504	1,503
Electrical equipment and supplies	1,574	1,587	1,593	1,597	1,595	1,589	1,589	1,593	1,595	1,586	1,590	1,590	1,592
Transportation equipment	1,560	1,622	1,623	1,614	1,623	1,597	1,595	1,586	1,574	1,561	1,587	1,583	1,520
Instruments and related products	376	376	375	370	370	368	366	365	364	362	362	361	363
Miscellaneous manufacturing industries	394	392	389	393	390	390	388	389	389	391	392	392	394
Nondurable goods	7,369	7,404	7,390	7,412	7,377	7,362	7,326	7,329	7,333	7,349	7,367	7,379	7,375
Food and kindred products	1,720	1,729	1,732	1,743	1,738	1,757	1,747	1,752	1,756	1,745	1,751	1,760	1,756
Tobacco manufactures	92	87	88	89	90	89	89	89	91	92	93	93	93
Textile mill products	888	890	889	889	891	892	890	891	893	896	898	898	900
Apparel and related products	1,292	1,318	1,306	1,317	1,296	1,286	1,273	1,268	1,265	1,266	1,273	1,274	1,270
Paper and allied products	627	623	620	620	618	619	617	617	616	615	616	616	617
Printing, publishing, and allied industries	938	936	936	934	929	910	907	910	908	928	929	931	928
Chemicals and allied products	866	871	868	864	862	859	856	853	851	851	851	850	848
Petroleum refining and related industries	189	188	187	188	188	188	188	187	189	190	190	190	195
Rubber and miscellaneous plastic products	404	409	414	417	416	411	408	411	408	409	408	408	409
Leather and leather products	353	353	350	351	349	351	351	351	356	357	358	359	359
Transportation and public utilities	3,931	3,932	3,919	3,909	3,890	3,894	3,899	3,821	3,898	3,896	3,904	3,901	3,899
Wholesale and retail trade	11,887	11,880	11,864	11,825	11,784	11,795	11,729	11,685	11,629	11,637	11,627	11,637	11,620
Wholesale trade	3,150	3,157	3,148	3,129	3,119	3,106	3,093	3,085	3,072	3,069	3,075	3,079	3,071
Retail trade	8,737	8,723	8,716	8,696	8,665	8,689	8,636	8,600	8,557	8,568	8,552	8,558	8,549
Finance, insurance, and real estate	2,877	2,873	2,865	2,864	2,853	2,848	2,839	2,834	2,822	2,821	2,817	2,807	2,804
Service and miscellaneous	8,379	8,348	8,282	8,228	8,199	8,207	8,144	8,110	8,079	8,063	8,044	8,019	8,017
Government	9,536	9,505	9,504	9,480	9,466	9,455	9,424	9,414	9,386	9,348	9,310	9,252	9,211
Federal	2,354	2,351	2,349	2,345	2,339	2,340	2,332	2,353	2,349	2,353	2,342	2,341	2,346
State and local	7,182	7,154	7,155	7,135	7,127	7,115	7,092	7,061	7,037	6,995	6,968	6,911	6,865

[1] For coverage of the series, see footnote 1, table A–2.
[2] Preliminary.

NOTE: The seasonal adjustment method used is described in "New Seasonal Adjustment Factors for Labor Force Components," *Monthly Labor Review*, August 1960, pp. 822–827.

TABLE A–5. Production workers in manufacturing industries, by major industry group, seasonally adjusted [1]

[In thousands]

Revised series; see box, p. 1228.

Major industry group	1963								1962				
	Aug. [2]	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.
Manufacturing	12,545	12,660	12,628	12,647	12,604	12,521	12,455	12,453	12,443	12,452	12,509	12,524	12,489
Durable goods	7,028	7,108	7,086	7,081	7,070	6,994	6,956	6,950	6,935	6,932	6,967	6,969	6,935
Ordnance and accessories	120	120	120	119	118	119	120	121	121	122	122	122	125
Lumber and wood products, except furniture	519	501	498	530	528	538	531	533	525	527	523	523	526
Furniture and fixtures	323	326	325	323	322	322	321	323	321	320	319	319	322
Stone, clay, and glass products	495	497	493	492	489	480	474	476	474	480	483	481	483
Primary metal industries	961	987	977	962	952	922	911	900	901	897	899	907	911
Fabricated metal products	891	891	888	883	881	868	864	860	862	859	863	867	862
Machinery	1,052	1,046	1,042	1,040	1,041	1,038	1,038	1,045	1,044	1,054	1,057	1,048	1,049
Electrical equipment and supplies	1,049	1,061	1,069	1,068	1,067	1,061	1,059	1,063	1,065	1,062	1,064	1,066	1,070
Transportation equipment	1,064	1,122	1,122	1,112	1,123	1,099	1,094	1,085	1,080	1,066	1,091	1,091	1,038
Instruments and related products	240	241	240	237	236	234	233	233	231	230	231	230	232
Miscellaneous manufacturing industries	314	316	312	315	313	313	311	311	311	315	315	315	317
Nondurable goods	5,517	5,552	5,542	5,566	5,534	5,527	5,499	5,503	5,508	5,520	5,542	5,555	5,554
Food and kindred products	1,140	1,148	1,151	1,158	1,152	1,172	1,163	1,167	1,170	1,162	1,169	1,176	1,172
Tobacco manufactures	81	75	75	77	78	77	77	77	79	80	81	81	81
Textile mill products	794	797	797	798	800	800	799	800	802	804	806	808	810
Apparel and related products	1,145	1,169	1,160	1,171	1,153	1,141	1,130	1,125	1,123	1,125	1,130	1,134	1,128
Paper and allied products	494	491	489	488	486	488	486	487	486	484	487	486	487
Printing, publishing, and allied industries	595	594	594	595	591	582	579	582	581	594	596	596	596
Chemicals and allied products	524	528	527	525	524	521	521	519	516	518	519	520	520
Petroleum refining and related industries	121	121	119	120	120	119	119	118	121	121	121	121	125
Rubber and miscellaneous plastic products	311	317	321	324	323	318	315	318	315	316	316	316	317
Leather and leather products	312	312	309	310	307	310	310	310	315	316	317	317	318

[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	1963							1962					
	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July
Employment service: [2]													
New applications for work	928	1,096	911	904	861	904	1,097	766	907	948	856	879	914
Nonfarm placements	572	577	612	581	496	423	459	434	533	643	652	642	580
State unemployment insurance programs:													
Initial claims [3 4]	1,351	973	1,079	1,216	1,127	1,308	2,102	1,747	1,353	1,267	956	1,197	1,395
Insured unemployment [5] (average weekly volume)	1,493	1,468	1,624	1,918	2,298	2,546	2,591	2,063	1,625	1,385	1,331	1,469	1,543
Rate of insured unemployment [6]	3.6	3.5	3.9	4.7	5.6	6.2	6.3	5.1	4.0	3.4	3.3	3.6	3.8
Weeks of unemployment compensated	5,695	5,308	6,732	7,919	9,091	9,025	10,002	6,307	5,702	5,207	4,695	5,781	5,563
Average weekly benefit amount for total unemployment	$34.43	$34.34	$34.91	$35.54	$35.80	$35.70	$35.52	$35.11	$34.95	$34.69	$34.42	$34.29	$34.01
Total benefits paid	$195,632	$188,189	$235,851	$274,798	$316,422	$313,272	$342,411	$214,203	$193,551	$176,608	$160,559	$197,414	$186,965
Unemployment compensation for ex-servicemen: [7 8]													
Initial claims [3]	31	22	20	23	25	27	39	31	29	31	27	39	30
Insured unemployment [5] (average weekly volume)	44	42	47	58	71	77	77	65	57	52	52	52	46
Weeks of unemployment compensated	176	181	203	267	303	306	338	235	222	214	200	211	175
Total benefits paid	$5,909	$6,269	$6,760	$8,797	$9,932	$10,027	$11,100	$7,679	$7,298	$7,019	$6,549	$6,934	$5,659
Unemployment compensation for Federal civilian employees: [8 9]													
Initial claims [3]	19	12	11	13	11	12	20	12	12	14	10	12	15
Insured unemployment [5] (average weekly volume)	30	26	28	31	35	38	37	31	29	27	25	26	26
Weeks of unemployment compensated	110	113	119	137	150	148	156	116	115	111	98	114	97
Total benefits paid	$4,387	$4,941	$4,678	$5,241	$5,591	$5,433	$5,744	$4,262	$4,282	$4,182	$3,797	$4,354	$3,653
Railroad unemployment insurance:													
Applications [10]	46	11	4	4	5	7	19	12	16	16	32	22	65
Insured unemployment (average weekly volume)	39	32	39	49	57	64	73	61	61	60	65	50	52
Number of payments [11]	79	77	99	118	138	137	173	132	133	148	124	129	98
Average amount of benefit payment [12]	$76.07	$73.87	$74.44	$77.11	$80.24	$80.58	$79.97	$79.56	$78.73	$74.47	$83.26	$78.53	$75.84
Total benefits paid [13]	$5,852	$5,563	$7,333	$9,005	$11,004	$10,881	$13,732	$10,358	$10,373	$11,081	$10,134	$10,081	$7,256
All programs: [14]													
Insured unemployment [5]	1,651	1,628	1,799	2,089	2,465	2,726	2,778	2,223	1,780	1,539	1,497	1,628	1,699

[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] The rate is the number of insured unemployed expressed as a percent of the average covered employment in a 12-month period.
[7] Excludes data on claims and payments made jointly with other programs.
[8] Includes the Virgin Islands.
[9] Excludes data on claims and payments made jointly with State programs.
[10] 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.
[11] Payments are for unemployment in 14-day registration periods.
[12] 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]

[Per 100 employees] **Revised series; see box, p. 1228.**

Major industry group	1963							1962						Annual average	
	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	1962	1961
Accessions: Total															
Manufacturing:															
Actual	4.1	4.8	4.0	3.9	3.5	3.3	3.6	2.4	3.0	3.9	4.9	5.1	4.5	4.1	4.1
Seasonally adjusted	*3.8*	*3.9*	*3.8*	*4.1*	*3.8*	*3.9*	*3.7*	*3.8*	*3.8*	*3.9*	*4.0*	*3.9*	*4.2*	-------	-------
Durable goods	3.6	4.2	3.8	3.8	3.5	3.2	3.5	2.3	2.8	3.6	4.5	4.5	3.8	3.8	3.9
Ordnance and accessories	2.6	2.9	2.5	2.3	2.1	2.2	2.5	1.7	1.9	2.6	2.6	2.8	3.2	2.9	2.9
Lumber and wood products, except furniture	5.6	7.9	7.3	6.6	6.0	4.4	4.6	2.4	3.2	4.5	5.4	5.4	6.2	5.5	5.3
Furniture and fixtures	5.3	4.8	4.5	4.4	3.8	3.9	4.1	2.6	3.3	4.3	5.0	6.0	5.2	4.5	4.1
Stone, clay, and glass products	4.1	5.1	4.4	5.7	4.7	3.5	3.6	1.9	2.4	2.8	3.4	4.1	3.8	3.8	3.7
Primary metal industries	2.2	3.3	3.5	3.8	3.6	3.6	3.4	2.3	2.5	2.7	2.7	3.4	2.8	2.8	3.4
Fabricated metal products	4.1	4.9	4.2	4.3	3.8	3.2	3.7	2.5	3.0	3.9	4.5	5.5	4.0	4.1	4.4
Machinery	2.8	3.4	2.7	2.7	2.6	2.7	3.0	2.0	2.4	2.9	2.9	3.2	2.9	3.0	3.1
Electrical equipment and supplies	3.4	3.6	2.9	2.9	2.7	2.7	3.0	2.1	2.8	3.5	3.8	4.0	3.5	3.6	3.6
Transportation equipment	3.6	4.1	3.8	3.8	3.5	3.3	3.8	2.9	3.5	4.5	8.1	6.1	4.3	4.7	4.7
Instruments and related products	3.2	3.9	3.1	2.6	2.5	2.4	2.7	1.7	2.4	2.6	2.6	3.4	2.8	2.7	2.6
Miscellaneous manufacturing industries	5.2	5.5	5.2	5.7	5.1	5.0	6.2	2.4	3.7	5.8	6.7	6.8	5.9	5.6	5.6
Nondurable goods	4.8	5.5	4.2	3.9	3.5	3.4	3.7	2.5	3.2	4.3	5.4	5.8	5.5	4.3	4.2
Food and kindred products	7.1	8.9	5.6	4.9	4.3	3.8	4.2	3.3	4.0	6.5	9.4	10.1	9.3	6.4	6.0
Tobacco manufactures	6.9	3.1	2.4	1.8	2.6	2.6	3.6	6.0	5.6	4.4	16.6	19.8	8.6	6.4	5.9
Textile mill products	3.9	4.0	3.9	3.6	3.5	3.3	3.3	1.9	2.7	3.5	3.8	4.2	4.0	3.6	3.5
Apparel and related products	6.6	5.7	5.9	5.1	4.7	5.4	5.9	3.1	4.4	5.3	5.2	6.2	6.8	5.5	5.7
Paper and allied products	2.9	4.0	2.7	2.7	2.4	2.2	2.3	1.6	1.9	2.4	2.8	3.0	2.9	2.6	2.6
Printing, publishing and allied industries	3.1	4.0	2.8	2.8	2.6	2.6	2.9	2.0	2.5	3.2	3.7	3.5	3.2	3.0	2.9
Chemicals and allied products	2.0	3.3	2.0	2.6	2.4	1.9	2.0	1.3	1.4	1.9	2.1	2.0	2.0	2.1	2.1
Petroleum refining and related industries	1.7	3.0	2.0	2.1	1.6	.9	1.3	.6	.8	1.2	1.5	1.7	1.5	1.4	1.3
Rubber and miscellaneous plastic products	4.4	4.0	3.7	3.8	3.4	3.0	3.2	2.3	3.1	3.8	4.7	4.4	4.3	3.8	3.9
Leather and leather products	6.3	6.3	5.6	4.4	4.1	4.2	5.9	3.5	4.4	4.8	4.7	5.5	6.4	5.0	5.0
Nonmanufacturing:															
Metal mining	2.0	3.8	3.6	5.7	2.9	2.8	3.2	2.0	2.9	2.7	2.9	2.4	2.4	2.9	2.7
Coal mining	1.9	1.5	2.1	2.2	2.5	2.2	2.2	1.4	1.5	1.7	2.5	2.5	1.5	1.7	2.2
Accessions: New hires															
Manufacturing:															
Actual	2.7	3.3	2.5	2.3	2.0	1.8	1.9	1.2	1.8	2.5	3.1	3.2	2.9	2.5	2.2
Seasonally adjusted	*2.4*	*2.4*	*2.4*	*2.6*	*2.4*	*2.2*	*2.3*	*2.2*	*2.3*	*2.3*	*2.3*	*2.4*	*2.5*	-------	-------
Durable goods	2.3	2.9	2.3	2.2	1.8	1.7	1.7	1.1	1.6	2.2	2.6	2.6	2.4	2.3	1.9
Ordnance and accessories	1.5	1.9	1.4	1.3	1.1	1.3	1.4	1.0	1.2	1.7	1.9	2.0	2.5	2.0	2.1
Lumber and wood products, except furniture	4.5	6.3	5.5	4.6	3.7	2.9	2.6	1.7	2.5	3.6	4.4	4.6	4.6	3.9	3.3
Furniture and fixtures	4.4	4.0	3.5	3.3	2.7	2.7	2.7	1.5	2.5	3.5	4.3	4.9	4.2	3.5	2.8
Stone, clay, and glass products	2.8	3.7	2.8	2.8	2.1	1.6	1.3	.9	1.3	1.8	2.2	2.6	2.5	2.2	1.8
Primary metal industries	1.2	2.1	1.7	1.4	1.0	.9	.9	.6	.7	.9	1.0	1.0	.9	1.1	.9
Fabricated metal products	2.7	3.2	2.6	2.4	2.0	1.8	1.9	1.3	1.9	2.6	3.0	2.9	2.6	2.4	2.1
Machinery	1.8	2.5	1.9	1.9	1.8	1.8	1.9	1.1	1.4	1.8	1.9	2.0	1.9	2.0	1.6
Electrical equipment and supplies	2.1	2.4	1.7	1.6	1.5	1.5	1.6	1.2	1.7	2.3	2.7	2.6	2.2	2.3	2.1
Transportation equipment	1.8	2.4	1.8	1.9	1.7	1.6	1.6	1.2	1.7	2.3	2.9	2.2	2.1	2.1	1.6
Instruments and related products	2.3	3.1	2.0	1.8	1.7	1.6	1.9	1.1	1.6	2.0	2.0	2.1	2.2	2.0	1.7
Miscellaneous manufacturing industries	3.3	3.7	3.2	3.2	2.6	2.7	2.6	1.5	2.5	4.3	5.3	5.1	4.1	3.8	3.6
Nondurable goods	3.1	3.8	2.7	2.4	2.2	2.0	2.1	1.3	1.9	2.9	3.8	3.9	3.6	2.8	2.5
Food and kindred products	4.7	5.9	3.5	2.8	2.2	1.9	2.1	1.7	2.3	4.1	6.2	6.6	5.9	3.8	3.4
Tobacco manufactures	1.7	1.8	1.3	1.1	1.6	1.1	1.9	3.4	2.4	3.1	10.9	7.8	2.5	3.2	3.1
Textile mill products	2.7	3.0	2.8	2.5	2.2	2.0	1.9	1.2	1.8	2.5	2.7	3.2	2.7	2.5	2.2
Apparel and related products	3.9	3.6	3.6	3.4	3.2	3.1	3.2	1.5	2.7	3.5	3.8	4.5	4.2	3.5	3.1
Paper and allied products	2.1	3.1	1.9	1.7	1.5	1.3	1.3	.9	1.2	1.8	2.2	2.2	2.1	1.8	1.7
Printing, publishing, and allied industries	2.4	3.0	2.1	2.0	1.9	1.8	2.1	1.3	1.9	2.6	3.1	2.7	2.6	2.3	2.1
Chemicals and allied products	1.4	2.6	1.4	1.8	1.6	1.2	1.2	.7	.9	1.3	1.5	1.3	1.5	1.5	1.4
Petroleum refining and related industries	1.4	2.4	1.5	1.3	.9	.5	.7	.4	.6	.9	1.1	1.2	1.2	1.0	.9
Rubber and miscellaneous plastic products	2.4	2.7	2.4	2.1	1.9	1.8	1.7	1.2	1.8	2.6	3.5	3.1	2.4	2.4	2.0
Leather and leather products	4.2	3.9	3.2	2.6	2.3	2.4	3.3	2.1	2.7	3.2	3.2	3.8	3.9	3.1	2.8
Nonmanufacturing:															
Metal mining	1.4	2.7	1.6	1.7	1.5	1.4	1.7	1.2	1.3	1.5	1.4	1.3	1.4	1.5	1.2
Coal mining	.8	.7	.8	.8	.8	.9	.6	.4	.6	.8	.7	.7	.5	.5	.6

See footnotes at end of table.

TABLE B–1. Labor turnover rates, by major industry group [1]—Continued

Per 100 employees]

Revised series; see box, p. 1228.

Major industry group	1963							1962						Annual average	
	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	1962	1961
	Separations: Total														
Manufacturing:															
Actual	3.9	3.4	3.6	3.6	3.5	3.2	4.0	3.8	4.0	4.4	5.0	5.1	4.4	4.1	4.0
Seasonally adjusted	*3.8*	*3.8*	*4.0*	*4.0*	*3.8*	*3.7*	*4.0*	*3.8*	*3.9*	*4.0*	*4.0*	*4.5*	*4.3*	-------	-------
Durable goods	3.9	3.2	3.3	3.3	3.3	3.1	3.7	3.4	3.6	3.9	4.3	5.3	4.4	3.8	3.9
Ordnance and accessories	2.6	2.4	2.3	2.4	4.2	3.1	3.2	2.0	2.7	2.8	3.5	2.9	2.4	2.7	2.3
Lumber and wood products, except furniture	4.6	5.1	5.0	5.2	5.4	4.7	5.0	5.5	6.1	5.6	6.7	6.8	5.6	5.6	5.4
Furniture and fixtures	4.1	4.2	4.4	4.5	4.5	3.9	4.5	3.7	4.3	4.6	5.2	5.7	5.2	4.6	4.3
Stone, clay, and glass products	3.1	3.2	3.1	3.0	2.9	3.4	4.9	5.2	4.1	4.2	5.0	4.6	3.6	4.1	3.8
Primary metal industries	3.1	2.0	2.1	2.1	2.1	2.2	2.6	2.5	2.9	3.5	3.8	3.8	4.1	3.3	2.8
Fabricated metal products	4.4	3.5	3.7	3.5	3.8	3.6	4.2	3.5	3.9	4.7	4.9	4.7	5.4	4.2	4.6
Machinery	2.7	2.8	3.0	2.6	2.5	2.3	2.8	2.1	2.6	2.9	3.5	3.8	3.0	2.8	3.2
Electrical equipment and supplies	3.1	3.1	3.0	3.1	3.6	3.1	3.7	2.8	3.1	3.4	4.0	3.9	3.3	3.3	3.3
Transportation equipment	6.3	3.5	3.7	3.9	3.5	3.3	3.7	3.2	3.5	3.9	4.1	10.5	6.5	4.6	5.0
Instruments and related products	2.8	2.3	2.7	2.3	2.4	2.4	2.9	2.1	2.6	3.0	3.3	3.1	2.4	2.6	2.5
Miscellaneous manufacturing industries	4.3	4.2	4.5	4.8	4.2	3.8	5.5	11.5	7.8	5.5	5.6	6.1	5.4	6.0	5.8
Nondurable goods	3.9	3.8	4.0	3.9	3.7	3.4	4.3	4.3	4.6	5.0	5.8	4.8	4.4	4.4	4.2
Food and kindred products	5.4	4.8	4.6	4.8	4.9	4.7	6.4	6.3	7.1	8.3	9.5	6.8	6.0	6.2	6.0
Tobacco manufactures	2.0	2.2	4.0	3.9	7.0	9.2	6.8	11.0	17.1	10.8	5.5	2.9	2.3	6.7	5.7
Textile mill products	3.5	3.3	3.9	3.7	3.5	3.1	3.9	3.4	3.7	3.8	4.5	4.5	3.9	3.7	3.4
Apparel and related products	5.3	5.6	5.8	6.0	4.8	4.2	5.5	5.9	5.2	5.7	6.0	5.9	6.8	5.8	5.8
Paper and allied products	2.5	2.2	2.5	2.5	2.5	2.3	2.9	2.5	2.7	2.8	4.3	3.5	2.6	2.8	2.7
Printing, publishing and allied industries	2.5	3.0	3.0	2.6	2.7	2.3	3.0	2.7	2.9	3.1	4.1	3.5	2.6	2.9	2.9
Chemicals and allied products	1.8	2.1	2.6	1.9	1.7	1.4	1.7	1.6	2.0	1.8	3.1	2.4	1.9	2.1	2.0
Petroleum refining and related industries	1.5	1.8	1.7	1.6	1.8	1.9	1.8	2.1	2.2	1.8	2.7	2.5	1.5	1.8	1.7
Rubber and miscellaneous plastic products	4.2	3.3	3.5	3.2	3.7	3.0	3.6	2.9	3.6	4.0	4.6	4.3	4.1	3.6	3.6
Leather and leather products	5.5	4.1	4.9	5.9	4.7	3.8	5.2	5.4	4.5	5.4	5.9	5.9	5.6	5.2	5.0
Nonmanufacturing:															
Metal mining	2.2	2.5	3.1	3.0	3.1	2.6	3.6	5.5	3.8	3.6	6.0	4.9	3.2	3.5	3.1
Coal mining	2.3	1.8	2.2	2.8	2.5	2.0	2.1	1.8	3.2	2.6	2.1	2.3	5.3	2.8	2.7
	Separations: Quits														
Manufacturing:															
Actual	1.4	1.4	1.4	1.3	1.2	1.0	1.1	0.8	1.1	1.5	2.4	2.1	1.4	1.4	1.2
Seasonally adjusted	*1.4*	*1.4*	*1.4*	*1.4*	*1.5*	*1.3*	*1.4*	*1.3*	*1.4*	*1.4*	*1.3*	*1.5*	*1.4*	-------	-------
Durable goods	1.2	1.2	1.3	1.1	1.0	.9	.9	.7	1.0	1.3	2.0	1.8	1.2	1.2	1.0
Ordnance and accessories	1.0	1.0	1.0	.8	.9	.9	1.0	.7	.8	1.1	1.9	1.6	1.2	1.2	1.1
Lumber and wood products, except furniture	2.5	3.0	3.0	2.6	2.2	1.6	1.7	1.3	1.9	2.5	4.2	3.7	2.6	2.4	1.9
Furniture and fixtures	2.1	1.9	2.3	2.2	1.9	1.5	1.7	1.1	1.6	2.1	3.0	3.1	2.2	2.1	1.5
Stone, clay, and glass products	1.3	1.3	1.3	1.1	.9	.7	.8	.6	.8	1.2	2.1	1.9	1.2	1.2	1.0
Primary metal industries	.7	.6	.7	.6	.5	.4	.4	.3	.4	.5	.9	.9	.6	.6	.5
Fabricated metal products	1.2	1.2	1.3	1.2	1.1	.8	.9	.7	.9	1.3	2.2	1.9	1.2	1.3	1.0
Machinery	.9	.9	1.0	1.0	.9	.7	.8	.6	.8	.9	1.5	1.5	.9	1.0	.8
Electrical equipment and supplies	1.2	1.2	1.2	1.1	1.1	1.0	1.0	.8	1.1	1.3	2.2	1.9	1.3	1.4	1.2
Transportation equipment	.8	.9	.9	.8	.8	.7	.7	.5	.7	1.0	1.6	1.4	.9	1.0	.8
Instruments and related products	1.1	1.1	1.3	1.0	1.0	1.0	1.1	.8	1.0	1.4	1.9	1.6	1.2	1.2	1.0
Miscellaneous manufacturing industries	1.8	1.8	1.8	1.6	1.5	1.3	1.3	1.0	1.6	2.2	3.0	2.9	1.9	2.0	1.8
Nondurable goods	1.6	1.6	1.7	1.5	1.4	1.2	1.3	1.0	1.3	1.8	2.9	2.5	1.7	1.7	1.5
Food and kindred products	1.9	1.7	1.6	1.4	1.4	1.2	1.3	1.1	1.3	2.2	4.1	3.0	1.9	1.9	1.6
Tobacco manufactures	.7	.7	.8	.8	.7	.7	.9	.6	.8	.9	2.1	1.4	.8	.9	.9
Textile mill products	2.0	1.9	2.1	2.0	1.7	1.4	1.6	1.1	1.6	2.0	2.6	2.8	2.1	1.9	1.6
Apparel and related products	2.4	2.2	2.4	2.3	2.0	1.8	2.0	1.4	1.9	2.4	3.0	3.2	2.6	2.3	2.0
Paper and allied products	1.0	1.0	1.0	1.0	.9	.7	.8	.6	.8	1.1	2.5	1.9	1.1	1.1	1.0
Printing, publishing, and allied industries	1.3	1.5	1.5	1.3	1.2	1.1	1.2	.9	1.3	1.5	2.5	2.1	1.4	1.5	1.4
Chemicals and allied products	.7	.7	.8	.7	.6	.5	.6	.5	.5	.7	1.8	1.2	.7	.8	.7
Petroleum refining and related industries	.6	.8	.7	.6	.5	.5	.4	.4	.6	.7	1.4	1.2	.6	.7	.5
Rubber and miscellaneous plastic products	1.4	1.4	1.4	1.3	1.1	1.0	1.1	.8	1.1	1.5	2.3	2.0	1.4	1.4	1.2
Leather and leather products	2.6	2.2	2.4	2.3	2.0	1.6	2.0	1.5	1.9	2.5	3.1	3.3	2.4	2.3	2.0
Nonmanufacturing:															
Metal mining	1.1	1.4	1.5	1.4	1.2	1.2	1.2	.8	.9	1.1	2.3	1.8	1.3	1.2	1.0
Coal mining	.5	.3	.4	.5	.4	.3	.3	.3	.3	.5	.5	.5	.4	.4	.4

See footnotes at end of table.

TABLE B–1. Labor turnover rates, by major industry group [1]—Continued

[Per 100 employees]

Revised series; see box, p. 1228.

Major industry group	1963							1962						Annual average	
	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	1962	1961
	Separations: Layoffs														
Manufacturing:															
Actual	1.9	1.4	1.5	1.6	1.7	1.6	2.2	2.5	2.3	2.2	1.9	2.2	2.2	2.0	2.2
Seasonally adjusted	*1.8*	*1.7*	*1.8*	*1.8*	*1.8*	*1.8*	*2.0*	*2.0*	*1.9*	*2.0*	*1.9*	*2.3*	*2.1*	-------	-------
Durable goods	2.0	1.3	1.3	1.4	1.6	1.6	2.0	2.2	2.0	1.8	1.6	2.7	2.4	1.9	2.2
Ordnance and accessories	1.1	.9	.8	1.1	2.7	1.8	1.7	1.0	1.3	1.1	1.1	.8	.5	.9	.7
Lumber and wood products, except furniture	1.4	1.2	1.1	1.8	2.5	2.3	2.6	3.6	3.5	2.1	1.6	2.1	2.2	2.4	2.8
Furniture and fixtures	1.2	1.6	1.3	1.5	1.8	1.7	2.1	2.0	2.1	1.7	1.4	1.7	2.2	1.8	2.1
Stone, clay, and glass products	1.2	1.2	1.2	1.2	1.4	2.1	3.4	4.0	2.8	2.3	2.2	1.9	1.7	2.2	2.2
Primary metal industries	1.7	.7	.8	.8	1.0	1.1	1.4	1.7	2.0	2.4	2.3	2.3	2.8	2.1	1.7
Fabricated metal products	2.5	1.5	1.7	1.7	2.0	2.1	2.5	2.3	2.4	2.6	2.0	2.0	3.3	2.2	2.9
Machinery	1.2	1.2	1.4	1.0	1.0	.9	1.3	1.0	1.2	1.3	1.3	1.5	1.4	1.2	1.7
Electrical equipment and supplies	1.2	1.1	1.2	1.3	1.7	1.4	1.8	1.4	1.3	1.3	1.0	1.2	1.3	1.1	1.4
Transportation equipment	4.5	1.7	1.9	2.2	1.9	1.9	2.1	1.9	1.9	1.9	1.9	8.2	4.5	2.8	3.6
Instruments and related products	1.2	.6	.7	.7	.7	.9	1.0	.8	1.1	.9	.7	.8	.7	.7	.9
Miscellaneous manufacturing industries	1.9	1.7	2.0	2.4	2.0	1.8	3.6	9.9	5.5	2.4	1.6	2.1	2.5	3.1	3.2
Nondurable goods	1.7	1.5	1.7	1.8	1.7	1.6	2.4	2.8	2.7	2.6	2.2	1.6	2.0	2.1	2.2
Food and kindred products	3.0	2.5	2.4	2.8	2.9	2.9	4.4	4.7	5.2	5.4	4.6	3.1	3.3	3.7	3.9
Tobacco manufactures	.9	1.2	2.7	2.6	5.8	8.1	5.4	9.9	15.9	9.2	2.6	1.0	1.1	5.3	4.4
Textile mill products	.9	.8	1.1	1.1	1.2	1.1	1.7	1.9	1.7	1.2	1.2	1.0	1.2	1.2	1.3
Apparel and related products	2.1	2.6	2.6	3.0	2.1	1.8	2.7	4.1	2.7	2.6	2.3	1.7	3.3	2.7	3.1
Paper and allied products	.9	.6	.9	.9	1.1	1.2	1.5	1.4	1.3	1.2	1.2	.9	.9	1.0	1.1
Printing, publishing, and allied industries	.8	.9	1.1	.9	1.0	.8	1.3	1.3	1.2	1.2	1.1	.9	.7	1.0	1.0
Chemicals and allied products	.8	.9	1.4	.8	.6	.5	.7	.8	1.1	.8	.8	.8	.8	.8	.9
Petroleum refining and related industries	.2	.3	.5	.5	.7	.9	.8	.9	1.0	.6	.7	.6	.5	.6	.6
Rubber and miscellaneous plastic products	2.1	1.2	1.3	1.2	1.8	1.3	1.8	1.6	1.9	1.7	1.5	1.5	1.9	1.5	1.8
Leather and leather products	2.2	1.1	1.7	2.9	2.0	1.6	2.5	3.4	2.0	2.3	2.0	1.7	2.2	2.1	2.2
Nonmanufacturing:															
Metal mining	.6	.4	.8	.9	1.4	.9	1.3	4.1	2.2	1.7	2.9	2.4	1.1	1.5	1.4
Coal mining	1.4	1.0	1.4	1.8	1.6	1.3	1.4	1.1	2.2	1.7	1.0	1.4	4.3	1.9	1.9

[1] For comparability of data with those published in issues prior to October 1963, 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. 1228.

Industry	1963								1962					Annual average	
	Aug.[2]	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962	1961
	Average weekly earnings														
Mining		$112.34	$117.85	$114.39	$112.75	$110.97	$112.48	$111.66	$111.66	$110.02	$111.78	$112.47	$111.90	$110.70	$106.92
Metal mining		116.00	118.85	117.71	117.50	118.37	117.14	116.16	116.85	116.31	116.44	117.71	115.87	117.45	113.44
Iron ores		118.42	124.14	120.08	117.80	116.73	116.05	118.95	115.36	119.56	117.87	122.61	119.87	122.19	115.50
Copper ores		121.55	122.69	122.55	124.12	125.71	121.69	121.12	121.41	120.13	119.14	120.98	117.99	120.70	119.03
Coal mining		108.19	128.74	122.14	117.73	113.77	121.29	120.43	119.11	110.77	113.28	112.53	112.42	113.09	110.62
Bituminous		110.21	130.60	124.66	119.81	114.56	122.77	120.90	119.88	111.24	114.76	113.67	113.83	114.50	112.01
Crude petroleum and natural gas		112.63	113.36	110.62	111.45	110.77	110.51	110.09	111.61	109.30	109.46	110.99	109.56	109.20	105.75
Crude petroleum and natural gas fields		121.60	123.31	117.74	120.30	118.26	118.15	121.09	119.11	115.18	114.09	119.81	114.80	115.46	113.96
Oil and gas field services		104.79	105.04	104.49	103.52	104.25	103.76	100.43	105.71	104.40	105.90	103.58	104.84	103.63	98.44
Quarrying and nonmetallic mining		112.88	112.91	110.32	106.56	102.00	98.77	100.14	98.25	106.76	110.40	113.24	112.79	105.43	100.09
Contract construction		130.90	129.79	128.06	124.58	122.72	118.33	121.07	118.67	121.61	127.25	128.64	127.71	122.47	118.08
General building contractors		119.97	118.58	117.85	115.84	113.34	108.85	111.11	108.55	113.34	117.12	117.81	116.92	112.50	108.83
Heavy construction		134.90	132.13	126.96	122.36	117.30	110.70	115.82	112.00	118.99	127.98	130.17	131.63	122.31	120.09
Highway and street construction		133.62	130.09	123.68	117.74	109.42	99.72	107.54	104.60	115.02	126.42	128.76	130.09	118.37	113.81
Other heavy construction		136.27	134.60	131.02	127.98	123.80	119.19	123.13	118.24	123.56	130.38	131.93	132.92	126.48	127.12
Special trade contractors		136.14	135.75	134.67	131.40	130.31	125.93	128.47	127.40	127.80	133.91	134.98	132.75	128.50	123.44
Manufacturing	$98.42	99.23	100.37	99.23	97.36	98.09	97.20	97.44	98.01	97.36	96.32	97.27	95.75	96.56	92.34
Durable goods	107.01	108.09	109.82	108.36	106.37	106.49	106.23	105.82	107.53	105.78	105.37	105.88	103.89	104.70	100.35
Nondurable goods	88.18	88.36	88.36	87.52	85.97	86.68	85.85	86.24	86.94	86.33	85.50	86.80	86.18	85.54	82.92
	Average weekly hours														
Mining		41.3	42.7	41.9	41.3	40.5	40.9	40.9	40.9	40.9	41.4	41.5	41.6	41.0	40.5
Metal mining		40.7	41.7	41.3	40.8	41.1	41.1	40.9	41.0	41.1	41.0	41.3	40.8	41.5	41.4
Iron ores		38.7	40.7	39.5	38.0	37.9	37.8	39.0	37.7	39.2	38.9	40.2	39.3	39.8	38.5
Copper ores		42.8	42.9	43.0	43.4	43.8	43.0	42.8	42.9	42.6	42.1	42.3	41.4	42.8	43.6
Coal mining		-------	41.0	39.4	38.1	36.7	39.0	39.1	38.3	36.2	36.9	36.3	36.5	36.6	35.8
Bituminous		-------	41.2	39.7	38.4	36.6	39.1	39.0	38.3	36.0	36.9	36.2	36.6	36.7	35.9
Crude petroleum and natural gas		42.5	42.3	41.9	41.9	41.8	41.7	41.7	42.6	42.2	42.1	42.2	42.3	42.0	41.8
Crude petroleum and natural gas fields		41.5	41.8	40.6	41.2	40.5	40.6	41.9	41.5	40.7	40.6	41.6	41.0	40.8	40.7
Oil and gas field services		43.3	42.7	43.0	42.6	42.9	42.7	41.5	43.5	43.5	43.4	42.8	43.5	43.0	42.8
Quarrying and nonmetallic mining		45.7	45.9	45.4	44.4	42.5	41.5	41.9	40.6	44.3	46.0	46.6	46.8	44.3	43.9
Contract construction		38.5	38.4	38.0	37.3	36.2	34.7	35.4	34.8	36.3	38.1	38.4	38.7	37.0	36.9
General building contractors		36.8	36.6	36.6	36.2	35.2	33.7	34.4	33.4	35.2	36.6	36.7	37.0	35.6	35.8
Heavy construction		43.1	42.9	41.9	41.2	39.1	36.9	38.1	36.6	39.4	42.1	42.4	43.3	40.5	40.3
Highway and street construction		44.1	43.8	42.5	41.9	38.8	36.0	37.6	35.7	39.8	43.0	43.5	44.4	41.1	40.5
Other heavy construction		41.8	41.8	41.2	40.5	39.3	37.6	38.6	37.3	39.1	41.0	41.1	41.8	39.9	40.1
Special trade contractors		37.4	37.5	37.1	36.5	35.8	34.5	35.1	35.0	35.6	37.3	37.6	37.5	36.3	36.2
Manufacturing	40.5	40.5	40.8	40.5	39.9	40.2	40.0	40.1	40.5	40.4	40.3	40.7	40.4	40.4	39.8
Durable goods	41.0	41.1	41.6	41.2	40.6	40.8	40.7	40.7	41.2	41.0	41.0	41.2	40.9	40.9	40.3
Nondurable goods	39.9	39.8	39.8	39.6	38.9	39.4	39.2	39.2	39.7	39.6	39.4	40.0	39.9	39.6	39.3
	Average hourly earnings														
Mining		$2.72	$2.76	$2.73	$2.73	$2.74	$2.75	$2.73	$2.73	$2.69	$2.70	$2.71	$2.69	$2.70	$2.64
Metal mining		2.85	2.85	2.85	2.88	2.88	2.85	2.84	2.85	2.83	2.84	2.85	2.84	2.83	2.74
Iron ores		3.06	3.05	3.04	3.10	3.08	3.07	3.05	3.06	3.05	3.03	3.05	3.05	3.07	3.00
Copper ores		2.84	2.86	2.85	2.86	2.87	2.83	2.83	2.83	2.82	2.83	2.86	2.85	2.82	2.73
Coal mining		-------	3.14	3.10	3.09	3.10	3.11	3.08	3.11	3.06	3.07	3.10	3.08	3.09	3.09
Bituminous		-------	3.17	3.14	3.12	3.13	3.14	3.10	3.13	3.09	3.11	3.14	3.11	3.12	3.12
Crude petroleum and natural gas		2.65	2.68	2.64	2.66	2.65	2.65	2.64	2.62	2.59	2.60	2.63	2.59	2.60	2.53
Crude petroleum and natural gas fields		2.93	2.95	2.90	2.92	2.92	2.91	2.89	2.87	2.83	2.81	2.88	2.80	2.83	2.80
Oil and gas field services		2.42	2.46	2.43	2.43	2.43	2.43	2.42	2.43	2.40	2.44	2.42	2.41	2.41	2.30
Quarrying and nonmetallic mining		2.47	2.46	2.43	2.40	2.40	2.38	2.39	2.42	2.41	2.40	2.43	2.41	2.38	2.28
Contract construction		3.40	3.38	3.37	3.34	3.39	3.41	3.42	3.41	3.35	3.34	3.35	3.30	3.31	3.20
General building contractors		3.26	3.24	3.22	3.20	3.22	3.23	3.23	3.25	3.22	3.20	3.21	3.16	3.16	3.04
Heavy construction		3.13	3.08	3.03	2.97	3.00	3.00	3.04	3.06	3.02	3.04	3.07	3.04	3.02	2.98
Highway and street construction		3.03	2.97	2.91	2.81	2.82	2.77	2.86	2.93	2.89	2.94	2.96	2.93	2.88	2.81
Other heavy construction		3.26	3.22	3.18	3.16	3.15	3.17	3.19	3.17	3.16	3.18	3.21	3.18	3.17	3.17
Special trade contractors		3.64	3.62	3.63	3.60	3.64	3.65	3.66	3.64	3.59	3.59	3.59	3.54	3.54	3.41
Manufacturing	$2.43	2.45	2.46	2.45	2.44	2.44	2.43	2.43	2.42	2.41	2.39	2.39	2.37	2.39	2.32
Durable goods	2.61	2.63	2.64	2.63	2.62	2.61	2.61	2.60	2.61	2.58	2.57	2.57	2.54	2.56	2.49
Nondurable goods	2.21	2.22	2.22	2.21	2.21	2.20	2.19	2.20	2.19	2.18	2.17	2.17	2.16	2.16	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. 1228.

Industry	1963								1962					Annual average	
	Aug.[2]	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962	1961
	Average weekly earnings														
Manufacturing—Continued															
Durable goods															
Ordnance and accessories	$118.20	$117.33	$118.24	$117.67	$115.14	$118.20	$119.65	$119.65	$120.10	$117.71	$116.03	$116.72	$115.34	$116.31	$113.29
Ammunition, except for small arms	119.31	118.55	119.65	117.50	116.24	117.86	119.31	119.02	120.06	118.37	116.69	117.38	116.00	116.69	115.49
Sighting and fire control equipment	-------	121.70	120.10	122.01	119.20	127.98	128.29	128.35	131.24	128.87	125.58	125.40	122.78	126.18	117.27
Other ordnance and accessories	115.49	114.93	115.36	116.90	112.19	116.05	117.59	117.74	116.06	113.44	111.79	112.06	110.70	112.34	108.39
Lumber and wood products, except furniture	84.05	82.62	82.62	80.60	78.41	77.81	77.22	77.03	78.40	79.00	79.60	82.42	81.80	79.20	76.83
Sawmills and planing mills	76.89	75.70	76.07	73.97	71.82	71.16	70.62	70.98	71.23	72.31	72.98	75.30	74.48	71.71	68.99
Millwork, plywood, and related products	92.01	90.09	90.29	90.07	87.94	87.94	86.88	87.10	87.94	87.53	86.88	89.23	89.02	87.12	84.44
Wooden containers	68.48	70.31	69.14	68.31	66.73	65.01	64.91	64.02	64.29	65.76	66.66	68.04	68.30	66.17	63.12
Miscellaneous wood products	75.81	74.12	74.85	73.89	72.36	73.12	72.90	73.08	72.80	73.71	73.44	74.62	73.49	72.54	69.77
Furniture and fixtures	83.40	81.19	81.39	79.60	78.01	79.19	79.19	79.00	81.58	80.16	81.76	81.54	80.54	79.37	76.40
Household furniture	78.62	76.52	76.70	74.99	74.21	75.36	74.96	74.19	78.02	76.63	77.38	77.15	75.99	75.07	71.46
Office furniture	-------	94.76	96.93	94.71	92.63	93.15	92.29	94.07	95.40	91.77	91.17	92.57	92.34	92.57	90.54
Partitions, office and store fixtures	-------	108.05	105.37	101.75	98.39	101.20	100.58	101.85	99.04	100.65	107.01	107.87	108.38	103.57	100.53
Other furniture and fixtures	83.43	82.42	82.82	82.42	81.19	79.98	81.18	80.78	81.81	81.20	81.61	82.00	81.79	81.41	79.99
	Average weekly hours														
Ordnance and accessories	40.9	40.6	41.2	41.0	40.4	40.9	41.4	41.4	41.7	41.3	41.0	41.1	40.9	41.1	40.9
Ammunition, except for small arms	41.0	40.6	41.4	40.8	40.5	40.5	41.0	40.9	41.4	41.1	40.8	40.9	40.7	40.8	41.1
Sighting and fire control equipment	-------	39.9	39.9	40.4	39.6	42.1	42.2	42.5	43.6	43.1	42.0	41.8	41.2	42.2	40.3
Other ordnance and accessories	41.1	40.9	41.2	41.6	40.5	41.3	41.7	41.9	41.6	41.1	41.1	41.2	41.0	41.3	40.9
Lumber and wood products, except furniture	41.0	40.7	40.9	39.9	39.6	39.3	39.4	39.3	39.2	39.5	40.0	40.8	40.9	39.8	39.4
Sawmills and planing mills	40.9	40.7	40.9	40.2	39.9	39.1	38.8	39.0	38.5	39.3	40.1	40.7	40.7	39.4	39.2
Millwork, plywood, and related products	42.4	41.9	41.8	41.7	40.9	40.9	40.6	40.7	40.9	40.9	40.6	41.5	41.6	40.9	40.4
Wooden containers	41.5	42.1	41.4	41.4	40.2	39.4	39.1	38.8	39.2	40.1	40.4	40.5	40.9	40.1	39.7
Miscellaneous wood products	41.2	40.5	40.9	40.6	40.2	40.4	40.5	40.6	40.0	40.5	40.8	41.0	40.6	40.3	40.1
Furniture and fixtures	41.7	40.8	40.9	40.2	39.8	40.2	40.2	40.1	41.2	40.9	41.5	41.6	41.3	40.7	40.0
Household furniture	41.6	40.7	40.8	40.1	39.9	40.3	40.3	40.1	41.5	41.2	41.6	41.7	41.3	40.8	39.7
Office furniture	-------	41.2	41.6	41.0	40.1	40.5	40.3	40.9	41.3	39.9	40.7	40.6	40.5	40.6	40.6
Partitions, office and store fixtures	-------	41.4	41.0	39.9	39.2	40.0	39.6	40.1	39.3	40.1	41.8	42.3	42.5	41.1	40.7
Other furniture and fixtures	41.1	40.6	40.8	40.4	39.8	39.4	39.6	39.6	40.3	40.2	40.4	41.0	41.1	40.3	40.4
	Average hourly earnings														
Ordnance and accessories	$2.89	$2.89	$2.87	$2.87	$2.85	$2.89	$2.89	$2.89	$2.88	$2.85	$2.83	$2.84	$2.82	$2.83	$2.77
Ammunition, except for small arms	2.91	2.92	2.89	2.88	2.87	2.91	2.91	2.91	2.90	2.88	2.86	2.87	2.85	2.86	2.81
Sighting and fire control equipment	-------	3.05	3.01	3.02	3.01	3.04	3.04	3.02	3.01	2.99	2.99	3.00	2.98	2.99	2.91
Other ordnance and accessories	2.81	2.81	2.80	2.81	2.77	2.81	2.82	2.81	2.79	2.76	2.72	2.72	2.70	2.72	2.65
Lumber and wood products, except furniture	2.05	2.03	2.02	2.02	1.98	1.98	1.96	1.96	2.00	2.00	1.99	2.02	2.00	1.99	1.95
Sawmills and planing mills	1.88	1.86	1.86	1.84	1.80	1.82	1.82	1.82	1.85	1.84	1.82	1.85	1.83	1.82	1.76
Millwork, plywood, and related products	2.17	2.15	2.15	2.16	2.15	2.15	2.14	2.14	2.15	2.14	2.14	2.15	2.14	2.13	2.09
Wooden containers	1.65	1.67	1.67	1.65	1.66	1.65	1.66	1.65	1.64	1.64	1.65	1.68	1.67	1.65	1.59
Miscellaneous wood products	1.84	1.83	1.83	1.82	1.80	1.81	1.80	1.80	1.82	1.82	1.80	1.82	1.81	1.80	1.74
Furniture and fixtures	2.00	1.99	1.99	1.98	1.96	1.97	1.97	1.97	1.98	1.96	1.97	1.96	1.95	1.95	1.91
Household furniture	1.89	1.88	1.88	1.87	1.86	1.87	1.86	1.85	1.88	1.86	1.86	1.85	1.84	1.84	1.80
Office furniture	-------	2.30	2.33	2.31	2.31	2.30	2.29	2.30	2.31	2.30	2.24	2.28	2.28	2.28	2.23
Partitions, office and store fixtures	-------	2.61	2.57	2.55	2.51	2.53	2.54	2.54	2.52	2.51	2.56	2.55	2.55	2.52	2.47
Other furniture and fixtures	2.03	2.03	2.03	2.04	2.04	2.03	2.05	2.04	2.03	2.02	2.02	2.00	1.99	2.02	1.98

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. 1228.

Industry	1963								1962					Annual average	
	Aug.[2]	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962	1961
	Average weekly earnings														
Manufacturing—Continued															
Durable goods—Continued															
Stone, clay, and glass products	$103.42	$103.66	$104.41	$103.07	$101.11	$99.47	$97.36	$97.36	$97.84	$100.53	$100.67	$101.33	$101.40	$98.57	$95.24
Flat glass	-------	132.72	139.40	133.51	131.66	130.65	127.92	129.26	130.42	133.06	127.59	126.94	125.78	126.01	122.68
Glass and glassware, pressed or blown	100.75	100.15	101.00	100.10	98.00	100.40	100.65	100.15	99.14	99.38	98.49	97.76	98.09	98.33	95.44
Cement, hydraulic	116.31	118.16	116.05	116.48	119.99	112.87	111.63	112.16	111.50	115.21	114.26	116.62	115.93	112.75	106.52
Structural clay products	90.92	90.27	90.92	90.71	90.27	86.67	84.77	85.41	85.41	86.90	87.56	87.34	87.56	86.69	84.45
Pottery and related products	-------	89.24	90.16	90.46	88.37	89.31	88.14	87.69	88.88	89.65	89.87	89.20	87.25	86.85	82.13
Concrete, gypsum, and plaster products	110.41	110.70	110.01	108.62	103.92	99.48	93.93	94.40	95.60	102.96	105.36	108.14	108.66	100.96	97.10
Other stone and mineral products	101.75	102.59	102.92	102.26	100.61	100.12	99.23	98.00	98.74	99.06	99.14	99.87	99.95	98.33	95.24
Primary metal industries	123.02	125.77	129.55	127.30	127.82	122.91	122.21	120.80	120.39	117.91	116.92	119.10	115.84	119.80	114.84
Blast furnace and basic steel products	131.67	135.20	140.70	138.28	141.70	131.27	129.89	128.44	126.68	123.39	122.42	125.00	122.68	127.40	122.92
Iron and steel foundries	109.34	111.37	115.45	112.98	110.15	110.15	110.83	108.14	109.88	107.73	106.52	107.45	103.34	106.52	98.81
Nonferrous smelting and refining	119.11	118.12	117.45	118.43	120.12	117.31	116.33	116.20	117.32	116.75	114.80	116.75	116.03	114.95	110.16
Nonferrous rolling, drawing, and extruding	118.44	118.72	120.83	118.72	115.23	116.34	116.34	116.89	118.43	116.62	115.09	116.47	113.98	116.05	111.76
Nonferrous foundries	106.34	105.82	107.38	106.45	105.01	106.45	106.45	107.38	106.81	105.01	105.41	104.60	102.11	104.55	100.75
Miscellaneous primary metal industries	129.58	128.03	129.16	127.10	125.05	126.99	127.60	129.98	129.25	125.14	123.49	126.00	123.07	124.50	117.16
	Average weekly hours														
Stone, clay, and glass products	41.7	41.8	42.1	41.9	41.1	40.6	39.9	39.9	40.1	41.2	41.6	41.7	41.9	40.9	40.7
Flat glass	-------	39.5	41.0	39.5	39.3	39.0	38.3	38.7	38.7	39.6	38.9	38.7	38.7	38.3	38.7
Glass and glassware, pressed or blown	40.3	39.9	40.4	40.2	39.2	40.0	40.1	39.9	40.3	40.4	40.2	39.9	40.2	40.3	40.1
Cement, hydraulic	41.1	41.9	41.3	41.6	42.1	40.6	40.3	40.2	40.4	41.0	41.1	41.5	41.7	41.0	40.5
Structural clay products	41.9	41.6	41.9	41.8	41.6	40.5	39.8	40.1	40.1	40.8	41.3	41.2	41.3	40.7	40.6
Pottery and related products	-------	38.8	39.2	39.5	39.1	39.0	39.0	38.8	39.5	40.2	40.3	40.0	39.3	39.3	38.2
Concrete, gypsum, and plaster products	44.7	45.0	44.9	44.7	43.3	41.8	39.8	40.0	40.0	42.9	43.9	44.5	44.9	42.6	42.4
Other stone and mineral products	40.7	41.2	41.5	41.4	40.9	40.7	40.5	40.0	40.3	40.6	40.8	41.1	41.3	40.8	40.7
Primary metal industries	40.6	41.1	42.2	41.6	41.5	40.7	40.6	40.4	40.4	39.7	39.5	40.1	39.4	40.2	39.6
Blast furnace and basic steel products	39.9	40.6	42.0	41.4	41.8	39.9	39.6	39.4	39.1	38.2	37.9	38.7	38.1	39.2	38.9
Iron and steel foundries	40.8	41.4	42.6	42.0	41.1	41.1	41.2	40.5	41.0	40.5	40.5	40.7	39.9	40.5	38.9
Nonferrous smelting and refining	41.5	41.3	41.5	41.7	42.0	41.6	41.4	41.5	41.9	41.4	41.0	41.4	41.0	41.2	40.8
Nonferrous rolling, drawing, and extruding	42.3	42.4	43.0	42.4	41.6	42.0	42.0	42.2	42.6	42.1	41.7	42.2	41.6	42.2	41.7
Nonferrous foundries	40.9	40.7	41.3	41.1	40.7	41.1	41.1	41.3	41.4	40.7	40.7	40.7	40.2	41.0	40.3
Miscellaneous primary metal industries	41.8	41.3	41.8	41.4	41.0	41.5	41.7	42.2	42.1	41.3	41.3	42.0	41.3	41.5	40.4
	Average hourly earnings														
Stone, clay, and glass products	$2.48	$2.48	$2.48	$2.46	$2.46	$2.45	$2.44	$2.44	$2.44	$2.44	$2.42	$2.43	$2.42	$2.41	$2.34
Flat glass	-------	3.36	3.40	3.38	3.35	3.35	3.34	3.34	3.37	3.36	3.28	3.28	3.25	3.29	3.17
Glass and glassware, pressed or blown	2.50	2.51	2.50	2.49	2.50	2.51	2.51	2.51	2.46	2.46	2.45	2.45	2.44	2.44	2.38
Cement, hydraulic	2.83	2.82	2.81	2.80	2.85	2.78	2.77	2.79	2.76	2.81	2.78	2.81	2.78	2.75	2.63
Structural clay products	2.17	2.17	2.17	2.17	2.17	2.14	2.13	2.13	2.13	2.13	2.12	2.12	2.12	2.13	2.08
Pottery and related products	-------	2.30	2.30	2.29	2.26	2.29	2.26	2.26	2.25	2.23	2.23	2.23	2.22	2.21	2.15
Concrete, gypsum, and plaster products	2.47	2.46	2.45	2.43	2.40	2.38	2.36	2.36	2.39	2.40	2.40	2.43	2.42	2.37	2.29
Other stone and mineral products	2.50	2.49	2.48	2.47	2.46	2.46	2.45	2.45	2.45	2.44	2.43	2.43	2.42	2.41	2.34
Primary metal industries	3.03	3.06	3.07	3.06	3.08	3.02	3.01	2.99	2.98	2.97	2.96	2.97	2.94	2.98	2.90
Blast furnace and basic steel products	3.30	3.33	3.35	3.34	3.39	3.29	3.28	3.26	3.24	3.23	3.23	3.23	3.22	3.25	3.16
Iron and steel foundries	2.68	2.69	2.71	2.69	2.68	2.68	2.69	2.67	2.68	2.66	2.63	2.64	2.59	2.63	2.54
Nonferrous smelting and refining	2.87	2.86	2.83	2.84	2.86	2.82	2.81	2.80	2.80	2.82	2.80	2.82	2.83	2.79	2.70
Nonferrous rolling, drawing, and extruding	2.80	2.80	2.81	2.80	2.77	2.77	2.77	2.77	2.78	2.77	2.76	2.76	2.74	2.75	2.68
Nonferrous foundries	2.60	2.60	2.60	2.59	2.58	2.59	2.59	2.60	2.58	2.58	2.59	2.57	2.54	2.55	2.50
Miscellaneous primary metal industries	3.10	3.10	3.09	3.07	3.05	3.06	3.06	3.08	3.07	3.03	2.99	3.00	2.98	3.00	2.90

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. 1228.

Industry	1963								1962					Annual average	
	Aug.[2]	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962	1961
Average weekly earnings															
Manufacturing—Continued															
Durable goods—Continued															
Fabricated metal products	$109.36	$107.53	$108.84	$108.32	$104 75	$105.67	$105.01	$105.52	$106.30	$105.22	$105.73	$106.66	$105.32	$104.81	$100.85
Metal cans	132.24	131.46	131.94	128.65	125.14	122.59	120.88	122.29	122.48	119.99	123.26	133.11	131.50	126.30	121.80
Cutlery, hand tools, and general hardware	103.07	100.10	103.98	104.24	99.70	101.75	101.59	102.59	103.09	102.51	100.86	99.96	96.48	99.14	93.53
Heating equipment and plumbing fixtures	104.24	102.72	103.22	100.15	97.86	98.60	98.95	98.95	98.60	99.20	101.09	101.34	100.94	98.55	94.95
Fabricated structural metal products	110.04	108.58	108.84	107.53	104.64	104.12	103.60	103.46	104.64	104.34	105.78	106.97	107.07	104.60	102.06
Screw machine products, bolts, etc	108.20	106.75	108.80	108.38	105.08	106.26	107.19	108.46	108.46	106.09	104.75	107.18	105.00	106.00	98.49
Metal stampings	115.63	113.30	116.75	116.47	112.06	113.57	113.15	113.01	113.82	113.55	112.56	112.56	111.87	111.76	105.41
Coating, engraving, and allied services	94.83	94.13	95.63	95.63	92.80	94.12	91.53	92.39	93.98	92.70	93.79	92.55	90.94	93.34	90.32
Miscellaneous fabricated wire products	97.10	95.75	97.64	97.58	95.51	97.34	96.93	98.06	97.70	95.76	96.64	97.29	96.64	96.64	94.07
Miscellaneous fabricated metal products	106.08	105.97	105.93	106.45	104.23	104.86	104.09	104.75	105.67	105.01	105.41	105.67	102.77	103.53	100.19
Machinery	115.23	115.23	117.04	115.79	113.85	115.51	114.82	114.40	114.53	112.75	112.88	112.74	112.32	113.01	107.42
Engines and turbines	124.34	122.31	123.73	122.41	119.30	124.23	123.11	120.99	122.40	121.20	121.20	121.20	120.09	119.88	114.80
Farm machinery and equipment	-------	110.83	111.79	109.07	111.66	112.61	113.16	111.66	110.43	108.14	108.41	107.46	107.18	107.59	102.66
Construction and related machinery	115.79	115.37	117.18	115.93	113.57	113.85	113.44	112.75	112.88	111.66	112.75	112.61	112.88	112.34	106.52
Metalworking machinery and equipment	126.26	128.01	130.52	128.90	128.17	130.52	128.76	127.01	126.87	123.25	122.69	123.55	123.55	125.57	117.04
Special industry machinery	109.30	108.94	110.33	109.13	107.17	108.88	107.94	108.71	109.31	106.68	106.68	108.38	105.59	106.77	101.43
General industrial machinery	112.88	112.88	114.54	112.61	110.16	110.98	110.70	110.43	112.06	111.52	111.38	110.97	110.83	110.83	105.04
Office, computing, and accounting machines	116.85	116.85	116.57	115.59	114.33	115.30	114.90	114.21	114.49	112.84	112.72	113.68	112.19	113.15	111.24
Service industry machines	100.55	102.31	103.57	103.98	101.15	102.31	100.90	100.90	100.35	101.15	99.94	100.44	99.96	100.12	95.84
Miscellaneous machinery	109.72	110.14	112.99	112.04	109.36	110.72	109.62	111.09	112.14	110.14	110.24	109.82	108.29	109.13	104.00
Average weekly hours															
Fabricated metal products	41.9	41.2	41.7	41.5	40.6	40.8	40.7	40.9	41.2	41.1	41.3	41.5	41.3	41.1	40.5
Metal cans	43.5	43.1	43.4	42.6	41.3	41.0	40.7	40.9	41.1	40.4	41.5	43.5	43.4	42.1	42.0
Cutlery, hand tools, and general hardware	40.9	40.2	41.1	41.2	40.2	40.7	40.8	41.2	41.4	41.5	41.0	40.8	40.2	40.8	39.8
Heating equipment and plumbing fixtures	41.2	40.6	40.8	39.9	39.3	39.6	39.9	39.9	39.6	40.0	40.6	40.7	40.7	39.9	39.4
Fabricated structural metal products	42.0	41.6	41.7	41.2	40.4	40.2	40.0	40.1	40.4	40.6	41.0	41.3	41.5	40.7	40.5
Screw machine products, bolts, etc	42.1	41.7	42.5	42.5	41.7	42.0	42.2	42.7	42.7	42.1	41.9	42.7	42.0	42.4	40.7
Metal stampings	42.2	41.5	42.3	42.2	41.2	41.6	41.6	41.7	42.0	41.9	42.0	42.0	41.9	41.7	40.7
Coating, engraving, and allied services	40.7	40.4	41.4	41.4	40.7	41.1	40.5	40.7	41.4	41.2	41.5	41.5	40.6	41.3	40.5
Miscellaneous fabricated wire products	40.8	40.4	41.2	41.0	40.3	40.9	40.9	41.2	41.4	41.1	41.3	41.4	41.3	41.3	40.9
Miscellaneous fabricated metal products	40.8	40.6	40.9	41.1	40.4	40.8	40.5	40.6	40.8	40.7	40.7	40.8	40.3	40.6	40.4
Machinery	41.6	41.6	42.1	41.8	41.4	41.7	41.6	41.6	41.8	41.3	41.5	41.6	41.6	41.7	41.0
Engines and turbines	40.9	40.5	40.7	40.4	39.9	41.0	40.9	40.6	40.8	40.4	40.4	40.4	40.3	40.5	40.0
Farm machinery and equipment	-------	40.3	40.8	40.1	40.9	41.1	41.3	40.9	40.6	40.2	40.3	40.4	40.6	40.6	40.1
Construction and related machinery	41.5	41.5	42.0	41.7	41.0	41.1	41.1	41.0	40.9	40.9	41.3	41.4	41.5	41.3	40.5
Metalworking machinery and equipment	42.8	43.1	43.8	43.4	43.3	43.8	43.5	43.2	43.3	42.5	42.6	42.9	42.9	43.3	41.8
Special industry machinery	42.2	41.9	42.6	42.3	41.7	42.2	42.0	42.3	42.7	42.0	42.0	42.5	41.9	42.2	41.4
General industrial machinery	40.9	40.9	41.5	41.1	40.5	40.8	40.7	40.9	41.2	41.0	41.1	41.1	41.2	41.2	40.4
Office, computing, and accounting machines	41.0	41.0	40.9	40.7	40.4	40.6	40.6	40.5	40.6	40.3	40.4	40.6	40.5	40.7	41.2
Service industry machines	39.9	40.6	41.1	41.1	40.3	40.6	40.2	40.2	40.3	40.3	40.3	40.5	40.8	40.7	40.1
Miscellaneous machinery	42.2	42.2	42.8	42.6	41.9	42.1	42.0	42.4	42.8	42.2	42.4	42.4	42.3	42.3	41.6
Average hourly earnings															
Fabricated metal products	$2.61	$2.61	$2.61	$2.61	$2.58	$2.59	$2.58	$2.58	$2.58	$2.56	$2.56	$2.57	$2.55	$2.55	$2.49
Metal cans	3.04	3.05	3.04	3.02	3.03	2.99	2.97	2.99	2.98	2.97	2.97	3.06	3.03	3.00	2.90
Cutlery, hand tools, and general hardware	2.52	2.49	2.53	2.53	2.48	2.50	2.49	2.49	2.49	2.47	2.46	2.45	2.40	2.43	2.35
Heating equipment and plumbing fixtures	2.53	2.53	2.53	2.51	2.49	2.49	2.48	2.48	2.49	2.48	2.49	2.49	2.48	2.47	2.41
Fabricated structural metal products	2.62	2.61	2.61	2.61	2.59	2.59	2.59	2.58	2.59	2.57	2.58	2.59	2.58	2.57	2.52
Screw machine products, bolts, etc	2.57	2.56	2.56	2.55	2.52	2.53	2.54	2.54	2.54	2.52	2.50	2.51	2.50	2.50	2.42
Metal stampings	2.74	2.73	2.76	2.76	2.72	2.73	2.72	2.71	2.71	2.71	2.68	2.68	2.67	2.68	2.59
Coating, engraving, and allied services	2.33	2.33	2.31	2.31	2.28	2.29	2.26	2.27	2.27	2.25	2.26	2.23	2.24	2.26	2.23
Miscellaneous fabricated wire products	2.38	2.37	2.37	2.38	2.37	2.38	2.37	2.38	2.36	2.33	2.34	2.35	2.34	2.34	2.30
Miscellaneous fabricated metal products	2.60	2.61	2.59	2.59	2.58	2.57	2.57	2.58	2.59	2.58	2.59	2.59	2.55	2.55	2.48
Machinery	2.77	2.77	2.78	2.77	2.75	2.77	2.76	2.75	2.74	2.73	2.72	2.71	2.70	2.71	2.62
Engines and turbines	3.04	3.02	3.04	3.03	2.99	3.03	3.01	2.98	3.00	3.00	3.00	3.00	2.98	2.96	2.87
Farm machinery and equipment	-------	2.75	2.74	2.72	2.73	2.74	2.74	2.73	2.72	2.69	2.69	2.66	2.64	2.65	2.56
Construction and related machinery	2.79	2.78	2.79	2.78	2.77	2.77	2.76	2.75	2.76	2.73	2.73	2.72	2.72	2.72	2.63
Metalworking machinery and equipment	2.95	2.97	2.98	2.97	2.96	2.98	2.96	2.94	2.93	2.90	2.88	2.88	2.88	2.90	2.80
Special industry machinery	2.59	2.60	2.59	2.58	2.57	2.58	2.57	2.57	2.56	2.54	2.54	2.55	2.52	2.53	2.45
General industrial machinery	2.76	2.76	2.76	2.74	2.72	2.72	2.72	2.70	2.72	2.72	2.71	2.70	2.69	2.69	2.60
Office, computing, and accounting machines	2.85	2.85	2.85	2.84	2.83	2.84	2.83	2.82	2.82	2.80	2.79	2.80	2.77	2.78	2.70
Service industry machines	2.52	2.52	2.52	2.53	2.51	2.52	2.51	2.51	2.49	2.51	2.48	2.48	2.45	2.46	2.39
Miscellaneous machinery	2.60	2.61	2.64	2.63	2.61	2.63	2.61	2.62	2.62	2.61	2.60	2.59	2.56	2.58	2.50

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. 1228.

Industry	1963								1962					Annual average	
	Aug.[2]	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962	1961
	Average weekly earnings														
Manufacturing—Continued															
Durable goods—Continued															
Electrical equipment and supplies	$98.74	$99.14	$99.88	$98.74	$96.87	$97.84	$98.09	$97.93	$100.21	$98.66	$98.49	$99.22	$97.20	$97.44	$94.47
Electric distribution equipment	107.04	106.52	107.98	106.11	103.34	104.78	104.23	102.91	107.12	104.75	104.60	105.22	102.97	102.87	101.00
Electrical industrial apparatus	104.96	105.47	105.73	104.81	102.36	102.97	104.14	102.82	102.97	102.56	102.66	103.16	102.00	102.00	98.58
Household appliances	108.39	110.42	111.22	108.39	106.25	107.71	104.52	103.74	107.94	105.01	105.26	105.67	106.08	104.23	101.30
Electric lighting and wiring equipment	93.73	93.03	94.02	93.09	90.00	91.14	90.29	90.52	92.52	92.52	91.66	93.25	90.68	90.85	87.91
Radio and TV receiving sets	86.76	86.98	86.33	86.46	83.00	85.36	86.02	84.92	86.72	85.06	87.23	89.13	87.26	85.75	82.11
Communication equipment	105.60	105.20	106.92	105.99	103.88	106.11	107.30	107.27	109.15	107.53	107.27	108.32	105.67	106.97	102.72
Electronic components and accessories	83.79	82.35	82.76	82.97	82.14	83.58	82.35	82.37	83.20	82.59	82.40	83.02	81.39	82.00	80.40
Miscellaneous electrical equipment and supplies	103.97	106.75	109.82	106.23	102.94	103.34	107.27	110.72	111.41	108.42	109.62	107.49	101.40	106.66	97.11
Transportation equipment	121.39	125.28	126.90	125.76	121.54	123.85	123.14	124.74	129.73	128.27	126.10	124.07	118.78	122.22	113.40
Motor vehicles and equipment	123.41	129.81	132.62	131.89	125.44	128.29	127.38	129.63	138.40	136.89	132.54	130.59	121.06	127.67	114.69
Aircraft and parts	120.95	121.54	121.72	120.30	118.90	120.18	121.76	122.64	123.94	123.09	122.80	120.38	118.69	119.97	114.68
Ship and boat building and repairing	122.70	120.09	121.77	122.01	119.25	119.95	118.55	118.61	119.72	116.18	116.76	116.76	119.19	114.97	111.20
Railroad equipment	-------	125.36	122.91	119.80	119.10	121.88	115.84	118.89	115.54	114.46	115.34	118.89	119.69	118.10	108.11
Other transportation equipment	-------	94.24	93.86	93.21	91.17	88.66	87.60	85.46	86.72	84.24	88.29	88.99	89.42	86.22	83.71
	Average weekly hours														
Electrical equipment and supplies	40.3	40.3	40.6	40.3	39.7	40.1	40.2	40.3	40.9	40.6	40.7	41.0	40.5	40.6	40.2
Electric distribution equipment	40.7	40.5	40.9	40.5	39.9	40.3	40.4	40.2	41.2	40.6	40.7	41.1	40.7	40.5	40.4
Electrical industrial apparatus	41.0	41.2	41.3	41.1	40.3	40.7	41.0	40.8	40.7	40.7	40.9	41.1	40.8	40.8	40.4
Household appliances	40.9	41.2	41.5	40.9	40.4	40.8	40.2	39.9	41.2	40.7	40.8	40.8	40.8	40.4	40.2
Electric lighting and wiring equipment	40.4	40.1	40.7	40.3	39.3	39.8	39.6	39.7	40.4	40.4	40.2	40.9	40.3	40.2	39.6
Radio and TV receiving sets	39.8	39.9	39.6	39.3	37.9	38.8	39.1	38.6	39.6	39.2	40.2	40.7	40.4	39.7	39.1
Communication equipment	40.0	40.0	40.5	40.3	39.8	40.5	40.8	41.1	41.5	41.2	41.1	41.5	40.8	41.3	40.6
Electronic components and accessories	39.9	39.4	39.6	39.7	39.3	39.8	39.4	39.6	40.0	39.9	40.0	40.3	39.7	40.0	40.2
Miscellaneous electrical equipment and supplies	40.3	40.9	41.6	40.7	39.9	39.9	41.1	42.1	42.2	41.7	42.0	41.5	40.4	41.5	39.8
Transportation equipment	40.6	41.9	42.3	42.2	41.2	41.7	41.6	42.0	43.1	42.9	42.6	42.2	41.1	42.0	40.5
Motor vehicles and equipment	40.2	42.7	43.2	43.1	41.4	42.2	41.9	42.5	44.5	44.3	43.6	43.1	40.9	42.7	40.1
Aircraft and parts	41.0	41.2	41.4	41.2	41.0	41.3	41.7	42.0	42.3	42.3	42.2	41.8	41.5	41.8	41.4
Ship and boat building and repairing	40.9	40.3	41.0	41.5	40.7	40.8	40.6	40.9	41.0	40.2	40.4	40.4	41.1	40.2	40.0
Railroad equipment	-------	41.1	40.7	40.2	40.1	40.9	39.4	40.3	39.3	39.2	39.5	40.3	40.3	39.9	38.2
Other transportation equipment	-------	41.7	41.9	41.8	40.7	40.3	40.0	39.2	39.6	39.0	40.5	41.2	41.4	40.1	39.3
	Average hourly earnings														
Electrical equipment and supplies	$2.45	$2.46	$2.46	$2.45	$2.44	$2.44	$2.44	$2.43	$2.45	$2.43	$2.42	$2.42	$2.40	$2.40	$2.35
Electric distribution equipment	2.63	2.63	2.64	2.62	2.59	2.60	2.58	2.56	2.60	2.58	2.57	2.56	2.53	2.54	2.50
Electrical industrial apparatus	2.56	2.56	2.56	2.55	2.54	2.53	2.54	2.52	2.53	2.52	2.51	2.51	2.50	2.50	2.44
Household appliances	2.65	2.68	2.68	2.65	2.63	2.64	2.60	2.60	2.62	2.58	2.58	2.59	2.60	2.58	2.52
Electric lighting and wiring equipment	2.32	2.32	2.31	2.31	2.29	2.29	2.28	2.28	2.29	2.29	2.28	2.28	2.25	2.26	2.22
Radio and TV receiving sets	2.18	2.18	2.18	2.20	2.19	2.20	2.20	2.20	2.19	2.17	2.17	2.19	2.16	2.16	2.10
Communication equipment	2.64	2.63	2.64	2.63	2.61	2.62	2.63	2.61	2.63	2.61	2.61	2.61	2.59	2.59	2.53
Electronic components and accessories	2.10	2.09	2.09	2.09	2.09	2.10	2.09	2.08	2.08	2.07	2.06	2.06	2.05	2.05	2.00
Miscellaneous electrical equipment and supplies	2.58	2.61	2.64	2.61	2.58	2.59	2.61	2.63	2.64	2.60	2.61	2.59	2.51	2.57	2.44
Transportation equipment	2.99	2.99	3.00	2.98	2.95	2.97	2.96	2.97	3.01	2.99	2.96	2.94	2.89	2.91	2.80
Motor vehicles and equipment	3.07	3.04	3.07	3.06	3.03	3.04	3.04	3.05	3.11	3.09	3.04	3.03	2.96	2.99	2.86
Aircraft and parts	2.95	2.95	2.94	2.92	2.90	2.91	2.92	2.92	2.93	2.91	2.91	2.88	2.86	2.87	2.77
Ship and boat building and repairing	3.00	2.98	2.97	2.94	2.93	2.94	2.92	2.90	2.92	2.89	2.89	2.89	2.90	2.86	2.78
Railroad equipment	-------	3.05	3.02	2.98	2.97	2.98	2.94	2.95	2.94	2.92	2.92	2.95	2.97	2.96	2.83
Other transportation equipment	-------	2.26	2.24	2.23	2.24	2.20	2.19	2.18	2.19	2.16	2.18	2.16	2.16	2.15	2.13

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. 1228.

Industry	1963								1962					Annual average	
	Aug.[2]	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962	1961
	Average weekly earnings														
Manufacturing—Continued															
Durable goods—Continued															
Instruments and related products	$101.34	$100.44	$101.84	$100.94	$99.14	$101.18	$101.18	$99.88	$101.52	$101.35	$99.96	$100.21	$99.63	$99.80	$96.87
Engineering and scientific instruments	-------	114.45	119.11	115.87	114.86	118.69	119.26	117.29	117.88	118.16	117.88	117.59	117.60	115.64	112.07
Mechanical measuring and control devices	102.50	100.85	103.07	102.56	100.10	101.09	99.70	98.74	101.68	100.44	99.38	98.80	98.74	98.98	95.91
Optical and ophthalmic goods	93.41	92.55	93.44	94.08	93.02	93.66	93.02	92.80	92.80	90.42	91.08	89.84	88.78	89.62	86.92
Surgical, medical, and dental equipment	86.07	85.86	86.30	84.21	82.58	83.39	83.79	82.97	84.44	84.85	83.41	85.27	85.07	84.45	81.81
Photographic equipment and supplies	-------	114.80	113.40	113.15	111.78	114.26	115.51	113.44	116.06	117.17	113.16	113.02	112.19	114.26	110.09
Watches and clocks	-------	81.72	82.50	84.14	82.50	83.53	83.74	82.29	83.13	83.82	83.79	84.00	83.41	83.37	80.58
Miscellaneous manufacturing industries	79.60	78.98	80.19	79.40	79.17	80.39	80.19	79.58	80.19	78.41	78.41	78.60	77.81	78.21	75.84
Jewelry, silverware, and plated ware	86.72	86.29	88.70	87.02	85.54	86.40	85.36	85.60	91.56	88.97	86.67	85.26	83.58	84.82	81.81
Toys, amusement, and sporting goods	-------	71.81	72.17	72.37	71.63	73.14	73.34	73.15	71.44	70.98	72.47	71.68	70.74	71.37	70.17
Pens, pencils, office and art materials	-------	77.21	79.38	77.41	76.43	77.02	78.59	76.44	76.76	75.98	75.55	75.52	74.61	74.82	72.86
Costume jewelry, buttons, and notions	-------	70.59	74.19	72.89	71.97	73.05	72.65	71.39	72.47	69.30	70.59	71.64	70.88	71.68	68.78
Other manufacturing industries	86.40	85.72	86.58	86.00	85.10	86.40	85.97	85.14	86.22	85.20	85.01	85.86	84.40	84.82	81.78
	Average weekly hours														
Instruments and related products	40.7	40.5	40.9	40.7	40.3	40.8	40.8	40.6	41.1	41.2	40.8	40.9	41.0	40.9	40.7
Engineering and scientific instruments	-------	40.3	41.5	40.8	40.3	41.5	41.7	41.3	41.8	41.9	41.8	41.7	42.0	41.3	40.9
Mechanical measuring and control devices	41.0	40.5	40.9	40.7	40.2	40.6	40.2	40.3	41.0	40.5	40.4	40.0	40.3	40.4	40.3
Optical and ophthalmic goods	41.7	41.5	41.9	42.0	41.9	42.0	41.9	41.8	41.8	41.1	41.4	41.4	41.1	41.3	41.0
Surgical, medical, and dental equipment	40.6	40.5	40.9	40.1	39.7	39.9	39.9	39.7	40.4	40.6	40.1	40.8	40.9	40.6	40.3
Photographic equipment and supplies	-------	41.0	40.5	40.7	40.5	41.1	41.4	41.1	41.9	42.3	41.3	41.4	41.4	41.7	41.7
Watches and clocks	-------	39.1	39.1	39.5	39.1	39.4	39.5	39.0	39.4	40.3	39.9	40.0	40.1	39.7	39.5
Miscellaneous manufacturing industries	39.6	39.1	39.7	39.5	39.0	39.6	39.5	39.2	39.7	39.6	39.8	40.1	39.7	39.7	39.5
Jewelry, silverware, and plated ware	39.6	39.4	40.5	40.1	39.6	40.0	39.7	40.0	42.0	41.0	40.5	40.6	39.8	40.2	40.3
Toys, amusement, and sporting goods	-------	38.4	38.8	38.7	38.1	38.7	38.4	38.3	38.0	39.0	39.6	39.6	39.3	39.0	39.2
Pens, pencils, office and art materials	-------	39.8	40.5	39.9	39.6	39.7	40.3	39.4	40.4	40.2	40.4	40.3	39.9	39.8	39.6
Costume jewelry, buttons, and notions	-------	39.0	40.1	39.4	38.9	39.7	39.7	38.8	39.6	38.5	39.0	39.8	39.6	39.6	39.3
Other manufacturing industries	40.0	39.5	39.9	40.0	39.4	40.0	39.8	39.6	40.1	40.0	40.1	40.5	40.0	40.2	39.7
	Average hourly earnings														
Instruments and related products	$2.49	$2.48	$2.49	$2.48	$2.46	$2.48	$2.48	$2.46	$2.47	$2.46	$2.45	$2.45	$2.43	$2.44	$2.38
Engineering and scientific instruments	-------	2.84	2.87	2.84	2.85	2.86	2.86	2.84	2.82	2.82	2.82	2.82	2.80	2.80	2.74
Mechanical measuring and control devices	2.50	2.49	2.52	2.52	2.49	2.49	2.48	2.45	2.48	2.48	2.46	2.47	2.45	2.45	2.38
Optical and ophthalmic goods	2.24	2.23	2.23	2.24	2.22	2.23	2.22	2.22	2.22	2.20	2.20	2.17	2.16	2.17	2.12
Surgical, medical, and dental equipment	2.12	2.12	2.11	2.10	2.08	2.09	2.10	2.09	2.09	2.09	2.08	2.09	2.08	2.08	2.03
Photographic equipment and supplies	-------	2.80	2.80	2.78	2.76	2.78	2.79	2.76	2.77	2.77	2.74	2.73	2.71	2.74	2.64
Watches and clocks	-------	2.09	2.11	2.13	2.11	2.12	2.12	2.11	2.11	2.08	2.10	2.10	2.08	2.10	2.04
Miscellaneous manufacturing industries	2.01	2.02	2.02	2.01	2.03	2.03	2.03	2.03	2.02	1.98	1.97	1.96	1.96	1.97	1.92
Jewelry, silverware, and plated ware	2.19	2.19	2.19	2.17	2.16	2.16	2.15	2.14	2.18	2.17	2.14	2.10	2.10	2.11	2.03
Toys, amusement, and sporting goods	-------	1.87	1.86	1.87	1.88	1.89	1.91	1.91	1.88	1.82	1.83	1.81	1.80	1.83	1.79
Pens, pencils, office and art materials	-------	1.94	1.96	1.94	1.93	1.94	1.95	1.94	1.90	1.89	1.87	1.87	1.87	1.88	1.84
Costume jewelry, buttons, and notions	-------	1.81	1.85	1.85	1.85	1.84	1.83	1.84	1.83	1.80	1.81	1.80	1.79	1.81	1.75
Other manufacturing industries	2.16	2.17	2.17	2.15	2.16	2.16	2.16	2.15	2.15	2.13	2.12	2.12	2.11	2.11	2.06

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. 1228.

Industry	1963								1962					Annual average	
	Aug.[2]	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962	1961
Manufacturing—Continued	**Average weekly earnings**														
Nondurable goods															
Food and kindred products	$93.98	$95.87	$95.17	$94.66	$92.40	$93.32	$92.63	$92.52	$93.71	$92.89	$90.98	$92.57	$91.05	$91.62	$88.75
Meat products	99.39	101.60	101.43	101.11	97.66	98.85	97.46	100.19	102.26	102.09	99.39	98.98	97.61	98.66	96.52
Dairy products	99.03	99.92	99.92	98.33	97.02	97.48	96.79	97.29	97.33	96.64	96.22	98.01	95.63	96.05	93.08
Canned and preserved food, except meats	-------	75.46	73.06	74.03	72.96	74.84	73.26	73.13	71.99	70.12	72.77	78.69	75.81	73.53	70.67
Grain mill products	107.14	107.87	105.33	103.01	99.49	101.99	102.93	103.64	104.58	105.30	103.74	104.20	103.06	101.92	99.01
Bakery products	94.37	96.17	95.53	94.19	92.00	91.37	91.31	90.68	92.29	93.61	92.11	93.89	92.62	91.30	88.04
Sugar	-------	107.68	104.49	110.14	105.18	104.75	101.18	96.93	96.30	96.93	88.26	102.75	102.83	97.75	95.27
Confectionery and related products	81.39	79.20	81.00	77.62	75.64	77.62	76.64	76.44	77.59	77.18	78.14	80.12	77.78	76.61	73.42
Beverages	109.67	112.78	111.25	107.30	106.11	105.46	102.05	101.79	104.41	103.88	103.46	105.71	104.30	103.31	99.85
Miscellaneous food and kindred products	95.40	93.44	92.57	92.60	90.67	91.76	92.86	92.65	92.88	92.88	91.37	91.81	91.59	91.38	87.34
Tobacco manufactures	73.66	79.97	81.81	78.17	68.71	73.11	69.70	73.15	75.20	72.35	68.40	70.97	68.04	71.41	69.42
Cigarettes	-------	94.71	98.75	96.29	82.95	88.22	85.51	90.32	95.53	95.94	86.56	93.03	89.38	89.54	85.72
Cigars	-------	61.60	61.44	58.46	53.72	58.56	58.99	59.57	59.14	61.23	60.60	59.82	59.28	57.82	56.02
Textile mill products	69.60	68.68	69.70	69.02	67.26	68.51	68.00	67.26	68.45	68.45	68.45	68.11	68.21	68.21	65.04
Cotton broad woven fabrics	68.23	66.66	67.32	66.99	66.50	66.33	65.84	66.66	67.49	67.16	67.16	65.27	66.99	66.75	63.20
Silk and synthetic broad woven fabrics	73.53	73.27	74.39	74.91	72.49	73.35	73.35	73.35	74.99	74.47	74.47	73.35	74.04	73.44	68.72
Weaving and finishing broad woolens	72.76	76.49	77.04	76.31	74.21	76.86	76.49	75.35	74.80	73.67	74.44	76.80	77.96	77.17	72.28
Narrow fabrics and smallwares	69.55	71.28	72.04	71.28	69.26	69.77	70.18	70.69	70.69	70.07	70.07	71.45	70.76	70.93	68.11
Knitting	63.90	63.08	63.41	62.37	59.94	61.07	60.59	59.94	60.16	61.82	61.99	62.15	62.24	61.44	59.21
Finishing textiles, except wool and knit	79.00	76.26	80.89	79.29	78.35	80.09	79.15	75.48	80.46	80.04	77.98	76.59	75.26	78.07	74.70
Floor covering	-------	73.75	75.30	72.67	71.73	76.50	74.80	71.86	75.47	76.46	76.11	75.15	73.60	73.04	71.05
Yarn and thread	62.56	63.74	64.53	63.65	62.16	62.56	61.54	60.61	61.29	61.69	62.00	61.85	62.37	62.22	59.55
Miscellaneous textile goods	80.79	80.56	83.95	80.95	78.76	79.73	79.73	78.98	80.73	81.12	79.73	79.32	78.72	78.91	75.36
	Average weekly hours														
Food and kindred products	41.4	41.5	41.2	40.8	40.0	40.4	40.1	40.4	41.1	41.1	40.8	41.7	41.2	40.9	40.9
Meat products	40.9	41.3	41.4	41.1	39.7	39.7	39.3	40.4	41.4	41.5	40.9	40.9	40.5	40.6	40.9
Dairy products	42.5	42.7	42.7	42.2	42.0	42.2	41.9	42.3	42.5	42.2	42.2	42.8	42.5	42.5	42.5
Canned and preserved food, except meats	-------	39.1	36.9	37.2	36.3	37.8	37.0	37.5	37.3	37.3	38.3	41.2	39.9	38.7	38.2
Grain mill products	45.4	46.1	45.4	44.4	42.7	43.4	43.8	44.1	44.5	45.0	45.3	45.5	45.6	44.7	44.8
Bakery products	40.5	41.1	41.0	40.6	40.0	39.9	39.7	39.6	40.3	40.7	40.4	41.0	40.8	40.4	40.2
Sugar	-------	41.9	41.3	42.2	40.3	41.9	40.8	40.9	46.3	46.6	40.3	41.6	41.8	42.5	43.5
Confectionery and related products	40.9	39.6	40.5	39.2	38.2	39.6	39.3	39.4	40.2	40.2	40.7	41.3	40.3	39.9	39.9
Beverages	41.7	42.4	42.3	40.8	40.5	40.1	39.4	39.3	39.7	39.8	40.1	40.5	40.9	40.2	40.1
Miscellaneous food and kindred products	42.4	41.9	41.7	41.9	41.4	41.9	42.4	42.5	43.0	43.4	43.1	42.9	42.6	42.7	42.4
Tobacco manufactures	39.6	39.2	40.3	38.7	34.7	37.3	36.3	38.5	40.0	38.9	40.0	41.5	37.8	38.6	39.0
Cigarettes	-------	40.3	42.2	40.8	35.6	37.7	36.7	39.1	41.0	41.0	37.8	40.1	39.2	39.1	39.5
Cigars	-------	38.5	38.4	37.0	34.0	37.3	37.1	37.7	38.4	39.0	38.6	38.1	38.0	37.3	37.6
Textile mill products	40.7	40.4	41.0	40.6	39.8	40.3	40.0	39.8	40.5	40.5	40.5	40.3	40.6	40.6	39.9
Cotton broad woven fabrics	41.1	40.4	40.8	40.6	40.3	40.2	39.9	40.4	40.9	40.7	40.7	39.8	40.6	40.7	40.0
Silk and synthetic broad woven fabrics	42.5	42.6	43.0	43.3	41.9	42.4	42.4	42.4	43.1	42.8	42.8	42.4	42.8	42.7	41.4
Weaving and finishing broad woolens	40.2	41.8	42.1	41.7	41.0	42.0	41.8	41.4	41.1	40.7	40.9	42.2	42.6	42.4	41.3
Narrow fabrics and smallwares	40.2	41.2	41.4	41.2	40.5	40.8	40.8	41.1	41.1	40.5	40.5	41.3	40.9	41.0	40.3
Knitting	39.2	38.7	38.9	38.5	37.0	37.7	37.4	37.0	37.6	38.4	38.5	38.6	38.9	38.4	38.2
Finishing textiles, except wool and knit	41.8	41.0	42.8	42.4	41.9	42.6	42.1	40.8	42.8	42.8	41.7	41.4	40.9	42.2	41.5
Floor covering	-------	41.2	41.6	40.6	40.3	42.5	42.5	40.6	42.4	43.2	43.0	42.7	42.3	41.5	40.6
Yarn and thread	40.1	40.6	41.1	40.8	40.1	40.1	39.7	39.1	39.8	39.8	40.0	39.9	40.5	40.4	39.7
Miscellaneous textile goods	40.6	41.1	42.4	41.3	40.6	41.1	41.1	40.5	41.4	41.6	41.1	41.1	41.0	41.1	40.3
	Average hourly earnings														
Food and kindred products	$2.27	$2.31	$2.31	$2.32	$2.31	$2.31	$2.31	$2.29	$2.28	$2.26	$2.23	$2.22	$2.21	$2.24	$2.17
Meat products	2.43	2.46	2.45	2.46	2.46	2.49	2.48	2.48	2.47	2.46	2.43	2.42	2.41	2.43	2.36
Dairy products	2.33	2.34	2.34	2.33	2.31	2.31	2.31	2.30	2.29	2.29	2.28	2.29	2.25	2.26	2.19
Canned and preserved food, except meats	-------	1.93	1.98	1.99	2.01	1.98	1.98	1.95	1.93	1.88	1.90	1.91	1.90	1.90	1.85
Grain mill products	2.36	2.34	2.32	2.32	2.33	2.35	2.35	2.35	2.35	2.34	2.29	2.29	2.26	2.28	2.21
Bakery products	2.33	2.34	2.33	2.32	2.30	2.29	2.30	2.29	2.29	2.30	2.28	2.29	2.27	2.26	2.19
Sugar	-------	2.57	2.53	2.61	2.61	2.50	2.48	2.37	2.08	2.08	2.19	2.47	2.46	2.30	2.19
Confectionery and related products	1.99	2.00	2.00	1.98	1.98	1.96	1.95	1.94	1.93	1.92	1.92	1.94	1.93	1.92	1.84
Beverages	2.63	2.66	2.63	2.63	2.62	2.63	2.59	2.59	2.63	2.61	2.58	2.61	2.55	2.57	2.49
Miscellaneous food and kindred products	2.25	2.23	2.22	2.21	2.19	2.19	2.19	2.18	2.16	2.14	2.12	2.14	2.15	2.14	2.06
Tobacco manufactures	1.86	2.04	2.03	2.02	1.98	1.96	1.92	1.90	1.88	1.86	1.71	1.71	1.80	1.85	1.78
Cigarettes	-------	2.35	2.34	2.36	2.33	2.34	2.33	2.31	2.33	2.34	2.29	2.32	2.28	2.29	2.17
Cigars	-------	1.60	1.60	1.58	1.58	1.57	1.59	1.58	1.54	1.57	1.57	1.57	1.56	1.55	1.49
Textile mill products	1.71	1.70	1.70	1.70	1.69	1.70	1.70	1.69	1.69	1.69	1.69	1.69	1.68	1.68	1.63
Cotton broad woven fabrics	1.66	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.64	1.65	1.64	1.58
Silk and synthetic broad woven fabrics	1.73	1.72	1.73	1.73	1.73	1.73	1.73	1.73	1.74	1.74	1.74	1.73	1.73	1.72	1.66
Weaving and finishing broad woolens	1.81	1.83	1.83	1.83	1.81	1.83	1.83	1.82	1.82	1.81	1.82	1.82	1.83	1.82	1.75
Narrow fabrics and smallwares	1.73	1.73	1.74	1.73	1.71	1.71	1.72	1.72	1.72	1.73	1.73	1.73	1.73	1.73	1.69
Knitting	1.63	1.63	1.63	1.62	1.62	1.62	1.62	1.62	1.60	1.61	1.61	1.61	1.60	1.60	1.55
Finishing textiles, except wool and knit	1.89	1.86	1.89	1.87	1.87	1.88	1.88	1.85	1.88	1.87	1.87	1.85	1.84	1.85	1.80
Floor covering	-------	1.79	1.81	1.79	1.78	1.80	1.76	1.77	1.78	1.77	1.77	1.76	1.74	1.76	1.75
Yarn and thread	1.56	1.57	1.57	1.56	1.55	1.56	1.55	1.55	1.54	1.55	1.55	1.55	1.54	1.54	1.50
Miscellaneous textile goods	1.99	1.96	1.98	1.96	1.94	1.94	1.94	1.95	1.95	1.95	1.94	1.93	1.92	1.92	1.87

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. 1228.

Industry	1963								1962					Annual average	
	Aug.[2]	July[2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962	1961
Manufacturing—Continued															
Nondurable goods—Continued															
	Average weekly earnings														
Apparel and related products	$63.15	$61.71	$61.35	$61.52	$60.16	$62.59	$61.54	$60.35	$60.31	$61.18	$60.67	$62.05	$62.36	$61.18	$58.06
Men's and boys' suits and coats	77.59	74.57	78.17	74.03	70.76	73.48	72.93	71.57	73.13	72.54	71.57	74.09	73.89	72.54	67.78
Men's and boys' furnishings	54.58	54.34	54.05	53.91	52.48	53.28	52.91	52.85	52.82	53.77	53.77	54.48	54.81	53.53	49.87
Women's, misses', and juniors' outerwear	67.08	65.36	62.68	64.33	64.67	68.35	66.28	63.65	62.79	63.50	62.65	65.23	67.16	64.45	61.61
Women's and children's undergarments	57.51	55.94	56.00	56.15	53.86	56.52	55.02	54.11	55.33	57.38	56.70	57.22	56.47	55.48	54.02
Hats, caps, and millinery	-------	67.16	64.79	62.48	60.16	69.38	66.76	63.70	64.97	62.11	63.70	66.79	68.81	65.52	63.19
Girls' and children's outerwear	56.58	56.30	56.61	55.85	52.44	55.54	55.85	54.67	52.50	53.45	53.35	54.93	55.69	54.72	52.75
Fur goods and miscellaneous apparel	-------	64.98	64.80	63.19	58.47	62.83	61.06	63.19	67.16	67.71	66.07	66.25	64.78	64.98	62.65
Miscellaneous fabricated textile products	65.91	64.70	66.85	66.47	64.90	65.02	64.47	64.18	65.88	66.43	66.39	65.28	64.39	64.26	62.75
Paper and allied products	107.82	107.25	106.21	104.55	102.24	104.13	102.97	103.21	104.43	103.28	103.28	104.49	103.39	102.00	99.45
Paper and pulp	120.87	120.60	117.31	116.87	114.23	116.42	115.02	115.46	115.46	114.23	113.45	114.06	113.36	112.92	109.69
Paperboard	122.30	122.30	119.97	117.48	115.01	117.40	115.02	114.93	119.08	115.01	113.45	116.77	117.64	114.22	109.44
Converted paper and paperboard products	94.08	92.74	93.60	91.84	90.09	91.43	90.98	91.84	92.77	90.61	91.24	92.13	91.52	90.64	87.54
Paper board containers and boxes	98.14	96.28	97.44	94.99	92.75	94.30	92.97	92.80	94.66	94.69	96.22	97.78	95.37	94.24	91.10
Printing, publishing, and allied industries	110.88	110.30	110.69	110.21	108.97	110.21	108.20	107.16	109.24	108.49	107.82	109.24	108.29	107.62	105.05
Newspaper publishing and printing	111.91	111.91	113.20	113.52	111.19	109.74	108.42	107.16	113.22	113.09	111.13	111.75	109.99	110.35	107.45
Periodical publishing and printing	-------	118.59	115.49	112.58	113.58	116.18	112.97	106.65	113.15	111.15	113.43	117.86	115.54	111.95	109.81
Books	-------	106.40	105.97	106.14	103.28	103.57	100.98	100.84	100.04	97.64	98.11	102.16	101.18	99.85	99.06
Commercial printing	113.29	112.03	112.32	112.22	110.58	113.18	110.87	109.52	111.50	109.98	109.70	111.39	110.54	110.15	106.20
Bookbinding and related industries	87.81	86.85	88.24	88.69	87.17	88.01	85.95	86.71	87.01	85.19	85.86	88.53	87.30	85.91	82.35
Other publishing and printing industries	115.62	113.58	112.60	112.01	111.81	115.71	114.55	113.68	112.23	110.11	109.54	110.59	109.73	110.59	108.96
	Average weekly hours														
Apparel and related products	36.5	36.3	36.3	36.4	35.6	36.6	36.2	35.5	35.9	36.2	35.9	36.5	36.9	36.2	35.4
Men's and boys' suits and coats	36.6	36.2	37.4	37.2	36.1	37.3	37.4	36.7	37.5	37.2	36.7	37.8	37.7	37.2	35.3
Men's and boys' furnishings	37.9	38.0	37.8	37.7	36.7	37.0	37.0	36.7	37.2	37.6	37.6	38.1	38.6	37.7	36.4
Women's, misses', and juniors' outerwear	34.4	34.4	33.7	34.4	34.4	35.6	34.7	33.5	33.4	33.6	32.8	33.8	34.8	34.1	33.3
Women's and children's undergarments	37.1	36.8	36.6	36.7	35.2	36.7	36.2	35.6	36.4	37.5	37.3	37.4	37.4	36.5	36.5
Hats, caps, and millinery	-------	36.3	36.4	35.7	33.8	37.1	35.7	35.0	36.5	34.7	35.0	36.3	37.6	36.2	35.7
Girls' and children's outerwear	36.5	36.8	37.0	36.5	34.5	36.3	36.5	35.5	35.0	35.4	35.1	35.9	36.4	36.0	35.4
Fur goods and miscellaneous apparel	-------	36.1	36.0	35.5	34.6	35.7	35.5	35.7	36.3	36.6	36.3	36.6	36.6	36.1	35.8
Miscellaneous fabricated textile products	38.1	37.4	38.2	38.2	37.3	37.8	37.7	37.1	38.3	38.4	38.6	38.4	38.1	37.8	37.8
Paper and allied products	43.3	42.9	43.0	42.5	41.9	42.5	42.2	42.3	42.8	42.5	42.5	43.0	42.9	42.5	42.5
Paper and pulp	44.6	44.5	44.1	44.1	43.6	44.1	43.9	43.9	43.9	43.6	43.3	43.7	43.6	43.6	43.7
Paperboard	44.8	44.8	44.6	44.0	43.4	44.3	43.9	43.7	44.6	43.4	43.3	44.4	44.9	44.1	43.6
Converted paper and paperboard products	42.0	41.4	41.6	41.0	40.4	41.0	40.8	41.0	41.6	41.0	41.1	41.5	41.6	41.2	41.1
Paperboard containers and boxes	42.3	41.5	42.0	41.3	40.5	41.0	40.6	40.7	41.7	41.9	42.2	42.7	42.2	41.7	41.6
Printing, publishing, and allied industries	38.5	38.3	38.3	38.4	38.1	38.4	38.1	38.0	38.6	38.2	38.1	38.6	38.4	38.3	38.2
Newspaper publishing and printing	36.1	36.1	36.4	36.5	36.1	36.1	35.9	35.6	37.0	36.6	36.2	36.4	36.3	36.3	36.3
Periodical publishing and printing	-------	40.2	40.1	39.5	39.3	40.2	39.5	38.5	39.7	39.0	39.8	40.5	40.4	39.7	39.5
Books	-------	41.4	40.6	41.3	40.5	40.3	39.6	39.7	39.7	38.9	39.4	40.7	40.8	40.1	40.6
Commercial printing	39.2	38.9	39.0	39.1	38.8	39.3	38.9	38.7	39.4	39.0	38.9	39.5	39.2	39.2	38.9
Bookbinding and related industries	39.2	38.6	38.7	38.9	38.4	38.6	38.2	38.2	38.5	38.2	38.5	39.7	39.5	38.7	38.3
Other publishing and printing industries	38.8	38.5	38.3	38.1	37.9	38.7	38.7	38.8	38.7	38.5	38.3	38.4	38.1	38.4	38.5
	Average hourly earnings														
Apparel and related products	$1.73	$1.70	$1.69	$1.69	$1.69	$1.71	$1.70	$1.70	$1.68	$1.69	$1.69	$1.70	$1.69	$1.69	$1.64
Men's and boys' suits and coats	2.12	2.06	2.09	1.99	1.96	1.97	1.95	1.95	1.95	1.95	1.95	1.96	1.96	1.95	1.92
Men's and boys' furnishings	1.44	1.43	1.43	1.43	1.43	1.44	1.43	1.44	1.42	1.43	1.43	1.43	1.42	1.42	1.37
Women's, misses', and juniors' outerwear	1.95	1.90	1.86	1.87	1.88	1.92	1.91	1.90	1.88	1.89	1.91	1.93	1.93	1.89	1.85
Women's and children's undergarments	1.55	1.52	1.53	1.53	1.53	1.54	1.52	1.52	1.52	1.53	1.52	1.53	1.51	1.52	1.48
Hats, caps, and millinery	-------	1.85	1.78	1.75	1.78	1.87	1.87	1.82	1.78	1.79	1.82	1.84	1.83	1.81	1.77
Girls' and children's outerwear	1.55	1.53	1.53	1.53	1.52	1.53	1.53	1.54	1.50	1.51	1.52	1.53	1.53	1.52	1.49
Fur goods and miscellaneous apparel	-------	1.80	1.80	1.78	1.69	1.76	1.72	1.77	1.85	1.85	1.82	1.81	1.77	1.80	1.75
Miscellaneous fabricated textile products	1.73	1.73	1.75	1.74	1.74	1.72	1.71	1.73	1.72	1.73	1.72	1.70	1.69	1.70	1.66
Paper and allied products	2.49	2.50	2.47	2.46	2.44	2.45	2.44	2.44	2.44	2.43	2.43	2.43	2.41	2.40	2.34
Paper and pulp	2.71	2.71	2.66	2.65	2.62	2.64	2.62	2.63	2.63	2.62	2.62	2.61	2.60	2.59	2.51
Paperboard	2.73	2.73	2.69	2.67	2.65	2.65	2.62	2.63	2.67	2.65	2.62	2.63	2.62	2.59	2.51
Converted paper and paperboard products	2.24	2.24	2.25	2.24	2.23	2.23	2.23	2.24	2.23	2.21	2.22	2.22	2.20	2.20	2.13
Paperboard containers and boxes	2.32	2.32	2.32	2.30	2.29	2.30	2.29	2.28	2.27	2.26	2.28	2.29	2.26	2.26	2.19
Printing, publishing, and allied industries	2.88	2.88	2.89	2.87	2.86	2.87	2.84	2.82	2.83	2.84	2.83	2.83	2.82	2.81	2.75
Newspaper publishing and printing	3.10	3.10	3.11	3.11	3.08	3.04	3.02	3.01	3.06	3.09	3.07	3.07	3.03	3.04	2.96
Periodical publishing and printing	-------	2.95	2.88	2.85	2.89	2.89	2.86	2.77	2.85	2.85	2.85	2.91	2.86	2.82	2.78
Books	-------	2.57	2.61	2.57	2.55	2.57	2.55	2.54	2.52	2.51	2.49	2.51	2.48	2.49	2.44
Commercial printing	2.89	2.88	2.88	2.87	2.85	2.88	2.85	2.83	2.83	2.82	2.82	2.82	2.82	2.81	2.73
Bookbinding and related industries	2.24	2.25	2.28	2.28	2.27	2.28	2.25	2.27	2.26	2.23	2.23	2.23	2.21	2.22	2.15
Other publishing and printing industries	2.98	2.95	2.94	2.94	2.95	2.99	2.96	2.93	2.90	2.86	2.86	2.88	2.88	2.88	2.83

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. 1228.

Industry	1963								1962					Annual average	
	Aug.[2]	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962	1961
Manufacturing—Continued															
Nondurable goods—Continued															
Average weekly earnings															
Chemicals and allied products	$111.79	$113.57	$113.42	$112.59	$113.40	$111.37	$110.83	$111.10	$112.17	$110.95	$110.54	$110.81	$110.12	$109.98	$106.81
Industrial chemicals	124.53	128.33	127.60	126.58	130.82	126.46	126.16	126.05	127.56	126.65	125.63	125.52	124.09	124.68	120.93
Plastics and synthetics, except glass	110.43	114.36	113.94	111.76	113.55	110.27	109.33	109.59	111.19	109.45	108.77	109.82	109.41	109.52	107.07
Drugs	100.12	99.79	100.04	99.38	98.98	100.70	100.45	100.85	101.02	100.53	100.60	98.57	98.23	98.40	94.37
Soap, cleaners, and toilet goods	107.94	106.49	107.27	105.41	103.83	104.49	103.86	103.97	104.70	104.55	104.70	106.14	105.06	103.89	100.45
Paints, varnishes, and allied products	106.40	107.84	106.50	108.36	103.48	103.38	102.21	101.71	102.31	101.66	100.75	101.75	102.34	101.59	97.85
Agricultural chemicals	92.62	91.52	92.44	97.83	99.70	91.08	89.68	89.68	90.30	89.46	89.25	90.10	87.13	88.39	84.38
Other chemical products	106.30	108.52	107.94	107.59	105.37	104.45	104.65	105.83	107.10	105.25	105.16	105.75	104.67	103.75	100.77
Petroleum refining and related industries	130.21	133.35	133.25	131.57	133.77	128.61	126.36	130.62	126.99	127.71	127.19	131.09	126.35	126.88	124.31
Petroleum refining	134.39	138.61	138.53	137.03	140.95	134.97	132.68	137.52	132.48	132.57	130.88	135.24	129.34	131.43	129.24
Other petroleum and coal products	116.22	113.79	113.09	110.12	104.83	99.10	97.96	102.25	105.34	108.03	113.03	115.32	113.40	107.75	102.10
Rubber and miscellaneous plastic products	98.58	100.44	100.53	99.23	98.25	100.12	99.88	100.37	101.76	100.61	100.21	101.19	99.80	100.04	96.15
Tires and inner tubes	125.45	130.40	128.88	124.66	126.88	129.36	128.32	129.52	134.55	132.75	132.11	131.78	131.70	130.47	121.88
Other rubber products	94.56	94.80	97.27	96.22	94.40	96.22	96.22	96.29	97.23	96.59	95.71	96.88	94.83	95.53	91.53
Miscellaneous plastic products	87.77	87.76	87.56	87.13	85.24	87.13	86.51	86.72	86.51	85.26	85.48	86.53	85.90	85.90	83.03
Leather and leather products	67.61	66.12	66.70	64.42	62.13	64.58	64.70	65.60	65.05	64.03	62.63	64.36	65.53	64.67	62.83
Leather tanning and finishing	91.76	90.85	93.75	91.76	89.38	88.58	88.36	88.84	88.84	87.78	88.04	88.26	87.82	87.42	84.35
Footwear, except rubber	65.36	64.39	64.30	61.20	59.33	61.88	62.33	63.54	62.66	60.67	59.30	61.69	63.67	62.66	60.15
Other leather products	65.53	62.90	64.09	62.56	60.52	63.04	62.87	62.70	62.42	63.67	61.79	62.54	62.37	62.58	61.07
Average weekly hours															
Chemicals and allied products	41.1	41.6	41.7	41.7	42.0	41.4	41.2	41.3	41.7	41.4	41.4	41.5	41.4	41.5	41.4
Industrial chemicals	41.1	41.8	41.7	41.5	42.2	41.6	41.5	41.6	42.1	41.8	41.6	41.7	41.5	41.7	41.7
Plastics and synthetics, except glass	40.9	42.2	42.2	41.7	41.9	41.3	41.1	41.2	41.8	41.3	41.2	41.6	41.6	41.8	41.5
Drugs	40.7	40.4	40.5	40.4	40.4	41.1	41.0	41.5	41.4	41.2	41.4	40.9	41.1	41.0	40.5
Soap, cleaners, and toilet goods	41.2	40.8	41.1	40.7	40.4	40.5	40.1	40.3	40.9	41.0	40.9	41.3	41.2	40.9	41.0
Paints, varnishes, and allied products	41.4	41.8	41.6	42.0	40.9	40.7	40.4	40.2	40.6	40.5	40.3	40.7	41.1	40.8	40.6
Agricultural chemicals	42.1	41.6	42.6	45.5	48.4	44.0	42.5	42.3	42.0	42.0	42.5	42.5	41.1	42.7	42.4
Other chemical products	41.2	41.9	42.0	41.7	41.0	40.8	41.2	41.5	42.0	41.6	41.4	41.8	41.7	41.5	41.3
Petroleum refining and related industries	41.6	42.2	42.3	41.9	42.2	40.7	40.5	41.6	41.5	41.6	41.7	42.7	41.7	41.6	41.3
Petroleum refining	40.6	41.5	41.6	41.4	42.2	40.9	40.7	41.8	41.4	41.3	40.9	42.0	40.8	41.2	40.9
Other petroleum and coal products	45.4	44.8	44.7	43.7	42.1	39.8	39.5	40.9	41.8	42.7	44.5	45.4	45.0	43.1	42.9
Rubber and miscellaneous plastic products	40.2	40.5	40.7	40.5	40.1	40.7	40.6	40.8	41.2	40.9	40.9	41.3	40.9	41.0	40.4
Tires and inner tubes	38.6	40.0	39.9	39.2	39.9	40.3	40.1	40.1	41.4	41.1	40.9	40.8	40.9	40.9	39.7
Other rubber products	39.9	40.0	40.7	40.6	40.0	40.6	40.6	40.8	41.2	41.1	40.9	41.4	40.7	41.0	40.5
Miscellaneous plastic products	41.4	41.2	41.3	41.1	40.4	41.1	41.0	41.1	41.0	40.6	40.9	41.4	41.1	41.1	40.7
Leather and leather products	38.2	38.0	37.9	36.6	35.5	36.9	37.4	37.1	37.6	36.8	36.2	37.2	38.1	37.6	37.4
Leather tanning and finishing	40.6	40.2	41.3	40.6	39.9	39.9	39.8	40.2	40.2	39.9	40.2	40.3	40.1	40.1	39.6
Footwear, except rubber	38.0	38.1	37.6	36.0	34.9	36.4	37.1	37.6	37.3	35.9	35.3	36.5	37.9	37.3	36.9
Other leather products	38.1	37.0	37.7	36.8	35.6	37.3	37.2	37.1	37.6	37.9	37.0	37.9	37.8	37.7	37.7
Average hourly earnings															
Chemicals and allied products	$2.72	$2.73	$2.72	$2.70	$2.70	$2.69	$2.69	$2.69	$2.69	$2.68	$2.67	$2.67	$2.66	$2.65	$2.58
Industrial chemicals	3.03	3.07	3.06	3.05	3.10	3.04	3.04	3.03	3.03	3.03	3.02	3.01	2.99	2.99	2.90
Plastics and synthetics, except glass	2.70	2.71	2.70	2.68	2.71	2.67	2.66	2.66	2.66	2.65	2.64	2.64	2.63	2.62	2.58
Drugs	2.46	2.47	2.47	2.46	2.45	2.45	2.45	2.43	2.44	2.44	2.43	2.41	2.39	2.40	2.33
Soap, cleaners, and toilet goods	2.62	2.61	2.61	2.59	2.57	2.58	2.59	2.58	2.56	2.55	2.56	2.57	2.55	2.54	2.45
Paints, varnishes and allied products	2.57	2.58	2.56	2.58	2.53	2.54	2.53	2.53	2.52	2.51	2.50	2.50	2.49	2.49	2.41
Agricultural chemicals	2.20	2.20	2.17	2.15	2.06	2.07	2.11	2.12	2.15	2.13	2.10	2.12	2.12	2.07	1.99
Other chemical products	2.58	2.59	2.57	2.58	2.57	2.56	2.54	2.55	2.55	2.53	2.54	2.53	2.51	2.50	2.44
Petroleum refining and related industries	3.13	3.16	3.15	3.14	3.17	3.16	3.12	3.14	3.06	3.07	3.05	3.07	3.03	3.05	3.01
Petroleum refining	3.31	3.34	3.33	3.31	3.34	3.30	3.26	3.29	3.20	3.21	3.20	3.22	3.17	3.19	3.16
Other petroleum and coal products	2.56	2.54	2.53	2.52	2.49	2.49	2.48	2.50	2.52	2.53	2.54	2.54	2.52	2.50	2.38
Rubber and miscellaneous plastic products	2.45	2.48	2.47	2.45	2.45	2.46	2.46	2.46	2.47	2.46	2.45	2.45	2.44	2.44	2.38
Tires and inner tubes	3.25	3.26	3.23	3.18	3.18	3.21	3.20	3.23	3.25	3.23	3.23	3.23	3.22	3.19	3.07
Other rubber products	2.37	2.37	2.39	2.37	2.36	2.37	2.37	2.36	2.36	2.35	2.34	2.34	2.33	2.33	2.26
Miscellaneous plastic products	2.12	2.13	2.12	2.12	2.11	2.12	2.11	2.11	2.11	2.10	2.09	2.09	2.09	2.09	2.04
Leather and leather products	1.77	1.74	1.76	1.76	1.75	1.75	1.73	1.74	1.73	1.74	1.73	1.73	1.72	1.72	1.68
Leather tanning and finishing	2.26	2.26	2.27	2.26	2.24	2.22	2.22	2.21	2.21	2.20	2.19	2.19	2.19	2.18	2.13
Footwear, except rubber	1.72	1.69	1.71	1.70	1.70	1.70	1.68	1.69	1.68	1.69	1.68	1.69	1.68	1.68	1.63
Other leather products	1.72	1.70	1.70	1.70	1.70	1.69	1.69	1.69	1.66	1.68	1.67	1.65	1.65	1.66	1.62

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. 1228.

Industry	1963								1962					Annual average	
	Aug.[2]	July[2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962	1961
Average weekly earnings															
Transportation and public utilities:															
Railroad transportation:															
Class I railroads[3]	-------	-------	-------	-------	-------	-------	-------	$118.25	$116.48	$117.85	$117.94	$114.26	$118.21	$115.87	$112.94
Local and interurban passenger transit:															
Local and suburban transportation	-------	$101.94	$103.63	$102.48	$100.38	$99.72	$100.32	98.83	100.01	100.25	100.01	99.59	100.39	100.11	98.24
Intercity and rural buslines	-------	133.02	124.27	122.69	123.12	118.29	121.39	123.52	115.51	116.48	118.15	124.32	128.24	118.40	110.76
Motor freight transportation and storage	-------	119.70	118.58	117.31	115.36	114.95	114.39	111.93	115.23	113.30	113.98	116.20	115.78	113.30	108.58
Pipeline transportation	-------	139.06	140.56	137.16	138.45	135.94	138.63	138.58	139.52	131.78	130.07	135.05	130.09	132.76	131.45
Communication:															
Telephone communication	-------	101.71	102.00	101.24	99.94	100.58	101.09	99.94	101.35	103.07	102.06	102.31	99.29	98.95	93.38
Telegraph communication[4]	-------	112.98	113.25	110.30	108.16	107.38	108.05	108.05	106.97	105.78	107.74	109.98	110.08	107.78	104.33
Radio and television broadcasting	-------	131.38	132.10	131.66	135.04	131.99	131.93	134.30	130.93	132.78	131.14	130.81	126.10	127.20	120.12
Electric, gas, and sanitary services	-------	120.72	121.42	119.72	119.31	119.02	119.60	119.19	120.77	119.07	118.78	118.53	116.44	116.85	112.07
Electric companies and systems	-------	124.20	123.55	121.66	120.42	120.13	119.43	120.42	121.60	119.89	120.30	120.06	118.82	118.24	112.75
Gas companies and systems	-------	111.93	112.74	112.20	111.24	112.07	113.44	111.38	113.98	110.70	110.29	111.10	106.92	108.53	104.19
Combined utility systems	-------	129.27	131.14	129.15	129.05	128.43	129.68	128.64	130.94	129.27	128.23	127.82	125.97	126.59	121.77
Water, steam, and sanitary systems	-------	97.64	97.41	95.94	96.70	96.93	98.06	97.23	96.29	96.93	95.06	96.88	94.66	94.66	92.62
Average weekly hours															
Transportation and public utilities:															
Railroad transportation:															
Class I railroads[3]	-------	-------	-------	-------	-------	-------	-------	43.0	41.9	42.7	43.2	41.1	43.3	42.6	42.3
Local and interurban passenger transit:															
Local and suburban transportation	-------	42.3	43.0	42.7	42.0	41.9	41.8	41.7	42.2	42.3	42.2	42.2	42.9	42.6	42.9
Intercity and rural buslines	-------	45.4	43.3	42.9	42.9	41.8	43.2	43.8	41.4	41.6	42.5	44.4	45.8	42.9	42.6
Motor freight transportation and storage	-------	42.0	42.2	41.6	41.2	41.2	41.0	40.7	41.6	41.2	41.6	42.1	42.1	41.5	41.6
Pipeline transportation	-------	40.9	41.1	40.7	40.6	40.1	40.3	41.0	41.4	40.3	39.9	40.8	40.4	40.6	40.2
Communication:															
Telephone communication	-------	40.2	40.0	39.7	39.5	39.6	39.8	39.5	39.9	40.9	40.5	40.6	40.2	39.9	39.4
Telegraph communication[4]	-------	42.0	42.1	42.1	41.6	41.3	41.4	41.4	41.3	41.0	41.6	42.3	42.5	42.1	41.9
Radio and television broadcasting	-------	39.1	39.2	39.3	39.6	39.4	39.5	39.5	39.2	39.4	39.5	39.4	38.8	38.9	38.5
Electric, gas, and sanitary services	-------	41.2	41.3	41.0	41.0	40.9	41.1	41.1	41.5	41.2	41.1	41.3	41.0	41.0	40.9
Electric companies and systems	-------	41.4	41.6	41.1	41.1	41.0	40.9	41.1	41.5	41.2	41.2	41.4	41.4	41.2	41.0
Gas companies and systems	-------	40.7	40.7	40.8	40.6	40.9	41.1	41.1	41.6	41.0	41.0	41.3	40.5	40.8	40.7
Combined utility systems	-------	41.3	41.5	41.0	41.1	40.9	41.3	41.1	41.7	41.3	41.1	41.1	40.9	41.1	41.0
Water, steam, and sanitary systems	-------	41.2	41.1	41.0	40.8	40.9	41.2	41.2	40.8	40.9	40.8	41.4	40.8	40.8	40.8
Average hourly earnings															
Transportation and public utilities:															
Railroad transportation:															
Class I railroads[3]	-------	-------	-------	-------	-------	-------	-------	$2.75	$2.78	$2.76	$2.73	$2.78	$2.73	$2.72	$2.67
Local and interurban passenger transit:															
Local and suburban transportation	-------	$2.41	$2.41	$2.40	$2.39	$2.38	$2.40	2.37	2.37	2.37	2.37	2.36	2.34	2.35	2.29
Intercity and rural buslines	-------	2.93	2.87	2.86	2.87	2.83	2.81	2.82	2.79	2.80	2.78	2.80	2.80	2.76	2.60
Motor freight transportation and storage	-------	2.85	2.81	2.82	2.80	2.79	2.79	2.75	2.77	2.75	2.74	2.76	2.75	2.73	2.61
Pipeline transportation	-------	3.40	3.42	3.37	3.41	3.39	3.44	3.38	3.37	3.27	3.26	3.31	3.22	3.27	3.27
Communication:															
Telephone communication	-------	2.53	2.55	2.55	2.53	2.54	2.54	2.53	2.54	2.52	2.52	2.52	2.47	2.48	2.37
Telegraph communication[4]	-------	2.69	2.69	2.62	2.60	2.60	2.61	2.61	2.59	2.58	2.59	2.60	2.59	2.56	2.49
Radio and television broadcasting	-------	3.36	3.37	3.35	3.41	3.35	3.34	3.40	3.34	3.37	3.32	3.32	3.25	3.27	3.12
Electric, gas, and sanitary services	-------	2.93	2.94	2.92	2.91	2.91	2.91	2.90	2.91	2.89	2.89	2.87	2.84	2.85	2.74
Electric companies and systems	-------	3.00	2.97	2.96	2.93	2.93	2.92	2.93	2.93	2.91	2.92	2.90	2.87	2.87	2.75
Gas companies and systems	-------	2.75	2.77	2.75	2.74	2.74	2.76	2.71	2.74	2.70	2.69	2.69	2.64	2.66	2.56
Combined utility systems	-------	3.13	3.16	3.15	3.14	3.14	3.14	3.13	3.14	3.13	3.12	3.11	3.08	3.08	2.97
Water, steam, and sanitary systems	-------	2.37	2.37	2.34	2.37	2.37	2.38	2.36	2.36	2.37	2.33	2.34	2.32	2.32	2.27

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. 1228

Industry	1963								1962					Annual average	
	Aug.[2]	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962	1961
Average weekly earnings															
Wholesale and retail trade [5]		$78.79	$78.19	$77.39	$76.62	$76.42	$76.03	$76.03	$75.47	$75.26	$75.46	$76.05	$76.05	$75.08	$72.56
Wholesale trade		99.96	100.12	99.47	98.58	98.58	97.93	97.36	98.74	97.44	97.03	97.68	96.46	96.22	93.56
Motor vehicles and automotive equipment		94.89	94.66	94.66	94.24	93.15	92.74	92.96	93.83	93.41	93.86	93.86	93.26	92.82	89.46
Drugs, chemicals, and allied products		100.60	100.65	99.75	99.50	99.75	99.75	98.65	99.29	99.94	98.80	99.54	97.84	97.84	94.24
Dry goods and apparel		90.62	90.86	90.64	92.38	91.48	91.96	91.10	92.83	92.37	92.37	92.88	92.37	92.48	92.72
Groceries and related products		95.18	94.47	93.38	92.51	91.65	90.58	90.64	92.00	91.54	90.47	91.32	90.92	89.86	86.53
Electrical goods		102.77	102.77	101.85	101.71	102.21	102.87	102.56	103.48	102.97	102.97	102.91	100.04	101.59	97.53
Hardware, plumbing, and heating goods		94.60	96.05	95.65	95.00	93.96	93.50	94.66	95.30	94.54	94.60	94.83	92.92	92.97	89.91
Machinery, equipment, and supplies		108.65	109.06	108.09	107.16	107.16	106.49	106.34	108.65	106.60	105.37	107.38	104.39	104.14	101.59
Retail trade [5]		69.30	68.96	67.68	67.48	66.75	66.75	66.93	66.29	66.38	66.18	66.70	67.16	65.95	64.01
General merchandise stores		55.42	54.79	53.51	53.28	53.01	52.51	53.01	53.70	51.68	52.67	53.28	53.15	52.59	50.52
Department stores		60.20	59.68	58.31	57.80	57.12	56.45	57.12	57.70	55.61	57.80	58.65	58.12	57.10	55.04
Limited price variety stores		40.84	40.22	39.48	39.48	39.36	39.16	38.96	39.67	38.32	38.32	39.15	40.12	38.91	37.28
Food stores		67.68	66.93	65.58	65.26	65.24	64.73	64.91	65.31	65.66	64.94	65.50	66.25	64.78	63.01
Grocery, meat, and vegetable stores		69.31	68.74	66.82	66.66	66.47	66.12	66.69	66.36	67.45	66.53	66.95	67.53	66.22	64.44
Apparel and accessories stores		55.62	54.70	54.06	55.36	53.35	53.85	55.20	55.89	53.38	53.20	54.13	54.47	53.63	51.90
Men's and boys' apparel stores		67.84	67.28	66.66	66.39	64.40	65.15	66.77	67.23	64.06	64.59	65.45	66.53	65.82	64.67
Women's ready-to-wear stores		49.42	48.76	48.33	49.13	47.52	47.71	48.67	49.84	47.57	47.52	47.66	47.89	47.46	45.77
Family clothing stores		55.74	54.32	53.40	54.01	52.10	53.44	53.82	54.87	52.44	51.90	52.95	54.00	52.45	51.91
Shoe stores		56.78	54.15	54.78	58.35	55.26	55.44	56.28	57.61	54.44	53.94	56.78	56.83	55.61	52.97
Average weekly hours															
Wholesale and retail trade [5]		39.2	38.9	38.5	38.5	38.4	38.4	38.4	38.9	38.4	38.5	38.8	39.2	38.7	38.8
Wholesale trade		40.8	40.7	40.6	40.4	40.4	40.3	40.4	40.8	40.6	40.6	40.7	40.7	40.6	40.5
Motor vehicles and automotive equipment		41.8	41.7	41.7	41.7	41.4	41.4	41.5	41.7	41.7	41.9	41.9	42.2	42.0	42.0
Drugs, chemicals, and allied products		40.4	40.1	39.9	39.8	39.9	39.9	40.1	40.2	40.3	40.0	40.3	40.1	40.1	40.1
Dry goods and apparel		37.6	37.7	37.3	37.4	37.8	38.0	37.8	38.2	37.7	37.7	37.3	37.7	37.9	38.0
Groceries and related products		42.3	41.8	41.5	41.3	41.1	40.8	41.2	42.2	41.8	41.5	41.7	41.9	41.6	41.4
Electrical goods		40.3	40.3	40.1	40.2	40.4	40.5	40.7	40.9	40.7	40.7	41.0	40.5	40.8	40.3
Hardware, plumbing, and heating goods		40.6	40.7	40.7	40.6	40.5	40.3	40.8	40.9	40.4	40.6	40.7	40.4	40.6	40.5
Machinery, equipment, and supplies		41.0	41.0	41.1	40.9	40.9	40.8	40.9	41.0	41.0	41.0	41.3	41.1	41.0	40.8
Retail trade [5]		38.5	38.1	37.6	37.7	37.5	37.5	37.6	38.1	37.5	37.6	37.9	38.6	37.9	38.1
General merchandise stores		35.3	34.9	34.3	34.6	34.2	34.1	34.2	35.8	34.0	34.2	34.6	35.2	34.6	34.6
Department stores		34.8	34.3	33.9	34.2	33.8	33.6	33.6	35.4	33.5	34.0	34.3	34.8	34.4	34.4
Limited price variety stores		33.2	32.7	32.1	32.9	32.0	32.1	32.2	34.2	32.2	32.2	32.9	34.0	32.7	32.7
Food stores		36.0	35.6	34.7	34.9	34.7	34.8	34.9	35.3	35.3	35.1	35.6	36.4	35.4	35.8
Grocery, meat, and vegetable stores		36.1	35.8	34.8	34.9	34.8	34.8	35.1	35.3	35.5	35.2	35.8	36.5	35.6	36.0
Apparel and accessories stores		35.2	34.4	34.0	34.6	34.2	34.3	34.5	35.6	34.0	34.1	34.7	35.6	34.6	34.6
Men's and boys' apparel stores		37.9	37.8	36.7	37.3	36.8	36.6	37.3	38.2	36.4	36.7	37.4	37.8	37.4	37.6
Women's ready-to-wear stores		34.8	34.1	33.8	34.6	33.7	33.6	33.8	35.1	33.5	33.7	33.8	34.7	33.9	33.9
Family clothing stores		35.5	35.5	34.9	35.3	34.5	34.7	34.5	36.1	34.5	34.6	35.3	36.0	35.2	35.8
Shoe stores		34.0	31.3	31.3	32.6	32.7	33.6	33.5	33.3	32.6	32.3	33.6	35.3	33.3	32.9
Average hourly earnings															
Wholesale and retail trade [5]		$2.01	$2.01	$2.01	$1.99	$1.99	$1.98	$1.98	$1.94	$1.96	$1.96	$1.96	$1.94	$1.94	$1.87
Wholesale trade		2.45	2.46	2.45	2.44	2.44	2.43	2.41	2.42	2.40	2.39	2.40	2.37	2.37	2.31
Motor vehicles and automotive equipment		2.27	2.27	2.27	2.26	2.25	2.24	2.24	2.25	2.24	2.24	2.24	2.21	2.21	2.13
Drugs, chemicals, and allied products		2.49	2.51	2.50	2.50	2.50	2.50	2.46	2.47	2.48	2.47	2.47	2.44	2.44	2.35
Dry goods and apparel		2.41	2.41	2.43	2.47	2.42	2.42	2.41	2.43	2.45	2.45	2.49	2.45	2.44	2.44
Groceries and related products		2.25	2.26	2.25	2.24	2.23	2.22	2.20	2.18	2.19	2.18	2.19	2.17	2.16	2.09
Electrical goods		2.55	2.55	2.54	2.53	2.53	2.54	2.52	2.53	2.53	2.53	2.51	2.47	2.49	2.42
Hardware, plumbing, and heating goods		2.33	2.36	2.35	2.34	2.32	2.32	2.32	2.33	2.34	2.33	2.33	2.30	2.29	2.22
Machinery, equipment, and supplies		2.65	2.66	2.63	2.62	2.62	2.61	2.60	2.65	2.60	2.57	2.60	2.54	2.54	2.49
Retail trade [5]		1.80	1.81	1.80	1.79	1.78	1.78	1.78	1.74	1.77	1.76	1.76	1.74	1.74	1.68
General merchandise stores		1.57	1.57	1.56	1.54	1.55	1.54	1.55	1.50	1.52	1.54	1.54	1.51	1.52	1.46
Department stores		1.73	1.74	1.72	1.69	1.69	1.68	1.70	1.63	1.66	1.70	1.71	1.67	1.66	1.60
Limited price variety stores		1.23	1.23	1.23	1.20	1.23	1.22	1.21	1.16	1.19	1.19	1.19	1.18	1.19	1.14
Food stores		1.88	1.88	1.89	1.87	1.88	1.86	1.86	1.85	1.86	1.85	1.84	1.82	1.83	1.76
Grocery, meat, and vegetable stores		1.92	1.92	1.92	1.91	1.91	1.90	1.90	1.88	1.90	1.89	1.87	1.85	1.86	1.79
Apparel and accessories stores		1.58	1.59	1.59	1.60	1.56	1.57	1.60	1.57	1.57	1.56	1.56	1.53	1.55	1.50
Men's and boys' apparel stores		1.79	1.78	1.80	1.78	1.75	1.78	1.79	1.76	1.76	1.76	1.75	1.76	1.76	1.72
Women's ready-to-wear stores		1.42	1.43	1.43	1.42	1.41	1.42	1.44	1.42	1.42	1.41	1.41	1.38	1.40	1.35
Family clothing stores		1.57	1.53	1.53	1.53	1.51	1.54	1.56	1.52	1.52	1.50	1.50	1.50	1.49	1.45
Shoe stores		1.67	1.73	1.75	1.79	1.69	1.65	1.68	1.73	1.67	1.67	1.69	1.61	1.67	1.61

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. 1228.

Industry	1963								1962					Annual average	
	Aug.[2]	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962	1961
Average weekly earnings															
Wholesale and retail trade [5]—Continued															
Retail trade [5]—Continued															
Furniture and appliance stores		$82.82	$82.62	$81.40	$80.60	$80.79	$80.40	$82.21	$83.63	$80.98	$80.57	$81.58	$81.56	$80.75	$77.64
Other retail trade		79.38	78.81	78.06	77.64	76.63	76.63	76.63	77.19	76.63	76.22	75.76	76.68	75.76	73.57
Motor vehicle dealers		98.34	98.99	98.33	97.45	94.18	93.30	92.87	94.61	95.70	93.52	91.12	93.51	93.08	88.44
Other vehicle and accessory dealers		84.36	82.65	82.16	81.22	80.85	81.10	82.21	81.84	78.58	79.82	80.70	81.33	80.08	78.32
Drug stores		60.59	60.10	58.08	58.44	58.08	57.88	58.24	58.30	57.31	57.67	58.09	58.59	57.41	55.80
Finance, insurance, and real estate:															
Banking		74.77	74.40	74.40	74.23	74.23	74.40	74.23	73.30	72.72	72.54	71.97	71.80	71.80	69.38
Security dealers and exchanges		118.82	123.77	124.19	119.06	116.34	119.10	117.26	116.09	112.66	109.10	111.25	110.68	116.95	133.37
Insurance carriers		96.35	96.13	95.57	95.44	95.71	95.69	95.38	94.57	94.13	93.94	93.64	94.19	93.46	89.75
Life insurance		101.83	101.21	100.25	100.23	100.83	100.64	100.98	100.14	99.57	99.44	98.92	100.61	99.08	95.12
Accident and health insurance		81.48	82.06	81.97	81.36	81.18	81.58	81.82	80.22	79.20	78.24	78.50	78.34	78.33	74.39
Fire, marine, and casualty insurance		91.81	92.20	92.07	91.80	91.70	91.79	90.51	89.63	89.54	89.40	89.22	88.46	88.61	85.08
Services and miscellaneous:															
Hotels and lodging places:															
Hotels, tourist courts, and motels [6]		48.60	47.36	47.86	46.08	46.85	47.23	46.85	47.23	47.60	47.21	45.67	45.60	46.14	45.14
Personal services:															
Laundries, cleaning and dyeing plants		51.74	52.67	52.54	52.40	50.95	50.04	50.69	50.57	50.70	50.83	50.83	50.44	50.57	49.28
Motion pictures:															
Motion picture filming and distributing		130.36	128.89	121.25	124.33	123.98	125.52	125.74	130.20	122.52	126.60	126.17	123.46	122.27	120.50
Average weekly hours															
Wholesale and retail trade [5]—Continued															
Retail trade [5]—Continued															
Furniture and appliance stores		40.8	40.9	40.7	40.5	40.6	40.4	40.7	41.4	40.9	40.9	41.2	41.4	41.2	41.3
Other retail trade		42.0	41.7	41.3	41.3	41.2	41.2	41.2	41.5	41.2	41.2	41.4	41.9	41.4	41.8
Motor vehicle dealers		43.9	43.8	43.7	43.7	43.6	43.6	43.6	43.8	43.7	43.7	43.6	43.9	43.7	44.0
Other vehicle and accessory dealers		44.4	44.2	43.7	43.9	43.7	43.6	44.2	44.0	43.9	44.1	44.1	44.2	44.0	44.5
Drug stores		37.4	37.1	36.3	36.3	36.3	36.4	36.4	36.9	36.5	36.5	37.0	37.8	36.8	37.2
Finance, insurance, and real estate:															
Banking		37.2	37.2	37.2	37.3	37.3	37.2	37.3	37.4	37.1	37.2	37.1	37.2	37.2	37.1
Security dealers and exchanges															
Insurance carriers															
Life insurance															
Accident and health insurance															
Fire, marine, and casualty insurance															
Services and miscellaneous:															
Hotels and lodging places:															
Hotels, tourist courts, and motels [6]		40.5	38.5	38.6	38.4	38.4	38.4	38.4	38.4	38.7	38.7	38.7	40.0	39.1	39.6
Personal services:															
Laundries, cleaning and dyeing plants		38.9	39.6	39.5	39.4	38.6	38.2	38.4	38.6	38.7	39.1	39.1	39.1	38.9	38.8
Motion pictures:															
Motion picture filming and distributing															
Average hourly earnings															
Wholesale and retail trade [5]—Continued															
Retail trade [5]—Continued															
Furniture and appliance stores		$2.03	$2.02	$2.00	$1.99	$1.99	$1.99	$2.02	$2.02	$1.98	$1.97	$1.98	$1.97	$1.96	$1.88
Other retail trade		1.89	1.89	1.89	1.88	1.86	1.86	1.86	1.86	1.86	1.85	1.83	1.83	1.83	1.76
Motor vehicle dealers		2.24	2.26	2.25	2.23	2.16	2.14	2.13	2.16	2.19	2.14	2.09	2.13	2.13	2.01
Other vehicle and accessory dealers		1.90	1.87	1.88	1.85	1.85	1.86	1.86	1.86	1.79	1.81	1.83	1.84	1.82	1.76
Drug stores		1.62	1.62	1.60	1.61	1.60	1.59	1.60	1.58	1.57	1.58	1.57	1.55	1.56	1.50
Finance, insurance, and real estate:															
Banking		2.01	2.00	2.00	1.99	1.99	2.00	1.99	1.96	1.96	1.95	1.94	1.93	1.93	1.87
Security dealers and exchanges															
Insurance carriers															
Life insurance															
Accident and health insurance															
Fire, marine, and casualty insurance															
Services and miscellaneous:															
Hotels and lodging places:															
Hotels, tourist courts, and motels [6]		1.20	1.23	1.24	1.20	1.22	1.23	1.22	1.23	1.23	1.22	1.18	1.14	1.18	1.14
Personal services:															
Laundries, cleaning and dyeing plants		1.33	1.33	1.33	1.33	1.32	1.31	1.32	1.31	1.31	1.30	1.30	1.29	1.30	1.27
Motion pictures:															
Motion picture filming and distributing															

[1] For comparability of data with those published in issues prior to October 1963, 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] Money payments only, additional value of board, room, uniforms, and tips not included.

SOURCE. U.S. Department of Labor, Bureau of Labor Statistics for all series except that for Class 1 railroads. (See footnote 3.)

TABLE C–2. Average weekly hours, seasonally adjusted, of production workers in selected industries [1]

Revised series; see box, p. 1228.

Industry division and group	1963								1962				
	Aug. [2]	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.
Mining	-------	41.0	42.2	41.9	41.6	41.0	41.5	41.3	40.8	41.0	40.9	41.2	41.1
Contract construction	-------	37.3	37.6	37.5	37.5	37.3	36.1	37.0	36.1	36.8	36.8	37.4	37.1
Manufacturing	40.3	40.4	40.5	40.5	40.1	40.5	40.3	40.4	40.2	40.4	40.2	40.7	40.2
Durable goods	41.0	41.2	41.3	41.1	40.7	41.0	41.0	40.9	41.1	40.9	40.8	41.2	40.9
Ordnance and accessories	41.2	41.0	41.4	40.9	40.4	40.7	41.4	41.2	41.2	41.1	41.0	41.2	41.2
Lumber and wood products, except furniture	40.4	40.5	40.1	39.5	39.9	39.9	40.1	39.9	39.9	39.9	39.5	40.2	40.3
Furniture and fixtures	41.0	41.2	40.9	40.9	40.5	40.7	40.9	40.8	40.4	40.6	40.6	40.7	40.6
Stone, clay, and glass products	41.0	41.3	41.5	41.6	41.3	41.4	40.9	40.8	40.5	41.0	41.1	41.2	41.2
Primary metal industries	40.9	41.1	41.7	41.6	41.3	40.5	40.6	40.3	40.2	40.0	39.7	40.1	39.7
Fabricated metal products	41.5	41.2	41.2	41.4	40.9	41.2	41.3	41.3	41.1	41.1	41.1	41.0	40.9
Machinery	41.7	41.6	41.7	41.5	41.2	41.6	41.7	41.7	41.7	41.6	41.6	41.8	41.7
Electrical equipment and supplies	40.3	40.7	40.4	40.4	40.1	40.3	40.4	40.3	40.4	40.4	40.4	40.6	40.5
Transportation equipment	41.3	42.0	42.2	41.9	41.4	41.8	41.9	42.5	42.4	42.3	42.2	42.3	41.8
Instruments and related products	40.7	40.6	40.7	40.8	40.5	41.0	41.1	40.6	40.8	40.9	40.7	40.9	41.0
Miscellaneous manufacturing industries	39.6	39.6	39.5	39.6	39.2	39.6	39.8	39.6	39.4	39.2	39.4	40.0	39.7
Nondurable goods	39.5	39.5	39.6	39.7	39.3	39.8	39.7	39.6	39.4	39.5	39.3	39.8	39.5
Food and kindred products	41.0	40.9	41.0	40.8	40.7	41.1	40.9	40.8	41.0	41.0	40.6	41.0	40.8
Tobacco manufactures	39.3	39.8	39.7	39.0	35.6	39.2	37.6	39.2	38.8	39.2	38.4	38.9	37.5
Textile mill products	40.5	40.4	40.5	40.6	40.2	40.7	40.3	40.2	40.3	40.0	40.2	40.4	40.4
Apparel and related products	35.6	36.0	36.0	36.4	35.9	36.5	36.3	36.3	36.0	36.1	36.0	36.8	36.0
Paper and allied products	42.9	42.7	42.7	42.6	42.2	42.8	42.7	42.7	42.8	42.5	42.3	42.6	42.5
Printing, publishing, and allied industries	38.4	38.4	38.3	38.4	38.3	38.4	38.4	38.2	38.1	38.1	38.1	38.4	38.3
Chemicals and allied products	41.2	41.6	41.4	41.6	41.8	41.6	41.4	41.4	41.7	41.4	41.5	41.5	41.5
Petroleum refining and related industries	41.6	41.5	41.9	41.9	42.3	41.3	41.3	41.7	42.0	41.6	41.6	42.0	41.7
Rubber and miscellaneous plastic products	40.0	40.2	40.1	40.4	40.7	41.1	41.1	41.0	41.0	40.8	40.8	41.1	40.7
Leather and leather products	37.7	37.0	37.3	37.3	36.8	36.9	37.1	36.8	36.9	37.0	37.2	38.0	37.6
Wholesale and retail trade [3]	-------	38.7	38.7	38.7	38.7	38.6	38.7	38.6	38.7	38.7	38.7	38.8	38.7
Wholesale trade	-------	40.5	40.6	40.6	40.5	40.6	40.6	40.5	40.6	40.6	40.5	40.6	40.6
Retail trade [3]	-------	37.9	37.9	37.8	37.9	37.8	37.8	37.8	37.9	37.9	37.9	37.9	37.9

[1] For employees covered, see footnote 1, table A–3.
[2] Preliminary.
[3] Excludes eating and drinking places.

NOTE: The seasonal adjustment method used is described in "New Seasonal Adjustment Factors for Labor Force Components," *Monthly Labor Review*, August 1960, pp. 822–827.

TABLE C–3. Average hourly earnings excluding overtime of production workers in manufacturing, by major industry group [1]

Revised series; see box, p. 1228.

Major industry group	1963								1962					Annual average	
	Aug. [2]	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962	1961
Manufacturing	$2.35	$2.37	$2.37	$2.37	$2.37	$2.36	$2.35	$2.35	$2.34	$2.33	$2.31	$2.31	$2.29	$2.31	$2.25
Durable goods	2.52	2.54	2.54	2.54	2.54	2.53	2.52	2.52	2.51	2.49	2.48	2.48	2.45	2.48	2.42
Ordnance and accessories	-------	2.81	2.79	2.80	2.80	2.82	2.81	2.80	2.78	2.77	2.75	2.77	2.75	2.75	2.71
Lumber and wood products, except furniture	-------	1.94	1.93	1.94	1.91	1.90	1.89	1.90	1.92	1.93	1.92	1.93	1.92	1.91	1.88
Furniture and fixtures	-------	1.92	1.92	1.92	1.91	1.91	1.91	1.91	1.90	1.89	1.89	1.88	1.88	1.88	1.86
Stone, clay, and glass products	-------	2.37	2.37	2.35	2.36	2.36	2.35	2.36	2.35	2.34	2.32	2.32	2.32	2.31	2.25
Primary metal industries	-------	2.96	2.96	2.95	2.98	2.93	2.92	2.91	2.90	2.89	2.88	2.89	2.88	2.90	2.84
Fabricated metal products	-------	2.51	2.51	2.52	2.51	2.50	2.50	2.49	2.49	2.47	2.47	2.47	2.46	2.47	2.41
Machinery	-------	2.67	2.67	2.67	2.67	2.66	2.66	2.65	2.65	2.64	2.63	2.62	2.60	2.61	2.54
Electrical equipment and supplies	-------	2.40	2.40	2.40	2.40	2.39	2.39	2.38	2.38	2.36	2.35	2.35	2.33	2.34	2.29
Transportation equipment	-------	2.88	2.87	2.86	2.86	2.86	2.86	2.86	2.85	2.84	2.83	2.82	2.79	2.80	2.72
Instruments and related products	-------	2.41	2.42	2.41	2.41	2.41	2.41	2.39	2.39	2.39	2.38	2.37	2.36	2.37	2.32
Miscellaneous manufacturing industries	-------	1.97	1.97	1.96	1.98	1.97	1.98	1.98	1.96	1.92	1.91	1.90	1.90	1.92	1.87
Nondurable goods	2.13	2.14	2.14	2.14	2.14	2.13	2.13	2.13	2.12	2.11	2.10	2.09	2.09	2.09	2.05
Food and kindred products	-------	2.20	2.22	2.22	2.23	2.22	2.22	2.21	2.19	2.17	2.14	2.12	2.12	2.15	2.09
Tobacco manufactures	-------	2.00	1.99	2.00	1.97	1.94	1.90	1.88	1.85	1.83	1.68	1.68	1.78	1.83	1.75
Textile mill products	-------	1.64	1.64	1.63	1.64	1.64	1.64	1.64	1.63	1.63	1.63	1.62	1.62	1.62	1.58
Apparel and related products	-------	1.67	1.66	1.65	1.66	1.68	1.67	1.67	1.66	1.66	1.66	1.67	1.66	1.65	1.62
Paper and allied products	-------	2.37	2.35	2.34	2.34	2.33	2.32	2.33	2.32	2.31	2.31	2.30	2.29	2.29	2.22
Printing, publishing, and allied industries	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Chemicals and allied products	-------	2.65	2.64	2.62	2.60	2.61	2.62	2.62	2.61	2.61	2.60	2.59	2.58	2.57	2.51
Petroleum refining and related industries	-------	3.05	3.05	3.04	3.08	3.09	3.06	3.07	2.99	2.98	2.96	2.96	2.95	2.97	2.94
Rubber and miscellaneous plastic products	-------	2.39	2.39	2.38	2.38	2.38	2.38	2.38	2.38	2.37	2.36	2.35	2.35	2.35	2.30
Leather and leather products	-------	1.71	1.73	1.73	1.73	1.72	1.70	1.71	1.70	1.71	1.70	1.70	1.69	1.69	1.65

[1] For comparability of data with those published in issues prior to October 1963, see footnote 1, table A–2. For employees covered, see footnote 1, table A–3. Average hourly earnings excluding overtime are derived by assuming that overtime hours are paid for at the rate of time and one-half.
[2] Preliminary.
[3] Not available because average overtime rates are significantly above time and one-half. Inclusion of data for the group in the nondurable goods total has little effect.

TABLE C–4. Average overtime hours of production workers in manufacturing, by industry [1]

Revised series; see box, p. 1228.

Industry	1963								1962					Annual average	
	Aug.[2]	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962	1961
Manufacturing	2.9	2.9	3.0	2.8	2.4	2.6	2.5	2.5	2.9	2.9	2.8	3.0	2.8	2.8	2.4
Durable goods	2.9	2.9	3.2	2.9	2.5	2.7	2.6	2.6	3.1	3.0	2.9	3.1	2.8	2.8	2.3
Nondurable goods	2.9	2.8	2.8	2.6	2.4	2.6	2.5	2.4	2.6	2.7	2.7	2.9	2.7	2.7	2.5
Durable goods															
Ordnance and accessories	-------	2.5	2.4	2.2	1.6	2.1	2.5	2.6	2.9	2.4	2.3	2.1	2.1	2.2	1.8
Ammunition, except for small arms	-------	3.0	2.7	2.1	1.6	1.9	2.4	2.4	2.7	2.0	2.1	1.7	1.9	1.9	1.6
Sighting and fire control equipment	-------	.8	.7	.9	1.2	2.1	2.2	2.9	4.0	3.4	2.8	2.7	2.8	3.0	2.2
Other ordnance and accessories	-------	2.1	2.4	2.6	1.6	2.4	2.6	2.9	2.9	2.7	2.5	2.5	2.1	2.5	2.1
Lumber and wood products, except furniture	-------	3.7	3.9	3.2	2.9	3.0	2.9	2.8	3.0	2.9	3.1	3.7	3.7	3.2	2.9
Sawmills and planing mills	-------	3.8	3.9	3.2	3.0	3.0	2.9	2.9	2.9	2.9	3.1	3.6	3.5	3.1	2.9
Millwork, plywood, and related products	-------	3.9	3.9	3.5	3.1	3.2	3.0	2.8	3.3	3.2	3.2	3.8	3.7	3.3	2.8
Wooden containers	-------	4.1	3.5	3.5	2.8	2.6	2.2	1.9	2.4	2.5	2.8	3.2	3.3	2.9	2.5
Miscellaneous wood products	-------	2.8	3.1	3.1	2.6	2.9	2.7	2.5	2.7	2.7	3.0	3.1	3.1	2.9	2.6
Furniture and fixtures	-------	3.0	2.9	2.5	2.2	2.6	2.5	2.5	3.3	3.0	3.3	3.5	3.2	2.9	2.4
Household furniture	-------	2.9	2.9	2.6	2.4	2.9	2.7	2.7	3.6	3.2	3.4	3.4	3.2	3.0	2.4
Office furniture	-------	2.5	2.9	1.8	1.3	1.8	1.9	1.9	2.2	1.6	2.1	2.4	2.0	2.1	2.0
Partitions; office and store fixtures	-------	3.2	2.3	1.8	1.2	1.3	1.7	1.9	1.6	2.5	3.7	4.6	4.0	3.0	2.4
Other furniture and fixtures	-------	3.2	2.8	2.5	1.9	2.1	2.0	2.1	2.9	2.9	2.8	3.2	3.4	2.6	2.6
Stone, clay, and glass products	-------	4.0	4.0	3.9	3.4	3.1	2.8	2.8	3.0	3.4	3.7	3.9	3.9	3.4	3.2
Flat glass	-------	2.2	2.7	1.9	1.6	1.3	1.5	1.5	1.8	2.2	1.5	2.0	1.6	1.7	2.1
Glass and glassware, pressed or blown	-------	3.5	3.5	3.6	3.3	3.3	3.3	3.3	3.8	3.6	3.5	3.5	3.4	3.5	3.6
Cement, hydraulic	-------	2.2	2.3	2.1	2.3	2.0	1.7	1.6	1.3	1.7	1.8	2.3	2.1	1.8	1.5
Structural clay products	-------	3.6	3.5	3.4	2.8	2.6	2.5	2.4	2.5	2.9	3.0	3.1	3.2	2.8	2.7
Pottery and related products	-------	1.8	1.9	2.0	1.6	1.8	1.6	1.7	1.9	2.1	2.3	2.1	2.1	1.8	1.5
Concrete, gypsum, and plaster products	-------	6.5	6.5	6.2	5.6	4.5	3.7	3.5	3.8	5.0	6.0	6.4	6.7	5.4	5.0
Other stone and mineral products	-------	3.1	3.1	3.0	2.5	2.8	2.6	2.4	2.4	2.7	2.8	3.0	2.9	2.7	2.3
Primary metal industries	-------	2.7	3.3	3.1	2.8	2.5	2.4	2.3	2.4	2.1	2.0	2.2	1.9	2.3	1.9
Blast furnace and basic steel products	-------	2.1	2.7	2.8	2.8	1.8	1.5	1.3	1.1	1.0	.9	1.3	.9	1.4	1.3
Iron and steel foundries	-------	3.1	4.3	3.9	3.1	3.5	3.6	3.1	3.5	3.0	2.9	2.7	2.5	2.9	2.1
Nonferrous smelting and refining	-------	3.1	2.9	2.9	2.9	2.9	2.8	2.8	3.0	2.8	2.3	3.0	3.1	2.7	2.5
Nonferrous rolling, drawing and extruding	-------	3.7	4.3	3.7	2.5	3.4	3.3	3.5	3.9	3.8	3.4	3.7	3.2	3.6	3.1
Nonferrous foundries	-------	2.9	3.0	2.8	2.7	3.1	3.0	3.2	3.3	2.9	2.9	2.9	2.5	2.9	2.3
Miscellaneous primary metal industries	-------	3.4	3.3	3.3	2.7	3.0	3.0	3.4	3.9	3.2	3.2	3.5	2.9	3.2	2.4
Fabricated metal products	-------	3.1	3.3	3.0	2.4	2.7	2.6	2.7	2.9	3.0	3.0	3.3	3.1	2.9	2.4
Metal cans	-------	4.2	4.2	3.3	3.1	2.3	2.5	2.7	2.4	2.5	2.8	4.9	4.3	3.5	3.2
Cutlery, hand tools, and general hardware	-------	2.0	2.8	3.0	2.0	2.6	2.5	2.8	3.1	3.1	2.4	2.6	2.1	2.5	2.1
Heating equipment and plumbing fixtures	-------	2.5	2.5	2.0	1.3	1.7	1.8	1.9	2.1	1.9	2.5	2.5	2.2	1.9	1.5
Fabricated structural metal products	-------	3.3	3.1	2.7	2.0	2.2	2.1	2.0	2.3	2.5	2.6	3.0	3.0	2.5	2.3
Screw machine products, bolts, etc	-------	3.4	3.9	3.8	3.1	3.5	3.9	4.0	4.3	3.7	3.6	4.2	3.6	4.0	2.6
Metal stampings	-------	3.5	3.9	3.7	3.0	3.3	3.2	3.4	3.6	3.8	3.8	4.1	3.7	3.5	2.9
Coating, engraving, and allied services	-------	3.2	3.6	3.3	2.6	3.1	2.8	3.2	3.5	3.3	3.6	3.6	3.1	3.3	2.8
Miscellaneous fabricated wire products	-------	2.7	2.9	2.8	2.2	2.8	2.8	2.9	3.0	2.8	3.1	3.2	3.0	3.0	2.7
Miscellaneous fabricated metal products	-------	2.5	2.5	2.7	2.2	2.6	2.3	2.4	2.7	2.7	2.8	2.8	2.5	2.6	2.3
Machinery	-------	3.2	3.4	3.1	2.8	3.2	3.0	2.9	3.1	2.8	2.9	3.0	3.0	3.1	2.5
Engines and turbines	-------	2.8	2.6	2.2	1.8	2.7	2.6	2.0	2.5	1.9	1.9	2.3	2.3	2.2	1.8
Farm machinery and equipment	-------	2.2	2.1	2.1	2.2	2.6	2.5	2.0	1.9	1.6	1.8	2.1	1.9	2.1	1.6
Construction and related machinery	-------	3.1	3.1	2.7	2.2	2.4	2.3	2.2	2.3	2.2	2.5	2.7	2.8	2.6	1.9
Metalworking machinery and equipment	-------	4.8	5.2	4.9	4.6	5.1	4.7	4.4	4.7	4.3	4.1	4.2	4.5	4.7	3.4
Special industry machinery	-------	3.4	3.7	3.4	3.1	3.5	3.5	3.5	3.7	3.3	3.3	3.6	3.3	3.5	2.8
General industrial machinery	-------	2.8	2.9	2.4	2.0	2.4	2.3	2.2	2.6	2.5	2.7	2.6	2.7	2.8	2.0
Office, computing, and accounting machines	-------	1.3	1.7	1.6	1.3	1.7	1.5	1.3	1.5	1.3	1.4	1.4	1.3	1.5	2.2
Service industry machines	-------	2.2	2.5	2.3	1.7	2.3	1.8	1.6	1.7	1.6	1.8	2.0	2.1	2.0	1.6
Miscellaneous machinery	-------	3.9	4.4	4.2	3.5	4.1	3.9	4.1	4.3	4.2	4.3	4.4	4.1	4.1	3.5
Electrical equipment and supplies	-------	2.0	2.2	1.9	1.5	1.9	2.0	1.9	2.4	2.3	2.3	2.5	2.1	2.2	1.9
Electric distribution equipment	-------	2.1	2.4	1.9	1.5	1.8	1.8	1.5	2.5	2.2	2.3	2.4	2.0	2.0	1.8
Electrical industrial apparatus	-------	2.4	2.4	2.3	1.9	2.2	2.4	2.1	2.3	2.3	2.3	2.3	2.1	2.2	1.9
Household appliances	-------	2.6	2.7	2.0	1.5	2.2	1.6	1.3	2.3	2.0	1.8	2.0	2.1	1.9	1.9
Electric lighting and wiring equipment	-------	2.0	2.1	1.9	1.5	1.7	1.6	1.7	2.0	2.1	2.1	2.4	1.8	1.9	1.6
Radio and TV receiving sets	-------	2.0	2.0	1.7	.8	1.4	1.4	1.1	2.0	1.7	2.2	2.6	2.4	1.9	1.6
Communication equipment	-------	1.5	1.8	1.6	1.3	1.9	2.1	2.2	2.5	2.5	2.5	3.0	2.3	2.5	2.2
Electronic components and accessories	-------	1.6	1.8	1.8	1.6	1.9	1.9	1.7	2.0	2.1	1.9	2.1	1.9	2.0	1.9
Miscellaneous electrical equipment and supplies	-------	2.2	3.0	2.4	1.6	1.8	2.7	3.4	3.9	3.7	3.6	2.9	2.3	3.2	2.2
Transportation equipment	-------	3.2	3.7	3.5	2.7	3.1	3.1	3.3	4.7	4.5	4.0	3.6	3.1	3.5	2.5
Motor vehicles and equipment	-------	3.9	4.5	4.3	3.3	3.7	3.3	3.8	6.1	5.9	4.9	4.5	3.6	4.1	2.6
Aircraft and parts	-------	2.4	2.5	2.2	1.9	2.3	2.7	2.9	3.3	3.2	3.2	3.0	2.7	2.9	2.5
Ship and boat building and repairing	-------	2.5	3.3	3.5	2.8	2.9	3.4	3.1	3.5	3.1	2.9	2.5	3.1	2.8	2.6
Railroad equipment	-------	2.4	2.3	1.9	2.0	2.3	1.6	1.6	1.5	1.2	1.7	1.7	2.1	2.0	.9
Other transportation equipment	-------	3.9	3.7	3.5	2.7	2.8	2.6	1.8	2.1	1.9	2.7	3.1	3.4	2.5	1.8
Instruments and related products	-------	2.3	2.4	2.3	1.9	2.3	2.2	2.2	2.6	2.5	2.5	2.5	2.3	2.4	2.1
Engineering and scientific instruments	-------	2.4	2.5	2.2	1.8	2.5	2.4	2.8	3.1	2.8	2.8	2.9	2.7	2.6	2.2
Mechanical measuring and control devices	-------	2.4	2.5	2.3	1.9	2.1	1.9	1.9	2.6	2.5	2.3	2.3	2.3	2.2	1.9
Optical and ophthalmic goods	-------	2.3	2.5	2.4	2.1	2.5	2.3	2.0	2.1	1.7	2.5	2.5	1.9	2.2	2.0
Surgical, medical, and dental equipment	-------	2.0	2.4	2.0	1.6	2.1	1.9	1.6	2.2	2.2	2.3	2.5	2.5	2.3	2.1
Photographic equipment and supplies	-------	2.4	2.4	2.8	2.3	2.9	3.2	3.1	3.0	3.4	2.7	2.7	2.5	2.9	2.9
Watches and clocks	-------	1.8	1.9	1.9	1.4	1.7	1.7	1.5	1.8	2.0	2.1	2.1	1.9	1.9	1.5

See footnotes at end of table.

TABLE C–4. Average overtime hours of production workers in manufacturing, by industry[1]—Continued

Revised series; see box, p. 1228.

Industry	1963								1962					Annual average	
	Aug.[2]	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962	1961
Manufacturing—Continued															
Durable goods—Continued															
Miscellaneous manufacturing industries	-------	1.9	2.1	2.0	1.9	2.2	2.1	2.0	2.4	2.4	2.6	2.6	2.3	2.3	2.2
Jewelry, silverware, and plated ware	-------	2.5	2.7	2.8	2.4	2.7	2.6	2.5	4.2	3.5	3.4	3.2	2.7	3.0	3.0
Toys, amusement, and sporting goods	-------	1.5	1.6	1.6	1.5	1.7	1.7	1.7	1.5	2.0	2.3	2.4	1.9	1.9	1.9
Pens, pencils, office and art materials	-------	1.7	2.1	1.7	1.4	1.8	2.0	1.9	2.1	1.8	3.1	2.2	2.2	2.0	1.8
Costume jewelry, buttons, and notions	-------	2.0	2.4	2.1	2.0	2.3	2.3	1.7	2.2	1.9	2.0	2.1	2.4	2.2	1.9
Other manufacturing industries	-------	2.0	2.3	2.2	2.0	2.5	2.3	2.3	2.6	2.5	2.6	3.0	2.6	2.5	2.3
Nondurable goods															
Food and kindred products	-------	3.8	3.7	3.4	2.9	3.1	3.0	3.1	3.4	3.6	3.4	3.8	3.4	3.4	3.3
Meat products	-------	3.9	3.9	3.6	2.9	3.2	2.9	3.3	4.2	4.5	3.8	3.7	3.0	3.6	3.7
Dairy products	-------	3.5	3.5	3.3	3.2	3.2	3.0	3.1	3.2	3.2	3.2	3.7	3.4	3.4	3.1
Canned and preserved food, except meats	-------	2.5	2.3	2.3	1.9	2.3	2.2	2.2	2.2	2.1	2.4	3.4	2.5	2.6	2.4
Grain mill products	-------	7.7	6.9	6.3	4.7	5.4	5.6	5.8	6.1	6.4	7.0	7.1	7.1	6.3	6.2
Bakery products	-------	3.3	3.4	3.2	2.9	2.8	2.7	2.5	2.9	3.3	3.1	3.6	3.3	3.1	2.9
Sugar	-------	3.7	3.5	4.4	3.9	3.3	3.1	3.1	2.7	3.9	2.8	4.5	4.2	3.7	4.3
Confectionery and related products	-------	2.2	2.6	1.8	1.7	2.3	2.3	2.3	3.0	3.1	3.3	3.4	2.6	2.5	2.5
Beverages	-------	4.5	4.1	3.2	2.9	2.8	2.3	2.3	2.4	2.4	2.5	3.1	3.0	2.8	2.7
Miscellaneous food and kindred products		3.9	3.8	3.8	3.4	3.6	4.0	3.8	4.2	4.2	4.1	4.1	3.9	3.9	3.9
Tobacco manufactures	-------	1.4	1.5	1.0	.3	.8	.7	.6	1.1	1.3	1.2	1.6	1.0	1.0	1.1
Cigarettes	-------	1.8	2.0	1.3	.4	1.0	.5	.5	1.2	1.5	1.0	1.4	.8	.9	1.2
Cigars	-------	1.1	1.2	.9	.1	.8	1.1	.7	1.0	1.6	1.4	1.3	1.2	.9	1.0
Textile mill products	-------	3.1	3.4	3.2	2.8	3.1	3.0	2.8	3.0	3.3	3.2	3.0	3.2	3.2	2.7
Cotton broad woven fabrics	-------	2.9	3.1	3.2	3.0	3.0	2.9	3.0	3.0	3.2	3.1	2.8	3.0	3.2	2.7
Silk and synthetic broad woven fabrics	-------	3.9	4.4	4.4	3.7	3.9	3.9	4.0	4.3	4.5	4.4	4.2	4.4	4.3	3.2
Weaving and finishing broad woolens	-------	3.9	4.0	3.7	3.0	3.6	3.7	3.4	3.1	3.2	3.4	3.7	4.1	4.2	3.3
Narrow fabrics and smallwares	-------	3.1	3.1	3.4	2.9	3.0	3.0	3.3	3.2	3.3	3.4	3.2	3.3	3.3	2.9
Knitting	-------	2.6	2.4	2.0	1.6	1.8	1.7	1.6	1.7	2.1	2.3	2.3	2.3	2.2	2.0
Finishing textiles, except wool and knit	-------	3.4	4.5	4.1	3.8	4.6	4.2	3.1	4.4	4.7	4.2	3.7	3.3	4.2	3.7
Floor covering	-------	3.9	4.2	3.5	3.6	4.8	4.9	3.3	4.4	5.0	5.0	4.7	4.9	4.1	3.3
Yarn and thread	-------	3.1	3.5	3.2	2.9	3.1	2.8	2.5	2.6	2.8	3.1	2.8	3.2	3.2	2.7
Miscellaneous textile goods	-------	3.3	4.2	3.3	2.8	3.3	3.4	3.2	3.7	3.8	3.5	3.4	3.2	3.5	2.9
Apparel and related products	-------	1.3	1.3	1.3	1.1	1.4	1.3	1.0	1.2	1.4	1.4	1.5	1.5	1.3	1.1
Men's and boys' suits and coats	-------	.6	1.0	1.1	.9	1.3	1.3	1.1	1.3	1.1	1.3	1.3	1.2	1.2	.8
Men's and boys' furnishings	-------	1.2	1.3	1.2	.9	1.1	1.0	.9	1.0	1.3	1.3	1.4	1.6	1.2	.9
Women's, misses', and juniors' outerwear	-------	1.5	1.3	1.4	1.4	1.8	1.5	1.1	1.2	1.3	1.2	1.4	1.6	1.4	1.1
Women's and children's undergarments	-------	1.3	1.2	1.3	1.0	1.4	1.1	.9	1.2	1.8	1.8	1.6	1.5	1.3	1.4
Hats, caps, and millinery	-------	1.5	1.0	1.2	1.0	2.0	1.7	1.1	1.2	1.2	1.5	1.2	1.6	1.5	1.5
Girls' and children's outerwear	-------	1.6	1.5	1.3	.7	1.2	1.2	.8	.7	.9	1.1	1.1	1.6	1.2	1.3
Fur goods and miscellaneous apparel	-------	.9	.9	1.0	.7	.9	.8	.8	1.2	1.4	1.4	1.3	1.1	1.2	1.2
Miscellaneous fabricated textile products	-------	1.6	1.8	1.8	1.5	1.5	1.4	1.3	1.8	2.1	2.3	2.1	1.8	1.7	1.6
Paper and allied products	-------	4.8	4.6	4.3	3.8	4.3	4.1	4.1	4.5	4.4	4.5	4.8	4.5	4.4	4.2
Paper and pulp	-------	5.9	5.4	5.3	4.8	5.4	5.2	5.3	5.2	5.2	5.1	5.3	5.2	5.2	5.0
Paperboard	-------	6.7	6.3	5.5	5.0	5.9	5.6	5.4	6.3	6.0	5.5	6.4	5.9	5.9	5.6
Converted paper and paperboard products	-------	3.2	3.2	2.9	2.6	2.9	2.9	2.9	3.3	2.8	3.0	3.3	3.4	3.0	3.0
Paperboard containers and boxes	-------	3.9	4.1	3.6	3.1	3.3	3.2	3.2	3.8	4.1	4.4	4.7	4.1	3.9	3.7
Printing, publishing and allied industries	-------	2.6	2.7	2.8	2.4	2.8	2.5	2.4	3.0	2.8	2.8	3.1	2.9	2.8	2.7
Newspaper publishing and printing	-------	2.0	2.6	2.7	2.0	2.0	1.8	1.7	3.0	2.9	2.7	2.7	2.5	2.5	2.4
Periodical publishing and printing	-------	3.4	2.8	2.7	3.0	4.0	3.2	2.2	3.2	3.5	3.7	4.3	3.3	3.1	3.1
Books	-------	4.4	3.5	3.9	3.1	3.6	2.8	2.6	2.8	2.8	3.0	3.6	3.6	3.4	3.7
Commercial printing	-------	2.8	2.8	2.9	2.7	3.2	2.8	2.7	3.1	2.9	3.0	3.2	3.0	3.0	2.9
Bookbinding and related industries	-------	2.1	2.4	2.2	2.1	2.2	1.8	2.2	2.1	2.3	2.5	3.2	2.7	2.4	2.1
Other publishing and printing industries	-------	2.4	2.4	2.1	1.9	2.5	2.7	2.4	2.6	2.5	2.7	2.7	2.8	2.6	2.5
Chemicals and allied products	-------	2.6	2.6	2.6	3.1	2.5	2.4	2.2	2.4	2.3	2.5	2.7	2.4	2.5	2.3
Industrial chemicals	-------	2.6	2.5	2.2	2.8	2.3	2.4	2.2	2.5	2.4	2.5	2.6	2.4	2.5	2.3
Plastics and synthetics, except glass	-------	2.5	2.7	2.1	2.6	2.0	2.0	1.9	2.1	1.9	2.0	2.3	2.2	2.3	2.0
Drugs	-------	2.3	2.2	2.0	2.0	2.6	2.5	2.4	2.4	2.5	2.6	2.5	2.3	2.4	1.9
Soap, cleaners and toilet goods	-------	2.5	2.4	2.1	2.2	2.4	2.5	2.3	2.4	2.5	2.9	3.2	2.8	2.7	2.6
Paints, varnishes and allied products	-------	2.9	2.8	3.1	2.0	2.0	1.7	1.5	1.6	1.5	1.8	2.3	2.3	2.1	1.9
Agricultural chemicals	-------	3.0	3.6	6.8	9.6	5.6	3.7	3.3	3.4	3.1	3.5	3.8	2.5	4.1	3.8
Other chemical products	-------	2.9	2.8	2.6	2.2	2.4	2.5	2.6	2.8	2.6	2.7	2.8	2.8	2.6	2.6
Petroleum refining and related industries	-------	2.8	2.7	2.6	2.5	1.7	1.6	2.0	2.0	2.5	2.5	3.0	2.2	2.3	2.0
Petroleum refining	-------	2.0	1.9	1.9	2.1	1.5	1.4	1.7	1.5	1.9	1.6	2.0	1.3	1.6	1.5
Other petroleum and coal products	-------	5.9	5.6	5.1	4.0	2.5	2.6	3.1	3.9	4.8	5.9	6.5	5.9	4.8	4.4
Rubber and miscellaneous plastic products	-------	3.0	2.9	2.5	2.4	2.9	2.9	2.8	3.1	3.1	3.0	3.3	3.1	3.1	2.6
Tires and inner tubes	-------	3.7	2.8	2.1	2.3	2.8	2.9	2.8	3.5	3.3	3.3	3.6	3.5	3.3	2.7
Other rubber products	-------	2.4	2.6	2.3	2.2	2.5	2.6	2.6	3.0	3.0	2.8	3.2	2.9	2.9	2.4
Miscellaneous plastic products	-------	3.3	3.3	3.1	2.5	3.4	3.2	3.0	3.1	3.2	3.1	3.4	3.0	3.2	2.9
Leather and leather products	-------	1.3	1.4	1.1	.9	1.3	1.5	1.2	1.3	1.4	1.3	1.4	1.5	1.4	1.4
Leather tanning and finishing	-------	2.6	3.2	2.8	2.4	2.4	2.5	2.4	2.5	2.5	2.7	2.8	2.8	2.6	2.3
Footwear, except rubber	-------	1.2	1.2	.9	.7	1.2	1.3	1.1	1.1	1.0	.9	1.0	1.2	1.1	1.1
Other leather products	-------	1.2	1.4	1.0	.9	1.4	1.7	1.2	1.6	2.1	1.8	1.8	1.8	1.8	1.7

[1] For comparability of data with those published in issues prior to October 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 ending nearest the 15th of the month. Overtime hours are those paid for at premium rates because (1) they exceeded either the straight-time workday or workweek or (2) they occurred on weekends 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]

Revised series; see box p. 1228.

[1957–59=100]

Activity	1963								1962					Annual average	
	Aug [2]	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962	1961
	Man-hours														
Total	105.0	103.9	104.4	101.6	98.0	95.8	94.1	95.1	98.0	101.0	103.5	105.2	103.9	99.8	95.7
Mining	85.0	82.6	86.7	84.2	81.3	77.4	78.2	78.8	80.8	82.5	84.5	85.4	86.5	83.6	85.6
Contract construction	124.2	121.5	116.1	107.6	97.4	83.3	76.5	82.6	88.3	103.2	114.0	116.5	119.5	99.3	96.1
Manufacturing	102.5	101.8	103.1	101.3	99.0	99.0	98.1	98.2	100.6	101.5	102.5	104.1	101.9	100.6	96.1
Durable goods	101.0	102.4	104.7	103.1	100.5	99.6	98.9	99.2	100.9	101.4	102.0	102.6	99.3	100.3	94.1
Ordnance and accessoires	149.1	147.0	148.8	147.8	144.8	149.6	151.8	153.4	156.1	155.4	153.2	154.1	154.5	150.3	133.4
Lumber and wood products, except furniture	100.7	95.5	95.3	94.9	90.2	87.8	87.1	87.8	89.5	93.2	96.4	99.8	101.7	93.3	91.2
Furniture and fixtures	109.9	105.1	106.0	102.6	101.8	102.7	102.4	102.9	106.9	107.3	109.4	109.3	108.6	104.8	97.7
Stone, clay, and glass products	109.8	109.5	109.3	106.4	101.4	94.9	91.2	92.1	95.8	102.3	105.4	106.6	107.5	100.3	97.7
Primary metal industries	98.3	101.2	105.2	102.3	100.2	95.8	94.0	92.1	92.1	90.0	89.8	92.4	90.3	95.3	91.7
Fabricated metal products	105.4	102.6	105.7	103.4	99.8	98.9	98.5	99.4	101.3	101.8	102.9	103.7	100.7	100.6	94.8
Machinery	101.9	102.3	104.9	103.8	103.0	103.5	102.7	102.4	102.4	101.3	101.7	102.3	101.6	101.9	94.4
Electrical equipment and supplies	113.5	112.7	115.5	113.7	111.8	113.4	114.5	115.9	118.7	118.6	119.1	119.5	116.0	115.8	105.9
Transportation equipment	78.8	92.5	95.0	94.7	92.2	92.2	92.0	93.7	94.5	93.5	92.0	89.9	78.0	88.7	80.8
Instruments and related products	107.3	105.2	106.9	104.7	103.5	104.2	103.8	103.3	105.2	105.4	104.6	104.2	104.2	103.2	99.4
Miscellaneous manufacturing industries	105.2	99.4	102.6	100.7	97.2	97.2	95.0	92.4	99.2	107.1	110.5	110.0	106.5	102.1	98.0
Nondurable goods	104.5	101.0	101.0	99.0	97.0	98.3	97.0	97.0	100.3	101.7	103.2	106.1	105.3	101.1	98.7
Food and kindred products	103.5	97.6	93.4	88.7	85.5	86.4	85.1	87.6	93.0	96.3	101.8	109.1	105.8	95.3	96.5
Tobacco manufactures	110.4	75.5	78.4	76.5	70.9	78.3	82.0	90.5	100.9	100.3	120.6	132.8	104.3	93.2	94.6
Textile mill products	96.6	94.5	97.1	95.5	93.5	94.4	93.4	92.8	95.8	97.1	97.4	97.2	98.3	97.4	94.8
Apparel and related products	112.4	108.0	108.5	108.9	105.9	110.9	108.2	103.2	106.0	108.4	107.9	110.4	112.0	106.9	100.2
Paper and allied products	110.4	106.8	107.8	105.1	103.3	104.5	103.3	104.1	106.5	105.9	106.6	108.3	107.7	105.5	103.6
Printing, publishing, and allied industries	104.9	103.7	104.4	104.1	102.9	102.3	100.8	100.8	104.1	105.8	105.7	106.5	104.9	104.7	104.0
Chemicals and allied products	103.9	105.3	105.9	106.4	107.7	103.9	102.3	102.2	103.1	103.0	103.2	104.1	103.8	103.5	100.5
Petroleum refining and related industries	85.0	85.5	84.9	83.4	83.0	78.9	78.4	80.4	81.2	82.4	83.2	86.1	88.1	86.1	88.5
Rubber and miscellaneous plastic products	110.1	109.8	114.3	112.9	111.3	112.4	111.8	114.3	116.0	116.3	117.1	117.1	114.0	113.4	102.3
Leather and leather products	100.3	96.3	96.2	90.2	87.3	93.6	95.6	95.7	97.6	95.6	93.5	96.9	101.5	98.1	96.7
	Payrolls														
Mining	-------	90.0	95.9	92.1	89.2	85.0	86.2	86.5	88.5	89.0	91.3	93.0	93.2	90.5	90.6
Contract construction	-------	146.4	138.9	128.3	115.5	100.2	92.4	99.9	106.8	122.5	135.0	138.3	139.7	116.4	108.8
Manufacturing	118.0	118.1	119.9	117.4	114.4	114.1	112.6	112.8	115.4	115.7	116.1	117.8	114.1	113.7	105.4

[1] For comparability of data with those published in issues prior to October 1963, 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]

Revised series; see box p. 1228.

[In current and 1957–59 dollars] [1]

Item	1963							1962						Annual average	
	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	1962	1961
Manufacturing															
Gross average weekly earnings:															
Current dollars	$99.23	$100.37	$99.23	$97.36	$98.09	$97.20	$97.44	$98.01	$97.36	$96.32	$97.27	$95.75	$96.39	$96.56	$92.34
1957–59 dollars	92.65	94.16	93.44	91.68	92.36	91.61	91.92	92.64	91.85	90.87	91.68	90.76	91.36	91.61	88.62
Spendable average weekly earnings:															
Worker with no dependents:															
Current dollars	79.51	80.38	79.51	78.04	78.63	77.92	78.11	79.02	78.50	77.67	78.43	77.21	77.72	77.86	74.60
1957–59 dollars	74.24	75.40	74.87	73.48	74.04	73.44	73.69	74.69	74.06	73.27	73.92	73.18	73.67	73.87	71.59
Worker with 3 dependents:															
Current dollars	87.25	88.18	87.25	85.72	86.31	85.58	85.78	86.72	86.19	85.33	86.11	84.87	85.39	85.53	82.18
1957–59 dollars	81.47	82.72	82.16	80.72	81.27	80.66	80.92	81.97	81.31	80.50	81.16	80.45	80.94	81.15	78.87

[1] For comparability of data with those published in issues prior to October 1963, 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 computed 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 Index [1]—All-city average: *All items, groups, subgroups, and special groups of items

[1957–59=100]

Group	1963								1962					Annual average	
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962	1961
All items	107.1	107.1	106.6	106.2	106.2	106.2	106.1	106.0	105.8	106.0	106.0	106.1	105.5	105.4	104.2
Food [2]	106.0	106.2	105.0	104.3	104.2	104.6	105.0	104.7	103.5	104.1	104.3	104.8	103.8	103.6	102.6
Food at home	104.5	104.8	103.4	102.5	102.6	103.0	103.5	103.2	101.9	102.6	102.9	103.5	102.3	102.2	101.5
Cereals and bakery products	109.1	109.2	109.2	109.3	109.2	109.1	109.2	108.7	108.2	108.4	108.0	107.9	107.8	107.6	105.4
Meats, poultry, and fish	101.4	100.2	98.4	98.0	98.3	100.7	102.1	102.5	102.5	103.5	104.1	106.3	102.6	101.7	99.3
Dairy products	104.2	103.3	102.8	102.8	102.9	103.5	103.6	103.8	103.9	104.2	104.3	104.2	103.9	104.1	104.8
Fruits and vegetables	114.2	118.7	115.6	113.9	112.0	109.6	109.4	106.4	100.2	102.1	102.0	102.2	105.2	105.0	104.2
Other foods at home [3]	98.0	97.8	96.9	94.5	96.2	96.7	97.1	97.6	97.2	97.2	98.1	97.8	95.2	96.1	97.6
Housing [4]	106.0	106.0	105.9	105.7	105.8	105.7	105.4	105.4	105.2	105.1	105.0	104.9	104.8	104.8	103.9
Rent	106.8	106.7	106.7	106.6	106.5	106.4	106.4	106.3	106.2	106.2	106.1	105.9	105.8	105.7	104.4
Gas and electricity	107.2	108.1	108.1	107.4	107.5	108.0	108.0	108.2	108.1	108.1	108.0	108.0	108.0	107.9	107.9
Solid and petroleum fuels	102.6	102.3	102.1	102.4	104.2	104.8	104.8	104.9	104.8	103.6	102.4	101.3	100.1	102.1	101.6
Housefurnishings	98.3	98.5	98.5	98.4	98.5	98.6	98.3	97.9	98.6	98.7	98.8	98.7	98.5	98.9	99.5
Household operation	110.6	110.3	110.2	110.0	109.9	109.7	109.3	109.3	108.1	107.8	107.6	107.6	107.4	107.4	105.9
Apparel	104.0	103.9	103.9	103.7	103.8	103.6	103.3	103.0	103.9	104.3	104.9	104.6	102.5	103.2	102.8
Men's and boys'	104.7	104.5	104.4	104.2	104.1	103.9	103.7	103.5	104.3	104.3	104.2	104.0	102.9	103.3	102.8
Women's and girls'	101.2	101.2	101.2	101.1	101.4	101.1	100.7	100.2	101.5	102.5	104.0	103.6	99.9	100.9	101.0
Footwear	110.6	110.5	110.6	110.3	110.2	110.0	109.9	109.8	109.9	109.7	109.6	109.5	109.3	109.3	107.8
Other apparel [5]	101.1	101.1	101.0	100.9	100.9	101.1	100.9	100.3	101.3	101.1	101.6	101.2	100.3	100.6	100.9
Transportation	108.3	107.8	107.4	107.4	107.0	107.0	106.8	106.6	108.0	108.3	108.1	107.8	107.4	107.2	105.0
Private	106.9	106.4	106.1	106.0	105.5	105.6	105.3	105.3	106.8	107.2	106.9	106.7	106.2	105.9	104.0
Public	117.1	116.6	116.6	116.5	116.5	116.4	116.3	115.7	115.7	115.4	116.0	115.7	115.7	115.4	111.7
Medical care	117.1	116.9	116.8	116.4	116.1	115.8	115.6	115.5	115.3	115.0	114.9	114.7	114.6	114.2	111.3
Personal care	108.0	108.0	107.8	107.8	107.6	107.3	107.3	107.4	107.6	107.1	106.9	106.8	106.8	106.5	104.6
Reading and recreation	112.1	111.5	110.9	110.7	111.0	110.1	110.0	110.2	110.0	110.1	109.5	110.0	110.3	109.6	107.2
Other goods and services	108.0	108.0	107.6	106.0	105.8	105.7	105.7	105.7	105.6	105.6	105.6	105.6	105.5	105.3	104.6
Special groups:															
All items less food	107.6	107.5	107.3	107.0	107.0	106.8	106.6	106.5	106.7	106.7	106.7	106.6	106.2	106.1	104.8
All items less shelter	107.2	107.1	106.6	106.1	106.1	106.1	106.1	105.9	105.8	106.0	106.1	106.1	105.5	105.4	104.2
All commodities less food	103.6	103.5	103.3	103.0	103.0	102.9	102.7	102.6	103.4	103.5	103.6	103.4	102.6	102.8	102.1
All commodities	104.7	104.7	104.1	103.6	103.6	103.7	103.8	103.6	103.6	103.9	104.0	104.1	103.2	103.2	102.4
Nondurables [6]	105.5	105.5	104.8	104.2	104.2	104.4	104.5	104.3	104.0	104.2	104.4	104.7	103.5	103.6	102.8
Nondurables less food	105.0	104.8	104.5	104.2	104.3	104.2	104.1	104.0	104.6	104.4	104.6	104.6	103.2	103.8	103.2
Nondurables less food and apparel	105.7	105.5	105.0	104.7	104.7	104.7	104.6	104.7	105.1	104.5	104.5	104.6	103.7	104.2	103.3
Durables [7]	101.4	101.3	101.3	101.0	100.9	100.8	100.6	100.4	101.7	102.2	102.0	101.6	101.7	101.5	100.5
Durables less cars	98.5	98.5	98.4	98.3	98.4	98.5	98.4	98.5	98.6	98.6	98.6	98.6	98.7	98.8	98.9
All services [8]	111.7	111.5	111.3	111.1	111.1	110.8	110.5	110.5	110.1	110.0	109.8	109.8	109.9	109.5	107.6
All services less rent	112.6	112.4	112.2	111.9	111.9	111.6	111.2	111.2	110.8	110.6	110.5	110.5	110.6	110.2	108.3
Household operation services, gas, and electricity	110.7	110.7	110.6	110.2	110.2	110.2	109.9	109.9	109.1	108.8	108.7	108.6	108.5	108.5	107.2
Transportation services	112.7	112.4	112.3	112.2	112.0	111.8	111.4	111.1	110.9	110.7	110.8	110.5	111.7	111.2	109.5
Medical care services	120.4	120.2	120.1	119.5	119.2	118.9	118.7	118.5	118.2	118.0	117.8	117.5	117.3	116.8	113.1
Other services	111.2	110.9	110.5	110.3	110.5	110.0	109.6	109.7	109.3	109.3	109.1	109.3	109.3	108.7	106.8

*The Consumer Price Index for August 1963 calculated from a 1947–49 =100 base was 131.4.

[1] The Consumer Price Index measures the average change in prices of goods and services purchased by urban wage-earner and clerical-worker families. Data for 46 large, medium-size, and small cities are combined for the all-city average.

[2] In addition to subgroups shown here, total food includes restaurant meals and other food bought and eaten away from home.

[3] Includes eggs, fats and oils, sugar and sweets, beverages (nonalcoholic), and other miscellaneous foods.

[4] In addition to subgroups shown here, total housing includes the purchase price of homes and other homeowner costs.

[5] Includes yard goods, diapers, and miscellaneous items.

[6] Includes food, house paint, solid fuels, fuel oil, textile housefurnishings, household paper, electric light bulbs, laundry soap and detergents, apparel (except shoe repairs), gasoline, motor oil, prescriptions and drugs, toilet goods, nondurable toys, newspaper, cigarettes, cigars, beer, and whiskey.

[7] Includes water heaters, central heating furnaces, kitchen sinks, sink faucets, porch flooring, household appliances, furniture and bedding, floor covering, dinnerware, automobiles, tires, radio and television sets, durable toys, and sporting goods.

[8] Includes rent, home purchase, real estate taxes, mortgage, interest, property insurance, repainting garage, repainting rooms, reshingling roof, refinishing floors, gas, electricity, dry cleaning, laundry service, domestic service, telephone, water, postage, shoe repairs, auto repairs, auto insurance, auto registration, transit fares, railroad fares, professional medical services, hospital services, hospitalization and surgical insurance, barber and beauty shop services, television repairs, and motion picture admissions

D.—Consumer and Wholesale Prices

TABLE D–2. Consumer Price Index [1]—All items and food indexes, by city

[1957–59=100]

City	1963								1962					Annual average		1963 (1947–49=100)
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962	1961	Aug.
All Items																
All-city average [2]	107.1	107.1	106.6	106.2	106.2	106.2	106.1	106.0	105.8	106.0	106.0	106.1	105.5	105.4	104.2	131.4
Atlanta, Ga.	([3])	([3])	104.9	([3])	([3])	104.9	([3])	([3])	104.5	([2])	([3])	104.7	([3])	104.1	103.2	([3])
Baltimore, Md.	([3])	([3])	106.8	([3])	([3])	106.2	([3])	([3])	105.7	([2])	([3])	106.0	([3])	105.2	104.4	([3])
Boston, Mass.	([3])	109.8	([3])	([3])	109.2	([3])	([3])	108.6	([3])	([2])	108.2	([2])	([3])	107.4	105.1	([3])
Chicago, Ill.	105.7	106.0	105.2	105.0	105.0	105.2	104.7	104.7	104.7	105.0	105.0	105.2	104.4	104.6	103.6	133.3
Cincinnati, Ohio	([3])	([3])	104.6	([3])	([3])	104.5	([3])	([3])	104.0	([3])	([3])	104.3	([3])	103.6	102.6	([3])
Cleveland, Ohio	105.1	([3])	([3])	104.3	([3])	([3])	104.3	([3])	([3])	103.7	([3])	([3])	103.8	103.5	103.2	130.5
Detroit, Mich.	104.4	103.9	103.5	102.4	102.1	102.6	102.6	102.5	102.5	102.6	102.8	102.8	102.3	102.2	101.9	128.7
Houston, Tex.	106.2	([3])	([3])	104.4	([3])	([3])	105.0	([3])	([3])	104.5	([3])	([3])	104.6	104.6	102.6	130.8
Kansas City, Mo.	([3])	107.1	([3])	([3])	106.4	([3])	([3])	105.9	([3])	([3])	107.1	([3])	([3])	106.1	104.5	([3])
Los Angeles, Calif.	108.4	108.0	107.4	107.6	108.0	107.7	107.8	107.3	107.2	107.1	107.2	107.2	106.6	106.6	105.4	135.2
Minneapolis, Minn.	([3])	107.7	([3])	([3])	106.5	([3])	([3])	106.0	([3])	([3])	105.9	([3])	([3])	105.5	104.2	([3])
New York, N.Y.	109.3	109.2	108.7	107.8	107.9	107.6	107.6	107.5	106.9	107.1	107.2	107.3	106.6	106.4	104.8	131.7
Philadelphia, Pa.	107.5	107.4	107.2	106.2	106.4	106.4	106.2	105.9	105.7	105.8	105.8	106.0	105.2	105.2	104.4	132.0
Pittsburgh, Pa.	([3])	107.9	([3])	([3])	106.3	([3])	([3])	106.5	([3])	([3])	106.3	([3])	([3])	105.9	105.0	([3])
Portland, Oreg.	([3])	106.8	([3])	([3])	106.2	([3])	([3])	105.7	([3])	([3])	105.3	([3])	([3])	104.6	104.1	([3])
St. Louis, Mo.	([3])	([3])	105.6	([3])	([3])	105.8	([3])	([3])	106.0	([3])	([3])	105.6	([3])	105.1	103.9	([3])
San Francisco, Calif.	([3])	([3])	108.9	([3])	([3])	108.4	([3])	([3])	107.8	([3])	([3])	107.5	([3])	107.4	105.8	([3])
Scranton, Pa.	107.6	([3])	([3])	106.7	([3])	([3])	106.9	([3])	([3])	106.5	([3])	([3])	106.0	105.9	104.1	128.4
Seattle, Wash.	109.1	([3])	([3])	107.4	([3])	([3])	107.2	([3])	([3])	107.0	([3])	([3])	106.7	106.5	104.9	137.1
Washington, D.C.	106.8	([3])	([3])	106.1	([3])	([3])	105.6	([3])	([3])	105.3	([3])	([3])	104.8	104.6	103.7	128.6
Food																
All-city average [2]	106.0	106.2	105.0	104.2	104.3	104.6	105.0	104.7	103.5	104.1	104.3	104.8	103.8	103.6	102.6	----
Atlanta, Ga.	104.8	105.0	103.7	102.3	102.7	103.8	104.2	104.0	102.7	103.1	103.9	104.3	103.4	103.0	101.8	----
Baltimore, Md.	105.7	106.0	104.8	103.5	103.5	103.7	103.9	104.6	103.4	103.6	104.2	104.5	104.2	103.3	102.4	----
Boston, Mass.	109.0	108.6	106.6	106.2	106.6	106.5	106.3	106.4	105.7	106.4	105.7	105.7	105.0	104.6	102.4	----
Chicago, Ill.	107.6	107.5	105.9	104.7	105.0	105.7	105.4	105.6	104.3	105.7	105.7	106.7	105.8	105.3	103.2	----
Cincinnati, Ohio	103.7	103.5	102.9	102.3	102.2	102.6	103.7	103.1	101.7	102.8	103.0	103.7	102.2	101.9	101.8	----
Cleveland, Ohio	103.6	102.6	101.6	100.7	100.8	101.7	102.2	101.7	100.8	101.3	101.7	102.4	101.5	101.0	100.9	----
Detroit, Mich.	103.0	103.4	102.0	100.7	100.8	101.1	101.7	101.3	100.6	101.6	101.5	101.6	100.8	101.1	101.4	----
Houston, Tex.	104.7	104.6	103.1	102.0	101.8	102.3	103.0	103.2	102.4	102.8	103.6	104.0	102.9	102.9	101.3	----
Kansas City, Mo.	105.2	105.1	103.9	102.1	103.3	103.6	104.3	103.2	103.2	104.4	104.5	105.1	104.2	103.3	101.9	----
Los Angeles, Calif.	107.1	107.7	106.3	105.9	106.6	106.8	107.8	106.8	105.6	105.3	105.6	105.9	104.7	105.5	104.5	----
Minneapolis, Minn.	102.4	103.7	102.1	101.7	102.0	101.8	101.7	101.5	100.8	100.9	101.5	102.5	101.8	101.8	101.2	----
New York, N.Y.	108.1	108.2	106.9	106.3	106.3	106.6	106.8	106.6	104.9	105.8	106.3	107.0	105.7	104.9	102.9	----
Philadelphia, Pa.	105.2	105.1	104.5	103.2	103.1	104.1	104.4	104.5	103.0	103.5	104.8	104.8	103.6	103.1	101.9	----
Pittsburgh, Pa.	104.4	104.6	103.7	103.2	103.1	104.1	104.3	103.2	101.7	102.5	102.8	103.4	102.5	102.4	102.3	----
Portland, Oreg.	106.2	105.8	104.8	104.1	104.5	104.6	105.2	105.3	103.9	104.1	104.5	104.8	103.4	103.6	103.0	----
St. Louis, Mo.	105.5	105.7	104.9	103.1	104.0	104.5	105.0	104.9	104.6	104.5	103.8	104.2	102.7	103.0	102.0	----
San Francisco, Calif.	107.1	107.6	107.0	105.9	106.5	106.9	107.0	106.7	105.6	105.8	105.6	105.0	104.3	105.4	104.0	----
Scranton, Pa.	104.4	105.0	104.6	103.1	103.1	103.3	104.4	104.1	102.9	103.6	104.1	103.8	102.3	103.1	101.3	----
Seattle, Wash.	107.8	107.8	107.1	106.7	107.3	107.3	106.9	106.3	105.9	105.9	105.9	106.6	106.0	105.7	104.5	----
Washington, D.C.	105.5	105.5	104.6	103.3	102.9	103.6	103.2	103.9	101.8	102.1	103.4	103.0	102.6	102.0	101.6	----

[1] See footnote 1, table D–1. Indexes measure time-to-time changes in prices of goods and services purchased by urban wage-earner and clerical-worker families. They do not indicate whether it costs more to live in one city than in another.

[2] Average of 46 cities.

[3] All items indexes are computed monthly for 5 cities and once every month on a rotating cycle for 15 other cities.

TABLE D–3. Indexes of wholesale prices,[1] by group and subgroup of commodities

[1957–59=100, unless otherwise specified] [2]

Commodity group	1963								1962					Annual Average	
	Aug.[3]	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962 [2]	1961
All commodities	100.4	[4]100.6	100.3	100.0	99.7	99.9	100.2	100.5	100.4	100.7	100.6	101.2	100.5	100.6	100.3
Farm products and processed foods	98.8	99.8	99.1	98.4	97.6	97.4	98.7	99.8	99.3	100.4	100.3	102.1	99.8	99.6	98.6
Farm products	96.3	96.8	94.9	94.4	95.4	95.4	96.5	98.5	97.3	99.3	98.7	100.6	97.6	97.7	96.0
Fresh and dried fruits and vegetables	92.6	97.0	97.1	99.8	99.6	99.0	96.5	104.0	88.5	96.4	97.5	94.9	90.9	97.7	93.7
Grains	98.5	99.5	101.4	102.9	105.1	103.7	103.0	102.0	101.1	99.5	98.5	98.6	98.1	98.8	95.6
Livestock and live poultry	93.5	94.4	89.3	86.8	88.2	85.6	89.5	94.1	96.2	98.3	98.6	104.4	98.5	96.2	92.5
Plant and animal fibers	99.6	100.2	101.4	101.7	102.0	101.8	100.8	99.3	98.1	97.6	97.5	97.4	98.4	98.4	94.8
Fluid milk	100.6	99.8	97.9	97.3	98.3	99.6	101.1	101.3	101.9	102.4	102.5	101.6	100.8	101.2	103.9
Eggs	96.0	87.5	79.2	77.1	81.3	99.8	99.1	100.1	99.3	112.4	103.1	110.7	98.0	95.2	99.0
Hay, hayseeds, and oilseeds	111.3	111.1	113.8	112.5	110.7	113.8	113.5	111.9	108.2	106.9	103.1	99.8	105.2	105.4	107.2
Other farm products	88.4	89.1	89.3	89.5	89.4	89.0	89.1	87.4	89.0	90.1	89.7	90.8	89.9	91.8	93.2
Processed foods	100.9	102.2	102.4	101.7	99.3	99.0	100.5	100.8	100.9	101.3	101.5	103.3	101.5	101.2	100.7
Cereal and bakery products	106.0	[4]106.4	107.0	107.6	108.1	108.0	108.6	107.4	107.6	107.7	107.6	107.6	107.8	107.6	105.1
Meats, poultry and fish	95.2	[4] 96.3	94.1	91.9	90.3	91.8	95.6	97.9	99.4	100.1	100.0	106.8	101.0	99.1	95.4
Dairy products and ice cream	107.9	107.3	106.6	106.8	106.9	107.1	108.0	107.8	108.1	108.0	107.7	106.0	106.1	106.9	107.5
Canned and frozen fruits and vegetables	104.7	[4]105.7	104.6	103.4	102.9	101.3	99.8	100.0	95.7	96.3	96.4	96.6	97.1	98.0	101.7
Sugar and confectionery	111.2	120.3	132.1	133.6	113.9	106.1	105.1	105.0	102.8	102.5	103.0	102.1	102.7	102.2	101.2
Packaged beverage materials	80.9	81.1	81.1	80.9	80.9	79.1	79.1	79.1	79.1	79.1	79.1	82.4	82.6	81.9	83.7
Animal fats and oils	84.3	[4] 82.7	79.2	77.2	79.1	80.0	86.0	82.8	85.2	92.2	95.2	91.4	89.5	88.4	94.4
Crude vegetable oils	77.3	83.6	83.3	84.2	83.3	83.8	82.5	81.0	78.9	79.8	80.9	76.7	77.9	84.5	102.6
Refined vegetable oils	79.6	84.3	84.4	85.8	84.1	90.0	89.2	88.4	90.0	88.7	86.2	84.6	85.2	93.1	108.3
Vegetable oil end products	86.1	87.0	87.0	87.0	87.2	90.5	91.9	91.9	91.8	91.8	90.9	92.6	92.9	97.3	102.7
Miscellaneous processed foods [5]	105.5	104.5	103.9	101.8	101.4	101.5	101.5	100.2	100.4	101.2	104.6	102.8	101.1	101.8	105.8
All commodities except farm products	100.8	101.1	101.0	100.7	100.2	100.4	100.6	100.7	100.8	100.8	100.8	101.2	100.8	100.9	100.8
All commodities except farm and foods	100.8	[4]100.8	100.7	100.5	100.4	100.6	100.6	100.7	100.7	100.7	100.7	100.8	100.6	100.8	100.8
Textile products and apparel	100.4	100.4	100.3	100.2	100.1	100.2	100.3	100.4	100.6	100.5	100.5	100.6	100.8	100.6	99.7
Cotton products	99.8	99.8	99.7	99.7	100.1	100.2	100.5	100.6	100.8	100.7	101.0	101.3	101.7	101.7	100.4
Wool products	100.6	[4]100.5	[4]100.8	100.6	100.8	100.8	100.7	100.7	100.2	100.1	99.6	99.4	99.3	99.1	97.1
Manmade fiber textile products	93.9	[4] 93.7	93.8	93.8	93.8	93.8	93.7	93.7	93.7	93.6	93.6	94.0	94.3	93.9	93.4
Silk products	136.6	134.5	148.0	144.4	150.9	150.9	151.1	149.8	143.3	130.3	129.5	125.2	132.4	125.9	113.2
Apparel	102.2	102.2	102.0	101.6	101.3	101.4	101.4	101.3	101.7	101.7	101.7	101.6	101.8	101.5	101.0
Miscellaneous textile products [6]	116.5	115.1	117.4	118.2	116.3	114.9	118.2	123.3	127.9	127.8	121.6	122.1	119.4	122.4	123.4
Hides, skins, leather, and leather products	103.6	104.3	104.5	104.8	104.5	105.1	105.1	106.0	106.9	107.3	107.4	107.5	107.0	107.4	106.2
Hides and skins	80.5	83.5	85.8	87.4	85.0	88.4	85.9	95.2	101.6	107.1	108.8	110.8	105.1	106.2	107.9
Leather	100.1	102.2	102.5	103.2	102.8	103.7	104.7	105.2	106.1	106.8	106.5	106.6	106.9	108.5	106.0
Footwear	108.4	108.4	108.2	108.2	108.2	108.3	108.3	108.3	108.5	108.4	108.4	108.8	108.8	108.7	107.4
Other leather products	103.7	[4]104.0	104.3	104.4	104.5	104.7	104.8	104.9	105.5	105.0	104.8	104.0	103.9	104.3	103.2
Fuel and related products, and power	99.0	[4]100.4	100.9	100.4	100.3	100.8	100.3	100.4	100.8	100.7	100.8	100.8	99.5	100.2	100.7
Coal	95.9	[4] 95.8	94.9	94.2	95.0	98.1	98.4	98.3	98.3	97.7	97.2	96.6	95.6	96.8	97.7
Coke	103.6	103.6	103.6	103.6	103.6	103.6	103.6	103.6	103.6	103.6	103.6	103.6	103.6	103.6	103.6
Gas fuels [7]	121.8	[4]121.2	120.3	120.1	124.1	127.8	127.8	120.8	123.1	122.3	122.7	120.1	117.8	119.2	118.7
Electric power [7]	101.9	102.0	102.2	102.2	102.4	102.4	102.5	102.5	102.7	102.7	102.7	102.8	102.8	102.8	102.4
Crude petroleum and natural gasoline	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	98.1	98.1	98.1	98.2	98.2	98.1	98.0
Petroleum products, refined	96.1	98.7	99.9	99.1	98.2	98.2	97.1	98.2	98.6	98.6	98.9	99.2	97.2	98.2	99.3
Chemicals and allied products	96.0	[4] 96.0	96.3	96.4	96.3	96.8	96.7	96.9	96.8	97.0	97.1	96.9	97.0	97.5	99.1
Industrial chemicals	94.6	94.7	95.0	95.0	95.0	95.4	95.2	96.0	95.9	95.9	96.1	95.9	95.9	96.3	98.4
Prepared paint	103.9	103.0	103.0	103.0	103.7	103.7	103.8	103.8	103.8	103.8	103.8	103.8	103.8	103.8	103.6
Paint materials	89.0	[4] 89.2	91.1	91.7	91.5	93.0	93.0	93.0	92.9	93.9	93.9	94.5	95.3	95.6	99.6
Drugs and pharmaceuticals	95.0	[4] 95.1	95.2	95.2	95.1	95.2	95.1	95.2	94.8	95.1	95.1	95.0	95.0	96.0	98.3
Fats and oils, inedible	81.6	[4] 81.4	80.6	78.6	77.7	74.5	72.7	71.7	72.8	75.9	76.7	72.3	73.0	76.3	87.5
Mixed fertilizer	103.6	103.6	103.6	103.6	103.7	103.6	103.6	103.0	102.8	103.1	103.4	103.9	103.9	103.8	102.6
Fertilizer materials	96.9	[4] 99.8	100.8	102.3	102.3	102.3	102.3	100.8	99.6	99.2	99.0	98.6	98.4	101.9	104.3
Other chemicals and allied products	98.9	98.7	98.6	98.6	98.6	99.5	99.5	99.6	99.5	99.5	99.5	99.5	99.4	99.4	99.2
Rubber and rubber products	93.6	93.0	93.1	93.2	94.1	94.1	94.2	94.3	94.4	93.7	93.1	92.8	92.7	93.3	96.1
Crude rubber	90.7	91.6	92.5	92.6	92.8	92.7	93.7	94.1	94.7	92.8	92.7	92.0	92.3	93.6	96.3
Tires and tubes	90.9	89.1	89.1	89.1	89.0	89.0	89.0	89.0	89.0	88.0	86.4	86.4	86.4	87.1	92.4
Miscellaneous rubber products [9]	97.5	97.5	97.5	97.5	99.8	99.8	99.7	99.7	99.7	99.7	100.0	99.4	99.1	99.4	100.0
Lumber and wood products	102.6	[4]101.6	98.3	97.5	97.0	96.5	96.1	95.9	95.8	96.3	96.6	97.0	97.4	96.5	95.9
Lumber	102.7	[4]102.1	99.2	98.4	97.6	96.6	96.2	95.9	95.8	96.3	96.7	97.2	97.7	96.5	94.7
Millwork	104.9	[4]104.2	[4]103.0	102.4	102.4	102.5	102.3	102.3	102.1	102.3	102.3	102.3	102.7	101.8	101.9
Plywood	104.1	[4]100.9	92.6	90.9	91.0	91.2	90.5	90.5	90.4	91.5	91.9	92.2	92.1	92.4	95.7
Pulp, paper, and allied products	99.1	99.0	99.4	99.1	99.0	99.0	99.1	99.0	99.0	99.1	99.3	99.5	99.7	100.0	98.8
Woodpulp	91.7	91.7	91.3	91.3	91.3	89.4	89.4	89.4	89.4	89.4	91.3	93.6	93.6	93.2	95.0
Wastepaper	91.2	91.4	90.8	89.8	92.5	96.6	96.1	94.7	94.6	96.0	96.1	96.4	95.1	97.5	80.5
Paper	102.2	102.2	102.2	102.2	102.2	102.2	102.2	102.2	102.2	102.2	102.3	102.4	102.6	102.6	102.2
Paperboard	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.0	94.0	94.0	93.1	92.5
Converted paper and paperboard products	99.7	[4] 99.6	100.3	99.9	99.7	99.7	99.9	99.6	99.6	99.7	100.0	100.0	100.4	101.0	99.5
Building paper and board	97.5	97.5	97.5	96.2	95.5	94.1	95.5	95.6	96.2	96.6	96.3	97.1	97.1	97.2	100.8

See footnotes at end of table.

TABLE D–3. Indexes of wholesale prices,[1] by group and subgroup of commodities—Continued

[1957–59=100, unless otherwise specified[2]]

Commodity group	1963								1962					Annual Average	
	Aug.[3]	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962[3]	1961
All commodities except farm and foods—Continued															
Metals and metal products	100.1	100.0	100.0	99.9	99.4	99.4	99.4	99.5	99.3	99.3	99.4	99.7	99.8	100.0	100.7
Iron and steel	99.1	99.0	99.0	99.3	98.5	98.4	98.6	98.8	98.7	98 4	98.7	99.0	99.1	99.3	100.7
Nonferrous metals	99.4	99.0	98.7	98.7	98.2	98.1	98.0	98.0	97.7	98.3	97.9	98.9	99.0	99.2	100.4
Metal containers	105.0	105.0	104.9	104.6	104.5	104.5	104.5	104.5	103.7	103.7	103.7	103.7	103.7	103.7	102.0
Hardware	104.1	104.1	104.0	103.9	103.9	103.9	104.0	103.8	103.8	103.8	103.7	103.7	103.7	104.0	103.8
Plumbing fixtures and brass fittings	100.6	[4]100.6	100.6	100.8	100.8	101.3	101.1	97.5	97.5	97.5	97.2	96.8	96.8	100.1	103.2
Heating equipment	93.1	93.3	93.3	93.0	92.9	92.6	92.4	92.5	93.3	92.8	92.7	92.6	92.9	93.2	94.6
Fabricated structural metal products	98.4	98.3	98.2	98.2	97.6	97.8	98.0	98.1	98.1	98.1	98.2	98.2	98.3	98.2	99.0
Fabricated nonstructural metal products	104.9	105.0	104.9	104.0	103.8	103.7	103.7	103.7	103.8	103.9	103.8	103.9	103.9	103.9	103.1
Machinery and motive products	102.1	[4]102.1	102.0	102.0	101.9	102.0	102.2	102.3	102.3	102.2	[4]102.4	102.3	102.3	102.3	102.3
Agricultural machinery and equipment	110.9	[4]110.9	111.0	110.9	110.9	111.0	110.8	110.8	110.5	110.2	109.6	109.4	109.4	109.5	107.4
Construction machinery and equipment	110.0	109.7	109.6	109.2	108.8	108.8	108.5	108.3	108.3	108.2	108.0	107.7	107.7	107.8	107.5
Metalworking machinery and equipment	110.2	[4]109.9	109.6	109.4	109.4	109.1	109.1	109.2	109.3	109.3	109.3	109.3	109.5	109.3	107.0
General purpose machinery and equipment	104.0	103.9	103.5	103.4	103.4	103.4	103.6	103.9	103.8	103.7	103.7	103.6	103.3	103.3	102.8
Miscellaneous machinery	103.4	103.4	103.4	103.3	103.4	103.7	103.4	103.4	103.4	103.3	103.3	103.2	103.5	103.4	102.8
Special industry machinery and equipment[10]	104.2	[4]104.1	103.9	103.9	103.9	103.1	103.1	102.9	102.8	102.5	102.2	102.0	102.0	101.9	100.4
Electrical machinery and equipment	97.1	[4]97.2	97.7	97.7	97.0	97.1	97.8	[4]97.8	98.1	98.1	98.4	98.4	98.0	98.4	100.0
Motor vehicles	99.5	99.8	99.3	99.8	100.2	100.7	100.8	100.8	100.8	100.8	100.7	101.1	101.2	100.8	100.8
Transportation equipment, railroad rolling stock[10]	100.5	100.5	100.5	100.5	100.5	100.5	100.5	100.5	100.5	100.5	100.5	100.5	100.5	100.5	100.2
Furniture and other household durables	98.1	[4]98.0	98.1	98.0	98.1	98.2	98.2	98.3	98.4	98.6	98.5	98.6	98.7	98.8	99.5
Household furniture	104.6	104.5	104.5	104.4	104.4	104.6	104.5	104.5	104.2	104.1	104.0	103.9	104.0	103.8	102.8
Commercial furniture	103.0	102.8	102.8	102.3	102.3	102.3	102.3	102.3	102.3	102.5	102.5	102.5	102.5	102.3	101.8
Floor coverings	96.6	96.6	95.9	95.7	95.9	96.0	95.9	96.2	96.4	96.8	96.8	96.7	96.7	97.0	99.3
Household appliances	91.7	[4]91.7	91.9	92.0	92.1	92.3	92.3	92.3	93.0	93.1	93.0	93.2	93.4	94.0	95.2
Television, radio receivers, and phonographs	87.7	[4]87.7	88.9	88.9	89.4	89.4	90.1	90.1	90.4	90.4	90.7	90.7	90.8	91.1	95.3
Other household durable goods	103.3	[4]103.4	103.2	102.9	103.0	102.8	102.8	102.8	102.8	102.9	102.9	103.1	102.9	103.1	102.5
Nonmetallic mineral products	101.2	100.9	101.2	101.3	101.5	101.5	101.5	101.4	101.5	101.6	101.6	101.5	101.6	101.8	101.8
Flat glass	100.1	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	97.0	96.8
Concrete ingredients	103.0	103.2	103.2	103.0	103.0	103.0	103.0	102.7	103.2	103.3	103.3	103.3	103.3	103.2	102.8
Concrete products	101.5	[4]101.5	101.9	101.9	102.2	102.2	102.2	102.5	102.5	102.8	102.7	102.6	102.6	102.6	102.5
Structural clay products	103.6	103.5	104.0	104.0	103.8	103.6	103.6	103.7	103.5	103.4	103.4	103.6	103.6	103.5	103.2
Gypsum products	105.8	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	103.8
Prepared asphalt roofing	88.2	88.2	89.1	92.7	94.1	94.1	94.1	89.4	89.4	89.4	89.4	89.4	89.4	94.8	98.6
Other nonmetallic minerals	100.7	101.2	101.3	101.4	101.4	101.5	101.5	102.2	102.4	102.4	102.2	101.5	101.7	102.2	102.2
Tobacco products and bottled beverages	107.5	[4]107.5	105.8	105.2	104.4	104.3	104.3	104.3	104.3	104.5	104.5	104.2	104.2	104.1	103.2
Tobacco products	105.7	105.7	105.7	104.5	102.3	102.2	102.2	102.2	102.2	102.2	102.2	102.0	102.0	102.1	102.0
Alcoholic beverages	101.0	101.0	101.0	101.0	101.1	101.1	101.1	101.1	101.1	101.5	101.5	101.1	101.1	101.0	100.6
Nonalcoholic beverages	127.7	[4]127.7	118.2	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.1	117.1	116.9	112.8
Miscellaneous products	111.2	110.4	108.1	107.6	108.0	110.8	111.5	111.6	110.2	109.8	108.7	109.1	107.2	107.3	103.9
Toys, sporting goods, small arms, ammunition	101.2	[4]101.0	100.7	100.7	100.7	100.5	101.1	101.3	101.3	101.2	101.2	101.1	101.0	100.8	100.9
Manufactured animal feeds	117.7	116.3	112.1	111.2	111.9	117.1	118.2	118.3	115.7	114.9	112.8	113.7	110.2	110.6	104.6
Notions and accessories	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.9
Jewelry, watches and photographic equipment	103.9	103.9	103.8	103.9	103.8	103.9	104.0	104.0	104.4	104.4	104.4	104.4	104.4	104.2	103.5
Other miscellaneous products	101.1	100.9	101.3	101.4	101.4	101.7	101.7	101.8	101.5	101.7	101.6	101.2	101.0	101.3	101.2

[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] Formerly titled "other processed foods."

[6] Formerly titled "other textile products."

[7] January 1958=100.

[8] Discontinued.

[9] Formerly titled "other rubber products."

[10] January 1961=100.

TABLE D–4. Indexes of wholesale prices for special commodity groupings [1]

[1957–59=100, unless otherwise specified] [2]

Commodity group	1963								1962					Annual average	
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962 [3]	1961
All foods	100.0	101.3	101.1	100.7	98.7	99.0	100.1	101.1	99.9	101.3	101.2	102.9	100.5	100.6	100.0
All fish	105.5	110.0	114.4	115.9	113.6	117.3	118.4	121.9	120.9	118.3	119.0	119.8	121.6	119.2	107.9
All commodities except farm products	100.8	101.1	101.0	100.7	100.2	100.4	100.6	100.7	100.8	100.8	100.8	101.2	100.8	100.9	100.8
Textile products, excluding hard fiber products	98.0	97.9	98.0	98.0	98.2	98.3	98.4	98.4	98.5	98.3	98.4	98.7	99.0	98.8	97.7
Bituminous coal—domestic sizes	96.6	[4] 96.3	94.2	92.9	95.5	100.6	101.5	101.5	101.5	100.4	99.1	98.1	95.9	98.3	99.9
Refined petroleum products	96.1	98.7	99.9	99.1	98.2	98.2	97.1	98.2	98.6	98.6	98.9	99.2	97.2	98.2	99.3
East Coast markets	96.2	96.2	96.2	96.2	98.9	98.9	98.9	98.9	100.1	98.9	97.8	97.8	97.8	99.4	100.9
Midcontinent markets	95.4	[4] 99.7	105.4	102.6	99.7	98.6	88.6	94.4	97.5	101.4	101.4	101.4	101.4	98.2	99.6
Gulf Coast markets	97.1	100.1	99.7	99.7	97.7	97.7	97.9	97.9	97.4	95.6	97.9	99.2	99.2	98.6	101.2
Pacific Coast markets	87.2	88.2	89.7	90.7	90.7	90.7	90.7	91.7	91.7	91.7	91.4	91.4	91.4	90.9	89.9
Midwest markets [5]	92.1	94.6	95.8	93.3	94.5	95.5	98.0	97.6	97.7	98.3	97.2	97.2	87.0	94.2	93.5
Soaps	105.4	103.5	103.5	103.5	103.5	103.5	103.5	103.5	103.5	103.5	103.5	103.5	102.2	102.6	101.4
Synthetic detergents	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.8	99.8	99.8	99.7	100.8
Pharmaceutical preparations	96.8	[4] 96.9	96.8	96.9	96.8	96.8	96.6	96.6	96.1	96.4	96.3	96.3	96.3	97.3	98.9
Ethical preparations [5]	95.8	[4] 95.8	95.7	95.7	95.7	95.7	95.7	95.7	95.0	95.4	95.4	95.4	95.4	96.9	99.3
Anti-infectives [5]	88.3	88.3	88.3	88.5	88.5	88.5	88.5	88.5	86.6	87.6	87.6	87.7	87.7	93.1	99.3
Anti-arthritics [5]	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	100.3
Sedatives and hypnotics [5]	113.2	113.2	113.2	113.2	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	102.6
Ataractics [5]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Anti-spasmodics and anti-cholinergics [5]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Cardiovasculars and anti-hypertensives [5]	101.3	101.3	101.3	101.3	100.7	100.7	100.7	100.7	98.7	101.6	100.9	100.9	100.9	100.5	100.5
Diabetics [5]	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	101.9
Hormones [5]	100.0	100.0	100.0	100.0	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	100.0
Diuretics [5]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Dermatologicals [5]	104.3	[4] 104.3	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.7	100.2
Hermatinics [5]	108.8	108.8	108.8	108.8	108.8	108.8	108.8	108.8	108.5	108.5	108.5	108.5	108.5	108.5	106.1
Analgesics [5]	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	100.9
Anti-obesity preparations [5]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Cough and cold preparations [5]	100.4	100.4	100.4	100.7	100.7	100.7	100.7	100.7	100.6	100.6	100.6	100.6	100.6	100.0	99.4
Vitamins [5]	87.7	87.7	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	95.0
Proprietary preparations [5]	101.2	101.5	101.5	101.6	101.6	101.6	101.0	100.9	100.7	100.7	100.5	100.5	100.5	100.5	100.1
Vitamins [5]	100.3	100.3	100.3	100.3	100.3	100.3	100.3	100.3	100.3	100.3	99.6	100.3	100.3	100.1	100.0
Cough and cold preparations [5]	98.6	100.1	100.1	100.1	100.1	100.1	100.1	99.5	100.1	100.1	100.1	100.1	100.1	100.0	100.0
Laxatives and elimination aids [5]	103.8	103.8	103.8	103.8	103.8	103.8	101.7	101.7	101.6	101.6	101.6	101.6	101.5	101.1	99.8
Internal analgesics [5]	101.9	101.9	101.9	101.9	101.9	101.9	101.3	101.3	101.3	101.3	101.3	101.1	101.1	101.2	100.4
Tonics and alteratives [5]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
External analgesics [5]	102.3	102.3	102.3	102.3	102.3	102.3	102.3	102.3	101.3	101.3	100.8	100.7	100.7	100.8	100.0
Antiseptics [5]	102.9	102.9	102.9	102.9	102.9	102.9	102.9	101.7	100.9	100.9	100.1	100.1	100.1	100.2	100.0
Antacids [5]	98.9	98.9	98.9	100.1	100.1	100.1	100.1	100.1	98.9	98.9	98.9	98.9	98.9	99.6	100.0
Lumber and wood products (excluding millwork)	102.8	[4] 101.7	97.7	96.7	96.1	95.4	94.9	94.6	94.6	95.2	95.6	96.1	96.4	95.6	94.7
Softwood lumber	102.6	[4] 101.9	98.5	97.5	96.5	95.6	95.3	95.0	95.0	95.6	96.1	96.8	97.3	95.9	93.5
Pulp, paper, and allied products (excluding building paper and board)	99.2	[4] 99.1	99.5	99.2	99.2	99.2	99.3	99.1	99.1	99.2	99.4	99.6	99.9	100.1	98.7
Special metals and metal products [6]	100.4	100.4	100.2	100.2	100.0	100.1	100.2	100.2	100.1	100.1	100.1	100.4	100.5	100.5	101.0
Steel mill products	102.0	102.1	102.1	102.0	101.2	101.1	101.3	101.3	101.3	101.3	101.4	101.3	101.3	101.4	101.7
Machinery and equipment	103.1	[4] 103.0	103.1	103.0	102.7	102.6	102.9	103.0	103.0	102.8	103.0	102.8	102.8	102.9	102.9
Agricultural machinery (including tractors)	112.1	112.0	112.2	112.2	112.1	112.0	111.9	111.8	111.4	111.3	110.7	110.5	110.4	110.5	108.3
Metalworking machinery	109.8	[4] 109.5	109.1	108.9	108.8	108.4	108.5	108.6	108.7	108.7	108.8	108.7	109.0	108.8	106.6
All tractors	111.2	[4] 110.9	111.3	111.1	110.7	110.6	100.5	110.4	110.2	110.0	109.5	109.2	109.1	109.4	108.0
Industrial valves	106.8	107.5	107.4	107.4	107.4	107.4	107.4	107.8	108.0	108.0	108.0	107.7	107.3	107.4	108.7
Industrial fittings	97.2	95.4	91.7	91.1	90.9	90.9	94.6	94.6	94.6	94.6	94.6	93.9	93.9	93.0	88.2
Antifriction bearings and components	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	92.5
Abrasive grinding wheels	96.3	96.3	96.3	96.4	96.4	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	98.5	96.2
Construction materials	99.7	[4] 99.3	98.3	98.1	97.8	97.7	97.6	97.7	97.7	97.9	98.0	98.1	98.3	98.3	98.6

[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	1963								1962					Annual average	
	Aug.[3]	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1962[3]	1961
All commodities	100.4	[4]100.6	100.3	100.0	99.7	99.9	100.2	100 5	100.4	100.7	100.6	101.2	100.5	100.6	100.3
Stage of processing															
Crude materials for further processing	95.7	96.1	94.8	94.2	95.0	94.5	95.6	96.8	96.8	97.6	97.4	99.2	97.2	97.1	96.1
Crude foodstuffs and feedstuffs	95.4	96.1	93.7	92.8	93.9	92.8	94.7	97.1	97.1	98.2	97.9	100.6	97.4	96.8	94.9
Crude nonfood materials except fuel	95.6	95.9	96.4	96.6	96.5	96.7	96.4	95.8	95.8	95.9	96.0	96.3	96.6	97.4	97.9
Crude nonfood materials, except fuel, for manufacturing	94.9	95.3	95.8	96.0	95.9	96.2	95.8	95.2	95.1	95.3	95.3	95.7	96.0	96.9	97.4
Crude nonfood materials, except fuel, for construction	103.1	103.2	103.2	103.0	103.0	103,1	103.0	102.7	103.2	103.3	103.3	103.3	103.3	103.2	102.8
Crude fuel	102.2	[4]101.9	101.0	100.5	102.3	105.4	105.6	103.3	104.0	103.4	103.2	102.0	100.6	101.8	102.3
Crude fuel for manufacturing	102.1	[4]101.8	101.0	100.5	102.3	105.3	105.5	103.2	103.9	103.4	103.2	102.0	100.6	101.8	102.2
Crude fuel for nonmanufacturing	102.4	[4]102.1	101.2	100.7	102.5	105.8	106.0	103.5	104.3	103.7	103.5	102.2	100.8	102.0	102.4
Intermediate materials, supplies, and components	100 5	[4]100.6	100.6	100.5	99.9	100.0	100.1	100.2	100.1	100.1	100.1	100.2	100.1	100.2	100.3
Intermediate materials and components for manufacturing	99.1	[4]99.4	99.7	99.7	98.8	98.6	98.7	98.8	98.7	98.8	98.9	99.0	99.1	99.2	99.8
Intermediate materials for food manufacturing	102.8	[4]106.4	109.8	110.2	103.5	101.2	101.2	101.0	99.9	100.2	100.8	100.4	99.8	100.5	102.6
Intermediate materials for nondurable manufacturing	96.6	[4]96.8	97.0	97.1	97.1	97.1	97.2	97.3	97.3	97.4	97.6	97.7	97.8	98.0	98.6
Intermediate materials for durable manufacturing	101.0	[4]100.8	100.4	100.1	99.6	99.7	99.8	100.0	99.9	100.1	100.1	100.4	100.5	100.4	100.5
Components for manufacturing	98.7	[4]98.6	98.7	98.6	98.2	98.2	98.5	98.6	98.8	98.6	98.6	98.7	98.7	98.8	99.6
Materials and components for construction	100.5	100.1	99.4	99.2	99.0	98.9	98.9	98.8	98.9	99.0	99.1	99.2	99.3	99.3	99.7
Processed fuels and lubricants	99.9	101.4	101.8	101.4	100.8	100.8	100.3	100.6	101.4	101.7	102.0	102.1	100.8	101.2	101.6
Processed fuels and lubricants for manufacturing	101.2	102.3	102.6	102.4	102.0	102.2	101.9	101.9	102.6	102.7	102.9	102.9	101.9	102.3	102.5
Processed fuels and lubricants for nonmanufacturing	97.6	99.7	100.3	99.7	98.6	98.4	97.6	98.4	99.4	100.0	100.4	100.6	99.0	99.4	100.1
Containers, nonreturnable	101.0	[4]100.8	101.4	101.2	100.9	101.1	101.4	101.6	101.5	101.6	101.4	101.4	101.6	102.2	100.9
Supplies	106.2	[4]105.8	105.0	104.7	105.1	106.4	106.7	106.6	105.9	105.6	105.0	105.2	104.3	104.5	102.3
Supplies for manufacturing	105.1	[4]105.0	105.1	105.2	105.9	105.7	105.8	105.7	105.9	105.9	106.1	106.0	105.8	105.7	105.2
Supplies for nonmanufacturing	106.1	105.6	104.3	104.0	104.2	106.1	106.5	106.4	105.3	104.9	104.0	104.3	103.2	103.5	100.6
Manufactured animal feeds	110.9	109.7	105.6	104.8	105.4	110.5	111.4	111.5	109.1	108.3	106.2	107.0	103.7	104.1	97.5
Other supplies	101.3	101.2	101.6	101.6	101.6	101.5	101.5	101.3	101.1	101.0	100.9	100.8	101.1	101.3	100.5
Finished goods (goods to users, including raw foods and fuels)	101.4	101.8	101.5	101.1	100.8	101.1	101.5	101.8	101.6	102.0	101.9	102 6	101.7	101.7	101.4
Consumer finished goods	100.8	101.2	100.8	100.4	99.9	100.3	100.9	101.2	101.0	101.5	101.5	102 3	101.1	101.2	100.9
Consumer foods	100.2	101.0	100.1	99.4	98.2	99.0	100.4	101.4	100.7	102.1	101.9	103.9	101.3	101.3	100.4
Consumer crude foods	95.7	95.4	92.5	93.2	94.2	99.5	98.9	103.4	95.9	102.8	100.9	101.5	96.3	98.6	97.6
Consumer processed foods	100.9	101.9	101.3	100.3	98.9	98.9	100.7	101.1	101.4	101.9	102.0	104.3	102.1	101.7	100.8
Consumer other nondurable goods	101.9	[4]102.3	102.1	101.8	101.6	101.8	101.7	101.7	101.8	101.7	101.8	101.7	101.4	101.6	101.5
Consumer durable goods	99.3	[4]99.4	99.3	99.4	99.5	99.7	99.8	99.8	99.9	100.0	99.9	100.1	100.1	100.0	100.5
Producer finished goods	103.0	[4]103.0	103.0	102.9	102.9	102.9	103.0	103.0	103.0	102.9	102.8	102.9	103.0	102.9	102.5
Producer finished goods for manufacturing	105.1	105.0	104.9	104.7	104.7	104.5	104.6	104.7	104.7	104.6	104.5	104.5	104.5	104.4	103.8
Producer finished goods for nonmanufacturing	101.0	[4]101.1	101.2	101.1	101.2	101.4	101.4	101.5	101.4	101.3	101.3	101.3	101.5	101.4	101.2
Durability of product															
Total durable goods	101.3	[4]101.1	100.9	100.8	100.6	100.6	100.7	100.7	100.7	100.7	100.7	100.9	101.0	101.0	101.3
Total nondurable goods	99.6	100.1	99.8	99.4	99.0	99.2	99.7	100.2	100.0	100.5	100.4	101.2	100.0	100.1	99.6
Total manufactures	100.8	101.0	100.8	100.4	100.0	100.2	100.4	100.6	100.6	100.7	100.7	101.1	100.7	100.8	100.7
Durable manufactures	101.6	101.5	101.2	101.1	100.9	100.9	101.0	101.1	101.1	101.1	101.1	101.3	101.3	101.3	101.4
Nondurable manufactures	99.9	100.4	100.2	99.5	99.0	99.3	99.7	100.0	100.0	100 2	100.2	100.9	100.0	100.1	100.0
Total raw or slightly processed goods	98.3	98.9	98.2	98.4	98.4	98.3	99.1	100.2	99.4	100 5	100.2	101.1	99.2	99.5	98.3
Durable raw or slightly processed goods	90.0	89.3	89.3	89.9	89.4	88.7	88.6	87.9	86.4	85.4	86.3	87.8	88.3	89.2	95.2
Nondurable raw or slightly processed goods	98.8	99.5	98.7	98.9	98.9	98.9	99.7	100.9	100.1	101.4	101.0	101.9	99.9	100.1	98.5

[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
1962: August	252	617	129,000	196,000	1,940,000	.18
September	297	541	91,700	181,000	1,590,000	.18
October	261	506	98,800	155,000	1,350,000	.13
November	230	442	81,000	171,000	981,000	.10
December	133	331	45,200	146,000	1,330,000	.14
1963: January [2]	230	360	75,000	185,000	2,340,000	.23
February [2]	200	320	60,000	120,000	1,100,000	.12
March [2]	225	350	45,000	90,000	1,110,000	.12
April [2]	350	475	100,000	130,000	1,050,000	.10
May [2]	425	600	125,000	165,000	1,750,000	.17
June [2]	450	675	135,000	190,000	1,740,000	.18
July [2]	400	660	115,000	220,000	2,060,000	.20
August [2]	325	575	75,000	185,000	1,620,000	.15

[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 shortage.

[2] Preliminary.

F.—Work Injuries

TABLE F–1. Injury-frequency rates [1] for selected manufacturing industries

Industry	1963 [2]					1962 [2]				1961 [2]				Annual average	
	Second quarter				1st quarter	4th quarter	3d quarter	2d quarter	1st quarter	4th quarter	3d quarter	2d quarter	1st quarter	1962 [2]	1961 [2]
	Apr.	May	June	Quarter											
All manufacturing	11.0	10.7	10.7	10.8	10.6	10.6	11.7	11.2	11.1	10.6	11.8	10.5	10.4	11.4	11.0
Food and kindred products:															
Meat packing and custom slaughtering	28.2	27.3	27.6	27.7	26.9	26.8	29.1	26.1	26.9	24.3	26.2	22.4	21.4	27.1	23.5
Sausages and other prepared meat products	27.3	24.2	33.7	28.4	23.4	24.8	29.7	27.4	35.9	20.9	33.9	27.7	29.9	30.0	28.4
Poultry and small game dressing and packing	(3)	(3)	(3)	27.4	27.0	36.1	29.6	36.8	28.0	38.9	45.5	31.8	32.1	32.6	37.2
Dairy products	15.8	19.0	15.9	16.9	17.8	16.5	17.5	17.1	18.7	16.5	17.6	14.9	15.6	17.1	15.9
Canning and preserving	18.9	18.1	18.3	18.4	18.6	20.5	24.5	19.6	19.7	19.4	24.2	18.5	18.1	22.0	20.8
Grain-mill products	15.9	21.0	20.7	19.3	16.3	18.2	18.0	17.6	15.6	16.9	16.2	15.9	15.8	17.3	16.2
Bakery products	16.1	15.5	15.3	15.6	16.5	16.8	16.9	15.3	19.1	15.2	17.6	16.3	17.4	16.6	16.6
Cane sugar	(3)	(3)	(3)	8.0	10.3	12.8	9.7	6.2	8.3	15.4	13.8	10.7	10.0	9.4	12.5
Confectionery and related products	12.7	11.4	16.6	13.6	13.6	17.2	17.3	16.0	16.4	19.1	19.6	19.1	15.2	17.0	18.4
Bottled soft drinks	20.7	23.2	25.5	23.2	20.6	20.7	27.0	27.9	24.2	21.0	24.8	24.3	21.1	25.4	22.7
Malt and malt liquors	22.6	17.5	28.2	22.6	23.5	19.2	17.2	20.6	17.5	19.0	19.1	17.2	17.8	18.7	18.2
Distilled liquors	10.1	11.6	12.2	11.4	8.4	9.0	4.6	7.6	4.8	7.1	6.8	5.3	5.7	6.8	6.3
Miscellaneous food products	14.9	13.8	12.1	13.7	19.1	14.5	20.6	13.8	17.4	15.1	16.6	13.8	14.0	16.7	14.8
Textile mill products:															
Cotton yarn and textiles	7.1	5.7	7.7	6.8	7.4	7.4	8.6	8.1	7.2	7.2	8.1	7.8	6.8	7.9	7.6
Rayon, other synthetic, and silk textiles	8.8	8.3	7.5	8.1	6.8	7.1	10.0	9.3	8.1	7.0	7.0	7.5	5.9	8.6	7.0
Woolen and worsted textiles	13.7	17.5	15.6	15.6	14.8	14.1	17.2	20.2	15.5	17.6	17.1	17.1	14.8	16.9	16.6
Knit goods	6.5	6.1	5.9	6.2	6.6	6.0	6.5	6.8	5.7	4.6	6.1	4.7	5.9	6.3	5.3
Dyeing and finishing textiles	17.8	12.5	10.4	13.6	12.1	11.5	14.1	12.7	13.7	13.1	17.5	13.1	15.0	13.0	14.5
Miscellaneous textile goods	23.1	11.7	21.3	18.6	19.2	17.5	21.4	20.2	20.9	19.2	16.8	14.4	14.8	20.0	16.2
Apparel and other finished texile products:															
Clothing, men's and boys'	7.0	6.8	6.4	6.7	6.9	6.3	7.3	7.1	7.2	5.8	7.5	6.2	5.6	6.8	6.2
Clothing, women's and children's	4.7	6.5	5.2	5.4	4.2	5.5	6.0	6.8	5.6	3.8	6.3	4.9	5.1	6.2	5.0
Fur goods and miscellaneous apparel	(3)	(3)	(3)	6.1	7.9	7.1	10.4	8.2	5.8	4.6	7.7	6.1	5.5	7.8	5.8
Miscellaneous fabricated textile products	8.0	7.3	4.5	6.7	6.7	8.4	8.4	5.7	8.1	7.2	9.1	6.0	10.5	7.6	8.3
Lumber and wood products (except furniture):															
Logging	36.6	45.6	45.1	43.0	43.5	43.8	52.9	39.8	50.2	59.7	65.5	58.3	50.5	46.2	59.0
Sawmills and planing mills	37.8	36.6	31.1	35.2	33.0	37.2	39.3	36.0	35.1	35.9	39.4	34.7	32.9	37.6	36.0
Millwork and structural wood products	30.1	18.3	24.1	24.0	25.5	21.3	26.8	18.3	22.7	22.3	25.0	20.0	22.7	22.3	22.6
Plywood mills	23.3	25.4	17.3	22.3	24.5	24.8	24.4	24.5	18.3	20.8	21.1	24.8	22.2	23.2	22.3
Wooden containers	24.3	29.6	31.0	28.3	27.7	36.1	37.3	34.4	31.8	32.3	31.2	30.2	33.3	34.7	31.6
Miscellaneous wood products	39.7	31.1	38.3	36.3	27.1	24.5	26.5	30.1	28.2	27.2	32.4	27.6	33.3	27.4	29.9
Furniture and fixtures:															
Household furniture, nonmetal	15.2	18.9	18.4	17.6	20.1	16.2	22.8	21.3	21.9	20.7	20.6	18.3	19.0	20.8	19.6
Metal household furniture	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	20.2	22.2	20.6	16.2	22.7	18.5	20.4
Mattresses and bedsprings	23.1	18.3	24.1	21.7	19.7	28.4	25.8	21.0	17.3	16.2	19.6	14.3	11.5	23.2	15.3
Office furniture	17.6	10.9	16.1	14.8	9.8	12.4	13.1	15.0	20.4	11.5	14.8	14.3	12.7	15.4	13.0
Public building and professional furniture	(3)	(3)	(3)	8.9	11.1	13.7	18.2	12.3	16.6	13.9	13.8	13.5	15.9	15.3	14.2
Partitions and fixtures	17.5	18.1	21.2	18.8	17.8	15.1	20.6	20.9	22.3	18.3	17.6	15.9	15.4	20.3	17.1
Screens, shades, and blinds	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	12.5	10.2
Paper and allied products:															
Pulp, paper, and paperboard mills	10.9	8.9	9.7	9.8	9.6	9.6	9.3	9.0	10.6	10.6	10.9	9.9	10.1	9.6	10.5
Paperboard containers and boxes	14.5	12.2	14.0	13.6	15.3	15.6	15.6	15.6	15.9	15.2	13.3	14.3	13.9	15.7	14.2
Miscellaneous paper and allied products	13.9	16.9	14.1	15.1	13.6	14.9	15.1	13.1	10.3	12.2	12.7	14.5	12.2	13.4	12.9
Printing, publishing, and allied industries:															
Newspapers and periodicals	10.9	9.1	6.8	8.9	12.5	9.6	9.0	9.1	10.1	8.8	7.7	8.4	8.9	9.5	8.5
Bookbinding and related products	(3)	(3)	(3)	15.5	15.6	19.8	29.5	12.5	16.2	20.5	13.2	14.6	18.5	19.3	16.7
Miscellaneous printing and publishing	13.2	11.8	12.3	12.4	12.9	12.1	11.5	11.6	12.1	10.3	10.7	10.5	10.1	12.2	10.6
Chemical and allied products:															
Industrial inorganic chemicals	6.2	4.6	4.4	5.0	5.0	5.5	5.9	5.5	4.6	4.9	5.0	4.1	4.8	5.4	4.6
Plastics, except synthetic rubber	6.3	4.7	3.6	4.9	5.2	5.2	2.5	5.2	4.4	4.9	3.8	4.3	3.8	4.6	4.1
Synthetic rubber	(3)	(3)	(3)	5.6	2.9	3.2	3.7	4.0	4.4	4.2	2.6	1.5	1.8	3.9	2.6
Synthetic fibers	(3)	(3)	(3)	4.9	3.4	4.0	3.4	2.2	2.7	3.4	2.9	3.1	3.1	3.1	3.1
Explosives	(3)	(3)	(3)	2.1	5.5	2.5	2.9	2.1	2.2	3.9	3.2	3.3	4.1	2.4	3.7
Miscellaneous industrial organic chemicals	4.5	3.7	3.1	3.8	4.1	3.7	3.1	3.3	5.0	3.5	5.0	4.3	3.7	3.8	4.2
Drugs and medicines	6.0	5.9	6.3	6.0	6.1	4.7	6.3	6.5	5.8	6.7	6.4	6.4	6.7	5.8	6.6
Soaps and related products	12.8	10.5	12.5	11.9	11.1	8.0	12.4	12.1	15.2	11.0	11.3	10.5	13.3	12.2	11.7
Paints, pigments, and related products	9.3	7.4	15.9	10.8	12.0	10.1	11.5	13.3	11.3	7.8	11.0	9.8	12.2	12.0	10.5
Fertilizers	(3)	(3)	(3)	24.8	18.4	30.9	15.7	21.1	13.9	19.5	13.0	19.1	24.4	19.9	19.3
Vegetable and animal oils and fats	23.7	26.3	16.8	22.4	23.7	23.0	21.5	19.7	23.6	17.0	23.8	18.8	21.3	22.1	21.1
Compressed and liquified gases	(3)	(3)	(3)	5.1	8.8	11.8	9.4	9.6	14.3	7.1	14.8	6.0	12.4	12.6	10.3
Miscellaneous chemicals and allied products	14.9	16.9	9.8	13.9	14.7	12.5	13.6	14.2	12.5	14.3	14.3	13.9	13.3	13.0	13.9
Rubber products:															
Tires and inner tubes	5.1	4.5	4.0	4.5	5.1	4.6	4.1	4.6	3.6	5.2	3.7	3.4	3.2	4.3	4.1
Rubber footwear	3.4	2.9	2.1	2.8	5.0	5.3	6.2	5.5	5.5	6.8	9.3	5.2	5.8	5.6	7.0
Miscellaneous rubber products	10.1	10.4	11.7	10.8	9.3	9.3	9.5	11.4	11.2	9.5	10.5	9.5	8.3	10.6	9.6
Leather and leather products:															
Leather tanning and finishing	34.6	33.0	34.9	34.1	34.7	32.4	35.9	30.6	31.2	29.8	33.1	28.1	26.9	33.6	29.8
Boot and shoe cut stock and findings	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	19.0	21.9
Footwear (except rubber)	10.1	8.5	7.6	8.7	9.4	8.6	10.2	9.8	9.0	9.3	8.7	8.6	8.8	9.4	8.8
Miscellaneous leather products	13.8	11.7	19.0	14.8	10.3	11.4	13.1	10.6	7.9	12.8	12.2	13.5	7.6	10.8	11.5
Stone, clay, and glass products:															
Glass and glass products	6.3	7.7	7.3	7.1	7.2	6.4	7.5	7.0	8.3	9.0	9.2	7.1	6.8	7.5	8.1
Structural clay products	26.0	27.7	27.2	27.0	24.0	27.7	29.0	27.9	33.7	31.1	30.3	36.4	30.5	29.3	32.0
Pottery and related products	11.2	15.3	15.3	13.9	15.6	16.7	17.7	17.0	15.5	15.5	15.4	16.2	16.1	16.9	15.7
Concrete, gypsum, and mineral wool	21.7	17.7	22.8	20.7	20.3	20.7	24.8	25.2	24.9	25.4	22.9	21.4	20.5	24.0	22.9
Miscellaneous nonmetallic mineral products	7.8	11.6	10.0	9.8	9.9	8.4	10.2	9.9	10.5	11.1	13.3	8.7	8.7	9.8	10.5

See footnotes at end of table.

TABLE F–1. Injury-frequency rates [1] for selected manufacturing industries—Continued

Industry	1963 [2]					1962 [2]				1961 [2]				Annual average	
	Second quarter				1st quarter	4th quarter	3d quarter	2d quarter	1st quarter	4th quarter	3d quarter	2d quarter	1st quarter	1962 [2]	1961 [2]
	Apr.	May	June	Quarter											
Primary metal industries:															
Blast furnaces and steel mills	3.1	3.3	3.8	3.5	3.7	3.3	3.3	3.8	3.7	3.5	3.5	2.6	3.3	3.6	3.3
Gray-iron and malleable foundries	24.8	26.0	24.1	25.0	23.6	24.4	27.9	25.4	25.3	23.4	28.3	22.5	24.8	25.9	24.9
Steel foundries	22.6	24.0	20.4	22.4	21.9	17.8	20.1	20.4	18.0	20.4	16.4	15.9	16.6	19.2	17.3
Nonferrous rolling, drawing, and alloying	9.8	12.4	12.9	11.7	9.6	10.9	12.1	10.9	11.3	12.1	13.2	8.8	8.4	11.3	10.8
Nonferrous foundries	21.3	13.2	17.9	17.4	19.5	19.3	23.6	21.2	20.2	21.4	23.5	20.1	19.2	21.2	21.2
Iron and steel forgings	19.8	18.4	18.0	18.7	19.3	15.4	21.1	20.6	19.8	19.2	18.9	17.9	15.6	19.8	18.1
Wire drawing	13.4	19.9	14.9	16.2	14.9	14.6	14.0	16.7	13.3	16.7	13.4	14.6	15.3	14.5	15.0
Welded and heavy-riveted pipe	14.1	16.2	7.0	12.5	11.4	13.7	14.2	15.0	11.8	8.4	10.7	10.3	9.9	13.6	9.7
Cold-finished steel	8.5	12.3	9.4	10.1	11.9	9.2	8.6	8.4	12.4	9.3	9.3	7.1	9.5	9.7	8.8
Fabricated metal products:															
Tin cans and other tinware	5.5	7.1	5.7	6.1	4.4	5.4	7.1	6.3	6.6	7.2	9.2	6.8	4.7	6.4	7.0
Cutlery and edge tools	(3)	(3)	(3)	11.4	12.8	13.2	13.2	15.1	14.9	18.7	12.6	13.9	14.3	14.2	15.0
Handtools, files, and saws	15.6	16.6	16.6	16.2	14.6	22.6	15.1	18.1	15.5	11.6	16.4	13.3	11.0	18.1	13.3
Hardware	7.9	9.3	9.5	9.0	8.5	9.4	10.4	10.0	9.1	10.4	11.9	8.1	8.7	10.0	9.9
Sanitary ware and plumbers' supplies	13.4	14.8	13.8	14.1	10.2	11.5	11.6	9.2	11.3	13.1	10.5	12.7	8.6	10.8	11.2
Oil burners, heating and cooking apparatus	14.7	15.4	13.8	14.7	10.9	14.4	17.7	13.7	14.5	14.0	11.8	11.8	15.1	15.4	13.1
Structural steel and ornamental metal work	22.0	23.1	23.0	22.7	21.0	19.7	22.5	20.6	20.5	19.3	22.1	19.6	19.6	21.5	20.5
Metal doors, sash, frame, and trim	(3)	(3)	(3)	21.7	18.0	23.0	26.0	22.1	21.4	17.9	27.5	16.3	20.5	23.6	19.9
Boilershop products	17.4	16.1	13.3	15.7	14.2	12.8	17.5	18.1	18.2	15.2	17.3	20.0	16.9	16.9	17.5
Sheet-metal work	29.8	30.8	23.1	27.9	20.4	20.2	24.6	25.9	21.2	22.8	27.4	18.0	22.2	23.4	22.4
Stamped and pressed metal products	10.7	9.0	11.0	10.2	10.7	10.2	11.7	12.7	12.2	11.5	11.6	9.5	9.2	11.8	10.7
Metal coating and engraving	(3)	(3)	(3)	21.9	17.9	29.3	28.2	20.6	21.1	15.9	12.7	22.7	(3)	25.6	17.6
Fabricated wire products	19.7	21.1	19.4	20.1	16.6	18.7	22.4	17.0	15.0	14.2	17.8	15.2	10.9	18.3	14.7
Metal barrels, drums, kegs, and pails	(3)	(3)	(3)	(2)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	14.4	14.1	13.7	12.8
Steel springs	(1)	(2)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	24.2	18.8
Bolts, nuts, washers, and rivets	12.8	10.0	11.0	11.3	13.3	15.9	11.6	14.3	15.4	14.5	15.1	12.8	10.8	14.5	13.5
Screw-machine products	10.2	5.8	12.8	9.6	13.0	13.6	13.8	13.6	13.8	14.2	14.2	7.1	11.3	13.6	11.8
Fabricated metal products, not elsewhere classified	8.9	10.9	11.1	10.3	9.8	8.0	12.9	10.1	11.1	10.0	10.0	11.1	9.1	10.2	9.9
Machinery (except electrical):															
Engines and turbines	5.6	7.9	6.5	6.7	5.2	6.1	5.6	5.2	6.8	5.8	6.0	6.1	6.0	6.0	6.0
Agricultural machinery and tractors	9.5	9.5	8.2	9.1	8.4	8.5	7.3	7.5	7.1	7.3	7.1	8.9	8.1	7.7	7.8
Construction and mining machinery	19.4	16.4	17.2	17.7	16.1	14.6	17.1	16.8	15.2	13.9	15.8	14.7	16.5	16.3	15.2
Metalworking machinery	10.5	9.0	10.3	9.9	10.1	9.3	10.1	9.6	9.9	8.1	9.0	8.9	8.1	9.9	8.4
Food-products machinery	9.7	10.4	7.0	9.1	9.8	12.1	11.0	10.6	12.7	9.5	14.1	11.6	12.5	11.5	11.4
Textile machinery	10.4	8.0	11.6	9.9	11.5	11.8	16.1	15.4	12.2	10.7	14.7	13.0	13.0	13.9	13.2
Miscellaneous special industry machinery	17.3	14.9	14.7	15.6	13.0	14.6	13.9	12.8	14.1	12.9	13.8	14.0	12.3	13.8	13.1
Pumps and compressors	12.1	12.6	11.1	11.9	11.3	11.0	12.8	13.0	13.8	10.0	11.2	9.7	10.9	12.9	10.8
Elevators, escalators, and conveyors	11.7	12.5	10.1	11.4	13.7	11.7	14.3	19.7	16.3	12.9	17.5	16.3	15.2	15.8	15.1
Mechanical power-transmission equipment (except ball and roller bearings)	11.6	9.7	11.2	10.8	8.6	11.5	15.6	11.9	12.3	11.0	11.1	9.7	11.5	12.8	10.9
Miscellaneous general industrial machinery	9.3	9.8	11.9	10.3	10.1	10.3	11.0	11.9	12.1	11.2	12.0	11.7	11.1	11.6	11.4
Commercial and household machinery	6.4	6.0	5.8	6.0	6.0	5.5	5.5	5.8	7.1	5.7	5.9	6.0	5.7	5.8	5.9
Valves and fittings	12.7	12.3	13.4	12.8	13.2	11.7	12.8	14.2	15.1	11.1	13.6	14.9	13.4	13.4	13.2
Fabricated pipe and fittings	(3)	(3)	(3)	22.4	14.9	17.6	13.9	15.9	13.6	12.2	11.9	(3)	(3)	14.7	14.0
Ball and roller bearings	6.2	5.1	5.1	5.4	5.6	6.6	5.4	4.4	5.7	4.7	4.1	6.1	5.4	5.6	5.1
Machine shops, general	12.6	15.9	15.3	14.6	15.4	13.3	14.3	14.8	15.7	12.0	14.3	12.5	13.3	15.0	13.2
Electrical machinery:															
Electrical industrial apparatus	5.6	5.7	4.6	5.4	6.0	6.2	5.9	5.6	6.9	6.4	6.8	5.5	5.6	6.2	6.0
Electrical appliances	9.6	4.1	6.3	6.7	7.4	5.7	5.0	7.6	7.8	8.3	8.0	6.5	5.4	6.6	7.4
Insulated wire and cable	26.7	13.6	15.7	18.5	18.8	15.3	17.5	16.5	22.6	19.4	15.3	14.3	16.6	18.0	16.5
Electrical equipment for vehicles	2.6	2.2	2.2	2.3	2.4	2.4	2.7	3.0	2.0	2.6	3.0	2.3	2.9	2.5	2.7
Electric lamps (bulbs)	(3)	(3)	(3)	1.6	2.6	3.5	4.3	2.6	2.2	3.7	2.2	1.2	1.6	3.0	2.2
Radios and related products	4.0	4.7	3.8	4.2	4.5	4.1	4.9	4.2	4.7	4.0	3.9	3.9	4.3	4.5	4.1
Radio tubes	3.0	1.5	2.5	2.3	2.6	2.5	4.8	2.3	2.4	3.5	3.2	2.1	2.8	3.0	3.0
Miscellaneous communication equipment	3.0	2.5	2.6	2.7	2.9	2.5	2.7	2.5	2.7	2.3	1.4	2.5	2.6	2.6	2.3
Batteries	6.0	12.2	14.7	11.1	10.8	11.8	13.6	14.7	13.5	13.1	18.0	15.2	12.8	13.4	14.7
Electrical products, not elsewhere classified	(3)	(3)	(3)	6.2	2.3	3.5	5.4	7.0	2.2	6.5	3.1	6.4	2.4	4.7	4.6
Transportation equipment:															
Motor vehicles, bodies, and trailers	3.1	3.6	3.2	3.4	3.0	3.3	3.8	3.7	3.2	3.4	4.2	3.7	3.6	3.6	3.7
Motor-vehicle parts and accessories	4.0	3.9	4.0	4.0	4.1	4.1	4.5	5.1	4.1	3.8	5.0	4.1	4.8	4.6	4.5
Aircraft	2.2	2.0	1.9	2.0	1.9	1.9	1.9	2.0	1.9	1.6	1.9	2.2	2.0	1.9	2.0
Aircraft parts	3.6	3.6	4.2	3.8	4.3	4.4	4.8	4.7	5.0	4.5	5.0	4.5	4.7	4.7	4.7
Shipbuilding and repairing	21.2	19.5	19.0	20.0	14.4	14.9	17.0	17.1	18.5	15.2	17.8	14.2	11.3	17.6	15.1
Boatbuilding and repairing	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	33.3	33.4
Railroad equipment	7.2	8.4	8.5	8.1	6.5	7.5	10.1	7.8	6.8	6.8	8.2	7.1	6.4	8.0	7.0
Instruments and related products:															
Scientific instruments	2.4	2.3	2.1	2.3	2.7	1.6	2.9	1.6	1.4	2.4	2.2	1.6	2.3	2.1	2.3
Mechanical measuring and controlling instruments	8.3	8.5	7.5	8.1	7.4	6.7	6.0	6.6	6.7	6.9	7.1	8.9	6.0	6.6	7.2
Optical instruments and lenses	(3)	(3)	(3)	4.0	5.3	5.3	2.7	5.4	4.4	6.2	3.4	2.8	4.5	4.6	4.3
Medical instruments and supplies	8.8	9.7	5.7	8.0	7.0	6.3	4.8	8.4	9.1	8.3	9.4	8.2	8.6	7.2	8.5
Photographic equipment and supplies	6.5	4.1	7.4	6.0	3.5	5.5	4.6	5.7	4.9	5.4	6.6	4.7	5.9	5.2	5.7
Watches and clocks	(3)	(3)	(3)	3.3	6.0	3.5	5.2	5.3	3.4	4.6	4.3	4.9	3.9	4.6	4.5
Miscellaneous manufacturing:															
Paving and roofing materials	(3)	(3)	(3)	7.5	8.8	6.7	7.0	3.0	6.7	11.5	9.1	4.6	4.9	5.9	7.8
Jewelry, silverware, and plated ware	7.9	9.0	7.8	8.3	7.9	6.1	7.0	10.6	10.4	7.0	10.3	6.4	10.7	7.9	8.5
Fabricated plastics products	16.0	16.0	14.0	15.3	15.6	16.9	19.1	17.5	20.0	14.6	15.0	13.6	19.6	18.8	15.8
Miscellaneous manufacturing	13.0	12.4	13.8	13.0	11.4	10.4	11.8	12.8	12.5	14.6	13.9	12.1	12.0	12.0	13.2
Ordnance and accessories	3.3	2.1	2.9	2.8	3.5	3.1	2.4	2.5	3.6	2.2	2.2	2.4	2.5	3.0	2.4

[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 one or more days after the day of injury (including Sundays, days off, or plant shutdowns). The term "injury" includes occupational diseases.

[2] Rates are preliminary and subject to revision when final annual data become available.

[3] Insufficient data to warrant presentation of average.

NOTE: These data are compiled in accordance with the American Standard Method of Recording and Measuring Work Injury Experience, approved by the American Standards Association, 1954.

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