## Monthly

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Collective Bargaining in Basic Steel
Characteristics of White-Collar Employment
Job Pay Levels and Trends in 60 Labor Markets
ILO Report on U.S. Trade Unions

UNITED STATES DEPARTMENT OF LABOR

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# Monthly Labor Review 

UNITED STATES DEPARTMENT OF LABOR • BUREAU OF LABOR STATISTICS

Lawrence R. Klein, Editor-in-Chief
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## Register of Reporting Labor Organizations

The first comprehensive listing of labor organizations ever compiled (ranging from small locals to large internationals) is being published by the U.S. Department of Labor's Bureau of Labor-Management Reports. The Register will consist of five separate parts, each covering a major section of the country, based on information from 52,278 labor organizations as of June 30, 1960. The Register will list these characteristics of each reporting labor organization: the State, city, or town in which it is located; its affiliation (or absence of affiliation); its own identification; and the file number assigned by the Bureau of Labor-Management Reports. A list of the five parts follows:

> Part 1. Western States (including American Samoa, Guam, and Wake Island)
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## The Labor Month in Review

On February 2, President John F. Kennedy sent to Congress his first detailed proposals to counteract the recession and increase the country's rate of economic growth. They included: a temporary extension of up to 13 weeks in the duration of unemployment compensation, an increase in the Federal minimum wage to $\$ 1.25$ an hour in 3 years, as well as coverage of 4.3 million presently unprotected workers, an increase in the minimum Social Security payment from $\$ 33$ to $\$ 43$ a month, and grants and loans for chronically depressed areas.

The President also announced his plan for an Advisory Committee on Labor-Management Policy. The committee, to be chaired in alternate years by the Secretary of Labor and the Secretary of Commerce, will consist of seven leaders each from business and labor and five public members. The broad aims of the Council-originally proposed some months before his appointment by Secretary of Labor Arthur J. Goldberg-will be to work for industrial peace and to promote sound wage and price policies.

William E. Simkin was appointed Director of the Federal Mediation and Conciliation Service late in January and a few days afterward Frank W. McCulloch was named Chairman of the National Labor Relations Board.
The Belgian General Workers Federation voted on January 21 to end its month-long strike in protest against the Belgian Government's economic austerity program. The strikers had contended that the Government legislation, which passed the lower house of Parliament in midJanuary, was unduly repressive on the workers.

In mid-January, new procedures for facilitating contract negotations were suggested by the committee set up by the Kaiser Steel Corp. and the United Steelworkers to develop a long-range plan for the sharing of economic progress. Its proposals are set forth on pp. 137-138 of this issue. The committee believes that these procedures, in contrast to Government intervention in disputes, will promote collective bargaining "which is not imposed but agreed upon."

A commission appointed by former Secretary of Labor James P. Mitchell late in November to study a jurisdictional conflict, that had resulted in a week-long work stoppage at Cape Canaveral, reported its recommendations on January 26. Fulfilling one of the commission's major suggestions, the National Aeronautics and Space Administration a few days later announced it had set up the position of Industrial Relations Officer to be filled by former NLRB member Paul L. Styles.

Two disputes over crew sizes were settled at least temporarily in the railroad industry during the month. A 2 -week strike by 650 workers on railroad ferryboats and tugboats in New York Harbor ended late in January when the parties agreed to submit to the Presidential Commission that is studying work rules in the railroad industry the key issue of whether the employers, 11 railroads, had the discretion to set crew sizes. The Secretary of Labor, the Governor of New York, and the Mayor participated in the negotiations that led to this solution. Like the commission's report on the railroad industry as a whole, that for the maritime workers will not be binding, but each side pledged to use it as a guide in trying to reach a satisfactory agreement on the crew issue. Wage issues were settled on the same basis (a 4 -percent increase, 2 percent effective July 1, 1960, and the remainder on March 1, 1961) provided in the railroad contracts signed last summer with the operating brotherhoods, plus 45 cents a day, retroactive to July 1 for captains and engineers.

A strike by members of the Railway Conductors employed by the New York Central was averted January 27 by a last minute settlement of a prolonged dispute over crews on sleeping car trains. The dispute arose when the Central took over sleeper service from the Pullman Co., dropping some sleeping car conductors and increasing duties of train conductors. Under the agreement, helper conductor assignments are to be frozen until April 1; thereafter, changes demanded by union or management will be subject to negotiation. Failing agreement, the issue may then be referred to a neutral party for a binding decision under the procedures of the Railway Labor Act.
On January 29, a contract for more than 3,500 tugboat workers in New York Harbor was agreed
upon by National Maritime Union Local 333 and the Marine Towing and Transport Employers Association without reaching the strike stage. The 3-year contract provides for wage increases of 8 percent in the first year, 4 percent the second year, an escalator clause for a cost-of-living increase in the third year, and other benefits. Early in February, NMU President Joseph Curran announced that in its spring negotiations for seagoing members, the union would demand a reduction in the workweek from 40 to 30 hours to counteract unemployment resulting from faster ships.

A strike by domestic agricultural workers in California's Imperial Valley caused the Secretary of Labor to revoke the authorization for employment of nearly 600 Mexican nationals working on the lettuce harvest on the struck farms in order to protect the braceros' health and safety. Represented by the United Packinghouse Workers and the Agricultural Workers Organizing Committee, the strikers were seeking a minimum wage of $\$ 1.25$ an hour, a union hiring hall, and other benefits. Six union officials and more than 30 pickets have been arrested in connection with strike activity.

At the quarterly meeting of the Teamsters general executive board in early February, James R. Hoffa, president, said that Teamster contracts recently concluded in the Midwest and the South contained a clause for national bargaining in 1964 when the contracts expire. He said he will seek similar clauses in remaining negotiations in the West and in New England. Among other actions, the executive board instructed its council to request the U.S. Court of Appeals in Washington, D.C., to order the District Court to make a decision on whether the union may hold a convention in April or May and so end the monitorship. On February 9, the board voted to recommend constitutional changes which would broaden the jurisdictional boundaries of the union. Under the proposal, the union would consider any unorganized worker eligible for membership, a concept which could conflict with the jurisdictional claims of all other unions.
Following the major settlement with several thousand trucking firms in the Midwest, came a proposal for compulsory arbitration of grievances
and contract terms from the American Trucking Association. The Association accepted in principle a resolution of the Wisconsin Motor Carriers Association stating that "labor had assumed the dominant role in contract negotiations" and asking for legislation that would allow the Federal Government to appoint arbitration panels to settle grievances "and to participate in collective bargaining and further that such arbitration be compulsory *** in the trucking industry." Teamster President James R. Hoffa, said he was confident that truck operators are no more in favor of outside decision in such matters than he is.

Lining UP with the growing number of union groups which are fighting competition from abroad, a local of the International Brotherhood of Electrical Workers in Chicago on January 13, announced that beginning May 1, its members would refuse to work with electronics parts imported from Japan and other low-wage countries. The local has contracts with 137 radio, television, and other electronics plants in the Chicago area. Earlier, Jacob S. Potofsky, president of the Amalgamated Clothing Workers, had said he would recommend to the ACWA executive board at its February meeting, that union cutters stop cutting Japanese fabrics after May 1, to counteract the Japanese intention of increasing its current export of suits by four times.

The executive board of the Bakery and Confectionery Workers' Union (Ind.) announced it had reached an agreement, subject to court approval, for BCW President James G. Cross' resignation. The terms reportedly included dismissal of a suit by union members charging financial misconduct by Cross and the payment of $\$ 250,000$ to Cross in lieu of his pension rights. An investigation into these arrangements to determine whether they violate the LandrumGriffin Act has been initiated.

To be eligible for payments to offset wages lost as a result of jury duty, members of Local 3 of the International Brotherhood of Electrical Workers must take a course in municipal affairs. Harry A. Van Arsdale, Jr., president of the 8,000-member New York City local, announced that the new benefit would be available only to those members who attended classes supervised by the local's education director 1 night a week for 9 weeks.

## Collective Bargaining in Basic Steel

Editor's Note.-Early during the steel strike of 1959, Secretary of Labor James P. Mitchell inaugurated a long-range study, under the direction of Professor E. Robert Livernash of the Graduate School of Business, Harvard University, of collective bargaining in the basic steel industry. The Secretary's announced purpose was to find out "why the steel industry is continually plagued by strikes and what actions, if any, management and labor in the industry, or Government, can or should take to correct the situation." A report based on the study was published in January 1961.

The following section contains three items emanating from the study. For obvious reasons, major portions of the Summary and Conclusions chapter of the report are reproduced. Appendix $B$ of the report, reviewing the strike and bargaining situations in nine foreign countries, is included because of its intrinsic interest and relevance. The third summarizes a background paper, not contained in the report, examining the extent to which the main bargain arrived at in basic steel negotiations is reflected in other contracts held by the Steelworkers union.

## The Steel Study: Summary and Conclusions

This report is written with continued confidence in the process and progress of free collective bargaining. It is reasonable to expect that the substantial mutuality of the long-term interests of the parties to collective bargaining in steel will bring a reduction of conflict. Also, the problem of national emergency strikes appears to have been declining in importance in this country and should continue to decline.

Collective bargaining for most major industries in the United States is only about 25 years old. The record of experience over this period is not one to cause alarm. It is one which, on balance, has shown a steady growth of accommodation. This is reflected predominately in the development of much more orderly day-to-day relations within a framework of increasingly stabilized contract language and contract interpretation. Conflict continues, however, over the economic terms of settlement. In recent years, there has been increasing firmness in management positions. This change coincides with an intensification of competition in the economy and with the growth
of excess manufacturing capacity. It corresponds also with more intense concern over the problem of inflation. The 1959 steel strike took place against the background of these factors.
The broad possibilities and alternatives with respect to future collective bargaining relationships in steel are (1) drastic legislation which would variously preclude industrywide bargaining, limit the right to strike or the scope of strikes, apply antitrust legislation to unions, compel arbitration, allow seizure, or establish governmental determination of wages and prices-all of these embody far-reaching limitations of free collective bargaining; (2) less fundamental changes in existing legislation aimed at improving mechanisms to facilitate settlements and avoid strikes in important disputes; (3) improved understanding between the parties, with a consequent reduction in conflict; (4) continued conflict comparable in frequency with the past.

This study does not lend support to the future success of limited legislative changes. Formal and early Government intervention, discussed subsequently, has not prevented strikes. Continued frequent conflict, with its attendant crisis atmosphere and with probable disillusion as to the accomplishments of limited Government intervention, could make some type of drastic legisla-
tion a more likely eventuality. This may well be true regardless of whether the public interest would best be served by such legislation. By far the most constructive alternative is the achievement by the parties of a reduction in conflict. A minimum of Government intervention will assist the parties in achieving this goal. Even if conflict is not substantially reduced, its consequences are of primary concern only to the parties. The public interest, as will be developed, can easily be exaggerated.

## The Impact of Steel Strikes

There have been five major strikes in the postwar years: 1946 ( 26 days), 1949 ( 45 days), 1952 ( 59 days), 1956 ( 36 days), and 1959 ( 116 days). A meaningful comparison of the frequency and duration of strikes in steel with other industries cannot be made because of differences in bargaining structure and contract duration. However, the record in steel is not one to inspire a high degree of public confidence in and support for collective bargaining.

An important public question is whether Government intervention is required purely and simply to prevent or end a strike. The answer to this question depends upon the effects of steel strikes. The impact of any particular steel strike will vary with its duration and will depend upon the relation of production to capacity and upon inventory levels in steel and related user industries. The following dimensions of the problem will be examined briefly: (1) the direct effect upon steel production over a period of about 1 year centered at the time of the strike; (2) the effects upon final product sales of durable goods; (3) the longer run effects upon steel demand; (4) the costs to the parties; (5) the secondary unemployment effects; and (6) the effects upon national defense.

A steel strike shuts down almost the entire industry. However, it is clearly not correct to measure the loss of steel production by examining only the strike period itself. There may be anticipatory production prior to the strike and will be catchup production after the strike. It is not possible statistically to separate with any precision strike-related variations in production from cyclical and other variations. Possible longterm market losses, noted subsequently, cannot
be measured. Nevertheless, experimentation with estimates of what steel production might have been had there been no strike leads to the judgment that the probability of net loss over a period of about 1 year is small.

The probability of little or no net final-product loss for the economy from steel strikes is indicated by a study of quarterly data on production, final sales, and inventory change for the durable goods component of the gross national product and of other data. While the postwar steel strikes show up quite clearly in production, it is difficult to discern any clear-cut effects upon final sales, even for the 1959 strike, though this strike did result in some delays. Steel inventory has unquestionably provided a significant cushion in past steel strikes. Since this inventory is in turn supplemented by the finished goods inventories in user industries, it is clear that final purchasers of such goods have been amply protected.

Aggregate data do not prove that there were no shortages of particular products during the longer steel strikes. The 1952 and 1959 strikes unquestionably caused some construction delays and product shortages. For this and other reasons, national defense is discussed subsequently. But economic data do not indicate any serious general effects stemming from the strikes.

Whether or not there were some longrun and permanent effects upon the steel industry from strikes or anticipation of strikes is impossible to determine. Substitute materials may have gained some permanent advantage from steel shortages. Imported steel may have strengthened its position in domestic markets. Some durable goods purchases may have been given up. These types of possible effects, though not believed to be marked, are hidden in longer term trends.

The fact that strikes appear to have had no serious permanent effects upon the economy does not imply that the strikes have not resulted in costs to the parties. The companies have special shutdown and startup costs. There are various service, material, and overhead costs which continue during the strike. Production at a fairly constant level over a period of time is more efficient and less costly than the fluctuating production related to the strike. Interruption in the flow of materials and special inventory costs
should also be mentioned. For the employees, there is no necessary balancing of income even if total production requirements over a period of time were identical with or without a strike. Some particular employees might gain in income because of the strike and some might lose. Layoff also can involve unemployment and supplemental unemployment benefit compensation. In addition, employees can to some extent offset strike loss of pay with vacation pay.

One of the more serious effects of steel strikes is secondary unemployment in closely related industries, such as transportation and mining. As the strikes are prolonged and steel inventories depleted, production can also be curtailed in steelusing industries. Again, there is no way by which the net amount of secondary unemployment can be measured because there usually are offsetting gains in secondary employment prior to and after steel strikes. In general, the extent of secondary unemployment due to steel strikes is believed to have some exaggeration.

One of the most difficult aspects of steel strikes to analyze is their impact on national defense. For example, in the 1959 strike, there were Government affidavits to the effect that the strike caused postponements in the delivery dates of critical defense items. The Steelworkers union protested vigorously as to the generality of the allegations in the affidavits. Also what may or may not have been true with respect to past strikes is not necessarily pertinent to future strikes.

Obviously, a steel strike can adversely affect national defense, although the general public is in no position to assess such consequences. The most crucial question to be answered is the feasibility of partial operation to meet defense needs during a strike.

A special report made by the U.S. Department of Commerce for this study points out that there are three types of problems posed by partial opera-tion-technical, economic, and administrative. Technical and economic problems clearly require consideration of the possibility of partial operation only on the assumption that entire plants be allowed or required to operate. If entire plants are opened, the technical and economic problems largely disappear. If entire plants operate, considerable nondefense steel will be produced. The determination of what plants would operate, what
employees would work, and what customers would get the nondefense steel poses administrative and equity problems, but these problems, while difficult, do not seem insuperable.

In other words, it does not seem beyond the range of possibility to guard against the danger of delay in critical defense projects by partial operation. If defense officials felt that a steel strike involved a threat to national security, it might be practical to keep open or reopen plants producing critical items. Under most circumstances, it is doubtful if this would require operation of more than a small fraction of the industry's capacity. If partial operation could not be achieved by voluntary agreement, it might well be possible under present injunction procedures.

The feasibility of partial operation should be given serious study by the parties and by the Government. The contention is not that it can be done easily but that its problems should be judged against the alternatives of total intervention and the risk of delay in important defense projects.

In summary, it appears that (1) the actual adverse economic effects of steel strikes have usually been overestimated; (2) partial operation in the interest of national defense should be given far more serious attention than has been the case to date; and (3) a major reason why steel strikes have had so little measurable impact is that when a strike approaches a critical stage, pressures upon the parties to settle become substantially irresistible.

## Experience With Government Intervention

The Government may intervene with one or more of the following objectives: (1) to averc or stop a strike if it threatens a national emergency; (2) to aid in the process of bargaining and facilitate a settlement; and (3) to encourage terms of settlement believed to be more in accord with the public interest than a privately negotiated settlement. In response to some combination of these objectives, the Government has intervened, or exerted influence, in all of the major steel strikes.

The national emergency problem in steel has two primary dimensions-one of national defense and another of widespread curtailment of production in user industries upon exhaustion of steel inventories. Partial or complete oderation mav be
regarded as essential in the interest of national defense. Widespread curtailment of production in user industries has not been a serious problem since pressures at this critical stage result in settlement. The record of intervention to avoid strikes or to attain settlements before this critical stage is reached is not an encouraging one.

Early intervention to avoid strikes typically has taken the form of mediation or factfinding with recommendations. Neither has been effective. Recommendations, contrary to the usual argument, have not been tantamount to compulsory arbitration. They have not served to crystallize public opinion in such fashion as to compel the parties to accept. The issue of accepting or not accepting a particular recommendation has become a new source of conflict. While it can be argued that recommendations have served to narrow the issues in dispute, clearly they have been unsuccessful in achieving steel settlements without strikes.

The anticipation of intervention modifies each party's approach to negotiation. Neither party wishes to weaken its position if intervention is regarded as probable. The parties behave quite differently in negotiations when they anticipate formal intervention than when they do not.

With this history and these attitudes toward intervention, it is very difficult to be optimistic with respect to the fruitfulness of any form of early intervention to facilitate the settlement of disputes. The imposition of neutrals, as distinct from a situation in which parties voluntarily seek the assistance of neutrals, would appear more likely to intensify conflict than to aid in the resolution of issues.

It is most difficult to define terms of settlement believed to be "in the public interest." Several disputes in steel, however, have been complicated by this issue. Shortly after World War II, wage control was abandoned but price control retained. Bargaining under these circumstances contributed to strikes in various industries and made their resolution difficult. The conflict was sharp in steel and the President's suggested wage settlement in 1946 was made effective only with the virtual abandonment of price regulation. A similar difficulty was encountered during the 1952 negotiations. In various negotiations, the influence of Government officials and their pro-
nouncements with respect to steel prices have appeared to complicate the resolution of disputes.

The economic implication of settlements will be discussed subsequently, but the possible conflict in intervention objectives between securing a settlement and encouraging terms of settlement believed to be in the public interest must be recognized. During periods of peace, and in the absence of thoroughgoing wage and price control, no form of noncompulsory intervention can be effective unless it largely accepts the equities of the issues as argued by the parties. Attempts to achieve settlement on terms deviating considerably from the views of the parties are not likely to be effective.

In collective bargaining in steel, intervention has itself been a source of conflict. It seldom appears evenhanded to the parties. Over the years, it appears to have been more resented by the industry than the union. The industry has objected to the wage and price implications of intervention and has felt that on issues of principle neutrals have more often compromised the industry position. The union in 1959 felt that the injunction considerably favored the companies.

The only form of intervention which has produced settlements in steel has been high-level mediation, perhaps aptly described as mediation "with a club." This form of mediation is similar in many respects to mediation in general. It involves no public statement of proposed terms of settlement. Its fundamental purpose is to move each party from fixed positions. It differs from many instances of traditional mediation in that it is not highly dependent upon presenting novel alternatives to the parties.

The significance of "high-level pressure" may nevertheless have been exaggerated in respect to steel strike settlements. It would appear to be far less the pressure of high office than the pressure of circumstances upon the parties which creates the settlement. The advantage of high-level mediation is that the parties have seemed to feel their prestige enhanced by working out a settlement under these auspices rather than through traditional mediation. But a consequence is that the high-level intervenor then is charged with some public responsibility for the settlement reached.

Is the experience of the past likely to be much modified in the future by modest changes in the
mechanism for handling national emergency disputes? It is argued that if the President had various alternative choices as to the mechanism to be used to resolve such disputes, the probability of resolution would be improved. The major arguments advanced in favor of this proposal are the advantages of uncertainty and flexibility. However, the realistic list of such alternatives would add little to the existing procedure other than "legalizing" factfinding with recommendations. Most of the difficulties experienced with intervention apply equally to a package approach as to an individual approach. The probabilities of keeping the parties guessing also seems somewhat unrealistic. Suggesting the use of an extreme form of intervention as a threat to induce a negotiated settlement may not be received with an equal or compelling repugnance by each party. Introducing a variety of alternatives may also encourage intervention and hinder the process of accommodation between the parties. So far as steel is concerned, there is little ground for optimism with respect to any mecbanistic type of solution.

In summary: (1) Early noncompulsory intervention tends to frustrate and hinder the process of negotiation and it has neither secured settlements nor avoided strikes; (2) Minor modifications in the mechanism for handling national emergency disputes hold little promise for altering this conclusion; (3) Late, informal, and mediatory intervention has produced settlements and appears to be least harmful to achieving a pattern of private agreement.

## The Economics of Settlements

The economic terms of steel settlements are of interest for this study: (1) to assess their impact upon wages and prices in the economy and (2) to indicate their significance in the relationship between the parties.

The effect of collective bargaining in general upon the increase of wages and prices in the postwar economy has been much debated. Since all periods of inflation are characterized by both wage and price increases, and since statistical leads and lags shed relatively little light on the problem of causation, much is left to judgment.

The immediate post-World War II and Korean periods of wage-price increases appear, in the
opinion of most economists, to be attributable primarily, but not exclusively, to monetary influences and excess aggregate demand. The period of inflation following the 1954 recession was associated with the investment expansion of those years, and does not appear to have involved excess aggregate demand. During this period, the influence of cost upon prices is more significant than in the earlier period, but there were still important demand influences in certain sectors of the economy. To the extent that collective bargaining in general has contributed to inflationary wage and price increases in the economy, collective bargaining in steel must share in this responsibility. While this general problem is recognized, this study is concerned with steel's independent influence within this framework.

There are decided difficulties in an examination of this narrower problem. These difficulties involve judgment in assessing pattern influences. The clearest instances of pattern setting and following are to be found within narrowly defined industries and segments of industries. For example, settlements with U.S. Steel have set the pattern for the basic steel industry. There are also varying degrees of pattern influences throughout the jurisdiction of given unions. With respect to the Steelworkers union, the basic steel pattern has been followed quite generally in aluminum and metal containers, but there has been much pattern deviation within steel fabrication. Complex combinations of bargaining and competitive product and labor market influences have produced varying degrees of pattern following and pattern deviation within the jurisdiction of the larger industrial unions.

Most difficult to analyze is the pattern influence among various unions in different industries. There is again a combination of bargaining and economic influences which defy completely satisfactory separation. The relative importance of the steel and automobile industries has given rise to the view that the settlements negotiated in these two industries exert widespread influence beyond their industry and union contexts. The relative ease with which a few important bargains can be followed in the press and by the public, as compared with the time and technical persistence required to follow a more complete picture, contributes to this point of view.

To appraise steel's influence, trends in hourly earnings in various industries were first analyzed. The increase in earnings in steel was similar to that in other durable and highly organized industries prior to 1955. There was, however, a marked relative increase for steel in the period from 1954 to 1959. This relative increase was attributable in large part not to basic wage rate increases, but to revision and extension of incentive plans, the introduction of Sunday and holiday premium pay with continuous operations, and to other similar variables. The increase in earnings, as distinct from wage rates, had no discernible repercussions beyond the basic steel industry. It contributed significantly, however, to employment cost increases in steel.
The timing and amounts of wage and fringe settlements over the postwar years were next studied. Steel did not lead in the timing or the amount of settlement to any marked degree prior to 1955. It was not possible to ascribe to any particular union or industry leadership in the first postwar "round" with its various factfinding boards and ultimate selection by the President of the crucial settlement figure. In 1947 and 1948, the automobile industry provided the focal point for the convergence of major settlements. In 1949, the steel factfinding board established an influential pension and insurance figure, but this became a basis for settlements in other industries prior to the negotiated settlement in steel. Since 1950, major wage settlements have closely approximated the amount yielded by the automobile wage formula which has persisted over these years.

The pattern influence, the economic appropriateness, and the equity of the automobile wage formula can be debated. It can be argued that it contributed to inflation by accentuating the wage-price spiral, that it moderated inflation by restraining collective bargaining settlements, or that it closely approximated and predominately reflected underlying economic conditions. It may or may not have been appropriate as a wage guide for other industries. It was, however, an important independent influence. Major settlements in durable and other highly organized manufacturing industries did not in fact deviate substantially from it.

In the years 1955-58, wage rate increases in steel did exceed the automobile formula by some 9 to 13 cents. This increase had repercussions predominantly within the jurisdiction of the Steelworkers union. Most clearly, it did not pull the remainder of the economy with it. The fact that, as it turned out, the 1959 settlement in steel involved no wage rate increase for that year, and considerably moderated the annual employment cost increases previously prevailing, moved steel in the direction of closer conformity with the automobile formula. For the years 1955-59, total effective wage rate increases in steel were below coal, aluminum, shipbuilding, can, meatpacking, and agricultural implements, but were above other important industries.

Though statistics cannot reflect all of the dynamic influences of one union or industry upon another, the results of this study indicate that if it were possible to abstract steel from the collective bargaining environment of the postwar years, it is very doubtful whether wage and other settlement terms in the economy would have been much modified. While judgments with respect to broad pattern influences cannot be dogmatic, steel appears much more to have been conforming to, rather than establishing, major wage trends in the economy.

By the same token, within the context of collective bargaining as it existed, the impact of increases in employment costs upon steel prices could hardly have differed substantially from that which in fact took place. Employment costs in steel constitute some one-third of average realized price. It would require, therefore, quite unrealistic assumptions as to what employment cost increases "might have been" to derive a 10 -percent plus or minus assumed change in steel prices over this span of years.
As noted in chapter 10 , steel prices have increased markedly in the postwar period. These increases in large measure reflect increases in employment, material, and capital costs, and have been largely unavoidable. Regardless of the reasons for price increases, however, even large price increases in steel, as analyzed in chapter 11, have only small effects upon the general price level in the economy. Within a range of realistic discretion open to the parties in collective bar-
gaining, and to the companies in the determination of prices, their decisions have bardly had a measurable effect upon the general price level.

In making the foregoing statements, it is recognized that various settlements in collective bargaining, and various decisions with respect to price policy, can be debated. For example: Were the 1955 and 1956 contract settlements too high? Should the union in 1959 have given priority to noncontributory insurance relative to greater protection for employees? Did the companies increase cash flow and profits too much during the years $1955-57$ ? Has the industry expanded too rapidly? Should the industry have increased cash flow to a greater extent in the earlier postwar years? Should the industry have spent more on research and development? Answers to questions of this type must be placed in perspective. In the first place, there are no simple answers that do not contain controversial public policy implications. Second, answers within a range of realistic discretion have minimal effects upon the general price level. Third, answers are of predominant importance only to the steel companies, steel employees, the steel union, and steel users.

Decisions in collective bargaining, and as to prices, are highly important to the parties. Adjusting the terms of settlement to the increasingly competitive conditions in the industry and the economy has already been singled out as a major problem for the parties, as has employee insecurity. The increase in the intensity of competition with respect to steel is discussed in chapter 10. Steel users, however, viewed over any reasonable period of years, are significantly protected by the compulsions of competition.

In summary: (1) Collective bargaining settlements in steel have not been a predominant independent influence in establishing or modifying wage trends in the economy; (2) The wage and price effects of steel settlements, and industry decisions with respect to price policy, when realistically interpreted, have had a minimal independent effect upon the price level in the economy; (3) The increasingly stringent compulsions of competition provide important protection for steel users; and (4) A major problem confronting the parties in collective bargaining is to adjust to the increasingly competitive environ-
ment in a manner best suited to protect their mutual longer term interests.

## The Negotiating Relationship

During 1957, an industry leader in steel negotiations stated, somewhat facetiously but with an element of bitterness, that the difficulty in steel was that the union would not allow the industry to win a short strike and that the Government and the industry's customers would not allow it to win a long strike. He might have added that from the industry's point of view, the price which had to be paid to avoid a strike or to settle a short strike had, upon occasion, been higher than the industry's long-term interests warranted. From the union's point of view, it has sometimes felt that the industry had not bargained with a genuine intent to settle prior to a strike. Neutrals have at times concurred in both of these opinions.

Neither the companies nor the union desire a strike. No one feels the pressures and criticisms to the degree of those responsible for calling or taking a strike. Also, neither party as a general rule wants Government intervention in a dispute.

If neither party wants a strike, and neither wants Government intervention, why have both taken place so frequently in the past? Each party would answer the question by pointing to the unreasonable position taken by the other party prior to a strike. This is not, however, a complete explanation. To the extent that a single generalization appears valid, it is that pressures upon the parties to avoid a strike have frequently been less compelling than those which develop in connection with the strike's resolution. The following paragraphs develop this point.

The negotiating relationship which exists in steel is different from the much more common situation prevailing in most other industries. If, for example, a major industrial union is negotiating with a single large company, that company is faced with the decision of whether to take a strike while its competitors continue to operate. The Union is faced with the realization that a long strike will be required to obtain even a small liberalization of the company offer. Increasingly, as experience with collective bargaining has developed, both parties in a major single-company
negotiation recognize that they must either reach a settlement or undertake a long and costly strike for what will likely be a very small change in the previous offer. Normally, the pressures to avoid a strike are compelling enough to bring about a settlement.

There is less pressure to avoid a strike in steel, however, because steel strikes are industrywide and virtually all companies are shut down. In addition, the parties have not usually anticipated a long strike because of the national emergency characterization of such strikes with consequent Government intervention. Of the five major postwar strikes, three have lasted roughly 1 month, one lasted approximately 2 months, and the 1959 strike lasted more than 3 months. In this last instance, a long strike was widely anticipated and steel-using industries had deliberately built up large inventories, making a strike of such duration possible.

Consider somewhat more specifically the broad outlines of the last several negotiations. After the 2-month strike in 1952 and the change in union leadership, there was no serious anticipation of a strike in 1953, and negotiation functioned effectively. A strike was likewise not anticipated in 1954, a recession year, and none resulted. In 1955, a strike was not anticipated. The union became unexpectedly militant, however, and to avoid a major strike in a year of peak demand for steel the companies went above, it is believed, what they considered to be a reasonable wage offer relative to other settlements in other industries. In 1956, the companies presented a large package in a 5 -year contract proposal. The belief again is that they strongly hoped to achieve a settlement largely within the framework of the original proposal. This proved not to be possible, and a strike resulted. At the end of a month, and at least partially influenced by the desire to avoid Government intervention, they gave, in a 3 -year contract, substantially all that had been included in the original 5 -year package. In 1959, they anticipated a strike, took a very firm position in prestrike negotiation, and the longest strike in steel history resulted.

It would seem that there is only one way out of the dilemma of avoiding frequent strikes which is consistent with the preservation of the present system of bargaining. In essence, the parties must recognize the longrun futility and danger of fre-
quent strikes. In this process, they can be assisted greatly by a public policy which avoids early and formal Government intervention. Under such circumstances, it should not be too difficult to avoid short strikes. The parties should be sufficiently flexible in their positions to anticipate any concessions they would be willing to make as a consequence of a 1-month strike.

Avoiding medium-to-long strikes is an entirely different matter. In this process, the parties would be greatly assisted by a public policy which limited intervention, if a strike reached a truly critical stage, to an informal mediatory procedure. But avoiding medium-to-long strikes probably implies that the union, from the point of view of a single dispute, would accept something less than it could get by such a strike. No matter how hard the companies might strive to make prenegotiation offers on which they would stand, regardless of the length of the strike, growing secondary unemployment might force concessions from the companies as well as from the union. However, a Government policy allowing medium-to-long strikes, and limiting intervention to a mediatory form, considerably increases the pressures to avoid strikes.

While the conclusions of this study indicate that the consequences of steel strikes to the public need not cause alarm and are typically exaggerated, the crisis atmosphere which is created can outweigh a logical appraisal. A succession of long steel strikes can easily lead to a political situation which demands drastic legislation. The consequences of such legislation are very difficult to appraise, but they are not appealing because they substitute the uncertain consequences of public power for private responsibility.

It is difficult to appraise the present state of the negotiating relationship. In some respects, attitudes have hardened. On the other hand, explorations of issues under the two committees set up under the 1959 contract are continuing. Although most observers are not overly optimistic as to the results, neither party will desire to take the responsibility for breaking off the work of these committees. It is to be hoped that the committees will make a meaningful contribution to mutual understanding.

In summary: (1) The exaggerated national emergency interpretation of steel strikes, with consequent Government intervention, has tended
to reduce the compulsions for avoiding strikes; (2) A public policy which avoids early intervention and limits its form to mediatory procedures at truly critical stages of strikes encourages the parties to avoid strikes; and (3) If the parties do not improve their negotiating relationships, the political consequences of continued frequent strikes may lead to some form of drastic legislation regardless of the wisdom and necessity for such legislation.

## Conclusion

The conclusions of this chapter can best be emphasized by an unqualified statement of the major points from the section summaries:

1. The actual adverse effects of steel strikes on the economy have not been of serious magnitude. A major reason why steel strikes have had so little measurable impact is that when a strike approaches a critical stage, pressures upon the parties to settle become substantially irresistible.
2. Partial operation in the interest of national defense should be given far more serious attention than it has in the past.
3. Early intervention tends to frustrate and hinder the process of negotiation and has neither secured settlements nor avoided strikes. Late, informal, and mediatory intervention has produced settlements and appears to be least harmful in achieving a pattern of private agreement.
4. Minor modifications in the mechanism for handling national emergency disputes hold little promise for altering the above conclusion.
5. Collective bargaining settlements in steel have not been a predominant independent influence in establishing or modifying wage trends in the economy.
6. The wage and price effects of steel settlements, and industry decisions with respect to price policy, when realistically interpreted, have had a minimal effect upon the price level in the economy.
7. The increasingly stringent compulsions of competition provide important protection for steel users.
8. A major problem confronting the parties in collective bargaining is to adjust to the increasingly competitive environment in a manner best suited to protect their mutual longer term interests.
9. The exaggerated interpretation of the national emergency dimension of steel strikes and resulting Government intervention have tended to reduce the compulsions for avoiding strikes relative to the pressures for ending them.
It is significant that the public interest has not been seriously harmed by strikes in steel, or by steel collective bargaining agreements, despite common public opinion to the contrary. Minor changes in existing legislation will not provide demonstrably superior results in the avoidance of future steel strikes. Moreover, the problems involved do not seem to indicate the necessity for the more drastic forms of governmental intervention that are sometimes proposed. In the light of these conclusions, it is hoped that the public and its representatives will be very cautious in approving legislative changes affecting the existing collective bargaining system.

# Steel Strikes and Bargaining Abroad 

Abraham J. Siegel*

This article summarizes the findings and conclusions of a larger detailed and documented report which was one of several background studies commissioned by the U.S. Department of Labor in connection with its steel study. The questions with which this background report dealt were directly related to only one of the two basic issues under consideration-industrial conflict and the role of Government. Essentially, the purposes of the background study were these:

1. To summarize the record of industrial peace or conflict in the steel industries of The United Kingdom, Sweden, West Germany, Australia, Japan, Canada, France, Belgium, and Luxembourg.
2. To outline those features of the respective national industrial relations systems (e.g., provisions for compulsory conciliation or arbitration) or of the structure and organization of the steel industries per se (e.g., special bargaining arrangements, nationalization, codetermination) which affect methods of dispute settlement and proneness to industrial peace or conflict.
3. To assess the relevance of this survey for American experience and to note any relevant "lessons from abroad" for public policy consideration concerning "Government and collective bargaining in steel."

## Preliminary Caveats

1. International comparisons of strike data are fraught with pitfalls. These are particularly vexing in industry comparisons, where adjustments must be made for varying definitions of the industry and of "numbers employed" in the industry.
2. Available information on strike and industrial relations experience in the various iron and steel industries was plentiful and reliable for some countries but only sparse and conjectural for others.

These technical disparities and substantive gaps necessarily imply that the data summarizing
strike experience are "best estimates" rather than precisely definitive and that interpretations (which are necessarily personal, in the first place) are subject to such minor modifications or qualifications as may be required by existent but currently unavailable detail concerning the industrial relations systems of the steel industries surveyed. Neither caveat, however, seems to me to destroy the general validity of the substantive findings concerning strike experience or the warrant for the general interpretive conclusions made.

## Strike Experience

In general, strike activity in the iron and steel industries of the nine countries surveyed appears to have been very low or nonexistent in six countries and moderate in the other three during the periods covered by the survey. In no country was steel a "problem" industry in industrial relations. ${ }^{1}$

1. United Kingdom. The steel industry in Great Britain is relatively strike free. For the pre-1949 period, when annual strike statistics were reported only by seven very broad industrial groupings, there are a number of reiterated qualitative testaments to industrial peace in British iron and steel. From 1949 on, when strike data are available for narrower industrial groupings, we find that the annual employee loss ratio for the 1949-58 period was on the average about a quarter of a day per worker-a very nominal loss ratio in relation to the same ratio in other British industries and elsewhere.
2. Sweden. There have been no strikes in the Swedish steel industry for the past 30 years. This is still a remarkable record despite the fact that for the country as a whole strike activity has been very low since the 1930's.
3. West Germany. There have been no strikes (in the statistically reportable category) in the
[^0]West German steel industry since World War II. There are records of a few wildcat and very brief ( 1 to 2 hours) stoppages, but since none of these lasted at least a day or involved the loss of more than 100 man-days, they were not "officially" recorded as "strikes." The postwar record in steel, however, stands in remarkable contrast with the pre-Nazi strike experience in iron and steel. For the 1925-32 period, the annual average of working days lost in steel strikes exceeded $1 \frac{1}{4}$ million days, and these accounted, on the average, for more than 17 percent of the total man-days lost in stoppages in all industry annually. Although all industries experienced fewer strikes in the postwar period, it is apparent that the decrease was much more marked in the iron and steel industry.
4. Luxembourg. The history of industrial relations in the Luxembourg steel industry has been one of almost unbroken peace for the past 40 years. With the- exception of several wildcat strikes of short duration and affecting only small numbers of workers, there have been no strikes since the early 1920's. In the past decade, only one serious threat to this record of labor peace occurred, but last-minute mutual agreement to accept arbitration averted a strike in 1959.
5. Belgium. Prior to 1957, steel strikes in Belgium were included in the broader industrial grouping of metal fabrication. Qualitative comments, however, suggest that there have been very few strikes in the postwar period and that those which did occur were, for the most part, "sympathy" strikes in which steelworkers joined in demonstrations of trade union solidarity in concert with workers in the entire metalworking industry.
6. Japan. In general, strike experience in the Japanese iron and steel industry does not appear to deviate too far from the average experience of aggregate Japanese strike activity. The general pattern is one of high worker participation and brief duration of stoppages. For the postwar period, the average duration of steel disputes has been somewhat lower than the already low average duration of all disputes ( 3.9 days as against 5.2 days). The average size of each dispute was about 2,500 employees, and the average number of working days lost annually per employee was 1.9. Such strikes as do occur are not only brief but orderly, usually involve only one shop or
department in a plant at a time, rarely shut down a blast furnace, and are generally conducted by local union officers with a prior agreement with management about the timing, limits, and methods of the strike.
7. Australia. In Australia, steel disputes are included in the broader metal trades and engineering industrial category. Other information, however, indicates that the Australian steel industry has been generally free from lengthy and total shutdowns. The only prolonged stoppage in the industry since World War II was a 13 -week strike in 1945. Also, the steel industry shares two aspects characteristic of Australian industrial disputes taken as a whole-relatively high frequency of disputes and a markedly low average duration of stoppages. Coal mining and stevedoring have accounted for a major portion of total strike activity in Australia. The metal trades and engineering group has generally ranked third in incidence of disputes, but this is undoubtedly a higher ranking than would be attained by the steel industry alone. All in all, the steel industry's record does not distinguish itself sharply from the experience of industry as a whole when the coal mining and stevedoring industries are excluded.
8. France. There are no precise data on strike experience in the French iron and steel industry. Figures are available only for metal production as a whole. There is no information to suggest that steel is either a "problem" industry or one which ranks inordinately "low" in strike activity. We do know that strikes are usually of relatively brief duration.
9. Canada. Of all the countries surveyed, strike experience in the Canadian iron and steel industry appears to rank highest. During the 1947-58 period, strikes in the ferrous metal products industry entailed an average annual loss of over 5 days per employee, and the average duration of disputes was almost 14 days. The ferrous metal products industry during this period accounted (on the average) for almost 15 percent of the total number of strikes occurring each year and for more than 13 percent of man-days lost annually in work stoppages. There were sporadic strikes in the basic steel industry during the initial organizational years when the Steel Workers Organizing Committee (SWOC) began its efforts
to unionize Canadian steelworkers. During World War II, the steelworkers did not pledge a no-strike policy and managed to improve wage rates despite wartime wage controls and to secure industrywide uniformity in base rates. This was accomplished through the use of the strike. The Government, anxious to restore production of vitally needed steel, in each case virtually compelled reluctant employers to grant concessions to the SWOC. The largest of these wartime disputes occurred after several smaller ones had been evaded and after union recognition had been ceded. In January 1943, after extended negotiations, intervention of Government conciliation boards, the appointment of a special commission, and so on, the steelworkers at Dosco and Algoma struck to obtain improvements in wages and other conditions (recognition was not an issue here). The dispute was ended only after a Memorandum of Understanding between union and Government was concluded in late January 1943. In July 1946, an industry shutdown occurred despite the proclamation of a temporary Government controllership over the industry and the provision in P.C. 2901 (which established the controllership) of severe penalties for failure to report to work without just cause. The strike lasted from July 14 to early October, and the Government made no effort to impose the penalties under P.C. 2901. There was no resort to strike action over the negotiation of new agreements nor was there resort to the conciliation board step of the two-stage conciliation procedure between 1947 and 1953. Negotiations in 1954 were markedly different from those in previous postwar years. Adverse economic conditions hardened the companies' bargaining stance, and the parties came closer to an industrywide strike than at any time since 1946. The face-saving concessions recommended by conciliation boards and agreed to by the companies and the union barely averted another industrywide stoppage. A series of wildcat stoppages at Algoma erupted in mid-1955. In the 1958 Canadian steel negotiations, a 12 -week strike occurred at Stelco, the "giant" of the industry. The settlement at Algoma, which normally had waited upon the Stelco settlement as a pattern for its own, averted an even broader stoppage and served as the basis for an eventual settlement at Stelco.

## Bargaining and Dispute Settlement Procedures

1. In a comparative study where findings are uniform, the stimulus to ferret for generally prevailing explanations is almost compulsive and occasionally rewarding. In an earlier interindustry comparison of strike experience in 11 countries, for example, it was found that the coalmining and longshoring industries tended to rank consistently high in proneness to strike. It seemed plausible in that international comparison to suggest a general explanatory hypothesis that related two aspects of the industrial environment of these industries to the prevailing high levels of strike activity in the coal-mining and longshoring industrial sectors. ${ }^{2}$

There have been a number of "rough and ready" hypotheses tossed off from time to time relating certain aspects of the industrial environment in the iron and steel industry to presumed consequences concerning industrial peace or conflict results. It has been suggested, for example, that the technology of the industry attracts necessarily "tough" workers and that this, combined with a traditionally hard-bitten, individualistic employer attitude, tends to foster combative industrial relations. On the other hand, we have encountered, perhaps more frequently, another general hypothesis relating the industrial organization of the steel industry to industrial relations results. Steel, it has been suggested, is a "big" industry, at best oligopolistic and at worst monopolistic, which tends to be confronted eventually by an equally "big" industrywide union. The tendency read into this juxtaposition is one of tacit collusion whereby both parties "get theirs" at the expense of the public and evolve, via this "mutuality," an accommodative rapport which results in industrial peace.

The findings of this comparative study support neither of these (nor any other) simple hypotheses as generally valid and prevailing explanations for industrial peace or conflict results in the iron and steel industry. They may be valid at one time or place, but no generally valid explanation for the pattern of strike activity revealed in this international comparison (where the steel indus-

[^1]tries ranked low in strike experience in six countries, moderate in three, and in the United States, would rank between moderate and high) emerges from the study. There simply does not appear (as there did in the case of the coal-mining and longshoring industries) to be any inherent characteristic of the industrial environment in iron and steel fabrication which tends to override the effects of differences in national industrial relations systems, industrial collective bargaining history and machinery, or cultural contexts, and which bids fair to predominate in the shaping of em-ployee-employer relations in the industry whatever its industrial location. The basic environment involving the relationships of workers, work process, and employers in the production of steel does not per se lead toward industrial peace or industrial conflict. In short, the explanations for the historical experience in steel appear to be at best partial and are frequently combined with unique causal factors. Both the partially transferable and the unique factors appear to lie outside the characteristics of the industrial environment imposed by the technology of steel production.
2. If we are deterred from proposing general cross-cut and all-encompassing valid explanations, we may yet legitimately attempt to seek out partial explanations for the generally modest level of strike activity revealed by the study. Unfortunately, this is neither simple nor sure, for we are confronted by an almost bewildering array of bargaining and dispute settlement relationships involving varying roles for Government in the iron and steel industries of each of the countries surveyed.
(a) In Britain, we find a history of early accommodation between employer and worker organizations in steel and a long-standing record of mutual acceptance which dates from 1867. Each of the parties is strong and effective; in relation to each other, they are fairly evenly matched, and in relation to the constituent memberships, organizational leadership exercises effective control and discipline. We find an industrial bargaining machinery established in a hierarchy of levels. Industrywide negotiations deal with broadly applicable issues such as hours, holidays, cost-of-living bonuses, and minimum rates for laborers; districtwide and regional bargaining encompasses relevant district issues; and bar-
gaining at the plant level supplements these agreements and incorporates the settling of individual rates, extras, plant work rules, and so on. There is a well-established dispute settlement machinery whereby most disputes have been peacefully resolved by the parties locally. There is also provision in some sections of the industry for an informal method of arbitration by a neutral committee consisting of two representatives of employers and two of workers chosen from employers and workers not directly concerned in the dispute. Those few disputes not settled locally have moved up for resolution in joint conferences at the district or national level and, if necessary, to private arbitration. Union leaders and employers have both agreed that a strike is a sign of failure. There have been close formal and informal relationships at all levels of the organizations. Both sides accept the fact that negotiations, while in progress, should be confidential and private to the parties concerned and statements should be made jointly to the press at the conclusion of negotiations. The role of Government in the dispute settlement machinery has been the model of voluntarism, and only in one instance has the Government intervened via a court of inquiry to inquire into the facts of a dispute and to issue a nonbinding report. The industry went from private ownership to nationalized ownership and back to private ownership with some general Government supervision of pricing policies, etc., all without affecting the industrial relations arrangements or experience in the industry.
(b) In Sweden, there is a similar history of generally accommodative relationships between worker and employer associations in steel which date from the first decade of the century, and we find a long and uninterrupted period of mutual acceptance. Again, each of the parties is strong and effective. The bargaining machinery is such that industrywide bargaining takes place within the framework of general nationwide limits negotiated between the central employer and worker organizations, the Svenska Arbetsgivaeforeningen (SAF) and the Landsorganisationen i Sverige (LO). In addition, there are advisory "enterprise councils." Dispute settlement machinery has functioned extremely well. The role of Government in dispute settlement involves compulsory arbitration of disputes arising out of contract inter-
pretation. Labor courts decide such disputes where no private machinery has been established by the parties for their resolution. Few disputes in steel ever get to the labor courts. In disputes over new contract terms, the Government's role is limited to mediation. Ownership in the industry is for the most part private, but a portion of the industry is Government owned. No differences either in industrial relations procedure or practice arise out of this ownership pattern.
(c) In Germany, a complex web of collective bargaining was reestablished after more than a decade of disuse, but political bargaining plays a significant role in the German industrial relations system. Strong employer associations bargain with less strong national unions and negotiate very general contractual terms on an industrywide level. At the plant level, the works councils (not part of the trade union machinery) negotiate supplementary agreements with individual employers and administer all agreements. The wide disparity between actual earnings and benefits and the level of wages scheduled in collective agreements negotiated between employer associations and the trade union (I. G. Metall) is an increasing concern of the union. The union has been promoting in recent years a new approach in collective bargaining which is aimed at increasing union participation in wage determination at the plant level and designed to reduce this gap-all in the hope of bolstering union appeal for workers and arresting membership stagnation of recent years. This development runs counter to continuing internal union appeals for more centralized federation authority and coordination of wage policies between the 16 national unions which comprise the federation. The Government provides voluntary conciliation and voluntary arbitration services via labor courts, but in the "codetermined" steel industry, few disputes have gotten to the labor courts. The strong paternalist heritage and the newly found status and machinery via codetermination in the steel industry plus the general disinclination (and inability?) of the postwar German worker to strike and the great emphasis on reconstruction have reduced industrial conflict in the German steel industry to virtually zero, in marked contrast with the strike record in steel prior to World War II.
(d) In Luxembourg, we find a long record of labor peace in a virtual "one-industry" economy,
with more than half its 45,000 industrial workers employed in the iron and steel industry. The industry is almost entirely an export industry, is highly efficient, and pays the highest steel wages in continental Europe. Workers have had few economic incentives for striking, and the psychological rapport between labor and management seems high. Although there are three competing unions, rivalry is confined to the recruiting of members and to political differences. In negotiating with management, a united front is always maintained (unlike the French situation). Industrial relations in the steel industry operate to a large extent in an atmosphere of free bargaining, which is characterized by a sense of responsibility (in view of the vital dependence of the economy upon steel) without any direct involvement of Government legislation or agencies. Only when free collective bargaining fails to produce agreement does the Government (in the form of the National Conciliation Office) enter the picture as mediator. Recommendations for settlement, however, are not binding, although in instances where the Conciliation Office has intervened, it has proved very effective in developing compromises and agreements. In practice, the great majority of settlements are reached in private negotiation stages by management and union representatives and only infrequently does a dispute reach the conciliation stage (unlike the Canadian experience).
(e) In Belgium, industrial relations in the steel industry since World War II have generally been considered as good. Like the Luxembourg industry, it came out of the war intact and has been prosperous. There are two major unions in the industry, the Socialist and the Catholic metalworkers' unions. In the Belgian steel industry, grievances are first considered at the plant level by joint-management committees. If they are not settled there, they are taken to the industry's Commission Paritaire, or joint committee, on which sit representatives of labor and management who endeavor to work out agreements and avert strike action. This joint committee arrangement whereby employers and workers themselves, in effect, act as conciliators, dates from 1919 in the metalworking industry and by the Decree of July 27, 1946, was officially established as a procedural arrangement for various branches of industry. The national industry joint committees
are composed of representatives of employers and workers who are appointed by the Government from lists of candidates submitted by the organizations qualified to represent the employers and workers. In the case of national strike threats, where this conciliation machinery has broken down, the Prime Minister generally calls for at least one more effort, usually naming the Minister of Labor as his representative in conciliation. Apart from these arrangements, Belgium has no other conciliation and no arbitration machinery, for steel or any other industry.
(f) In Japan, collective bargaining is a postwar phenomenon, and bargaining has been confined for the most part to the single enterprise. The paternalist heritage dies hard and the revived employer associations are strong. In steel, there is no industrywide bargaining. Within the enterprise, bargaining tends to be centralized, terms negotiated are vague and sketchy, and workermanagement councils established outside the purview of the trade union machinery duplicate some of these loose negotiations. There are no formal grievance procedures in most Japanese steel companies. If the grievances cannot be worked out in the shop, they become the subject of top-level negotiations, frequently as "consultation" between top management and top local union leaders. Steel is no "pattern setter" in Japan; rather, the determination of wage and bonus levels in the industry tend to be influenced by Government scales. There is almost no private arbitration resorted to, and disputes tend to be resolved by the parties and occasionally via the intervention (frequently unofficial) of the Labor Relations Commissions. Government legislation provides for a large number of standards and terms and conditions of employment which, in the United States, are for the most part bargainable issues.
(g) In Australia, we find bargaining between well-organized parties and a state-imposed system of compulsory conciliation and arbitration. There is one major steel-producing company; on the employee side, we find about 60 percent of the manual workers covered by the Federation of Ironworkers and skilled maintenance workers covered by some 16 other unions. Suspicions of the political motivation of some of the craft unions and skepticism about the possibility of winning any major concessions through the use of the strike weapon
have effectively limited industrywide solidarity among unions. The steel industry seems content to avoid any major concessions in direct negotiations and to turn over responsibility for the determination of wages and conditions to the Industrial Commission. The tribunals have generally been reluctant to introduce radical changes in the existing structure of wages and conditions, and this has led unions to turn to legislation as a means of securing major improvements. Despite the fact that in theory the arbitration system is intended as a substitute for the employment of direct economic pressure, it is difficult to estimate to what extent, if any, it has reduced overall loss to the community as a result of strikes. Perhaps the safest generalization is that under arbitration there are fewer protracted industrywide strikes and more disputes leading to work stoppages than might otherwise be the case.
(h) In France, we find strong employer associations, weak and divided unions, areawide bargaining which generally settles little, and supplementary plant-level negotiations which may or may not involve effective collective bargaining. The State sets the "minimum vital" and many other "rules" governing working conditions, provides for compulsory conciliation of disputes, mediation, and voluntary arbitration. Conciliation or mediation have been used very little in the French steel industry, however. Day-to-day relations at the plant level operate within the framework of the legislation dealing with the Comité d'Entreprise and the Delegué de Personnel. Although steel production is one of the major industries in the private sector, Government has been able nevertheless to exert a certain amount of influence over wage and other labor policies because many steel companies received important financial assistance from the Government during their post-World War II modernization and expansion programs.
(i) In Canada, with bargaining machinery most similar to that of the United States, there is the distinctive two-stage compulsory conciliation arrangement provided by Federal and Provincial legislation.

## Some Modest Conclusions

Despite this variegated industrial relations experience underlying the generally modest level of
industrial strike experience, there are a few tentative, general conclusions that appear most relevant for U.S. experience.

1. The role of Government (either in ownership or in dispute settlement) in no instance of low strike activity (Britain, Sweden, Belgium, Germany, Japan, and Luxembourg) appears to be the critical or principal determinant of industrial peace in the industry. In Australia and in Canada, where some form of compulsory governmental dispute settlement machinery is involved, the collective bargaining process reflects this in the generally more intractable and extreme positions initially adopted by the parties as they look toward the eventuality of dispute settlement by Government tribunal. Revision in the Government's role in dispute settlement in U.S. steel industrial relations is likely therefore to assume a tactical rather than a strategic role in affecting industrial peace or conflict results, and considerations of this factor are inextricably bound up with a congeries of additional considerations concerning the "actors" and their own attitudes and machinery.
2. In those countries in which collective bargaining, rather than bargaining via the legislature, is the predominant mode of rulesetting in industrial relations, the parties in steel have accepted and respected each other's survival and sovereignty. In Britain, in Sweden, or Australia, the question of complete employer acceptance of trade unionism has been buried for a long, long time. Bakke's assertions in Mutual Survival, the principal conclusion of the Final Report of the National Planning Association's Causes of

Industrial Peace series, and the countless other reiterations of the same theme-i.e., that a necessary, if not sufficient, condition for industrial peace in collective bargaining situations is genuine and unquestioned mutual acceptance-still appear to be relevant in considering variations in bargaining experience.
3. Finally, the bargaining machinery in steel in several of the low strike experience countries minimizes the potential for conflict growing out of all-encompassing top-side negotiations. The "hierarchy" of bargaining levels involving the coordination of national or industrywide, district or regional, and local terms and conditions of employment tends to reserve for each bargaining layer those issues about which the bargaining parties are best equipped to negotiate. The apparent prerequisites for such split-level bargaining involve either strong unions with effective internal discipline and coordination bargaining with equally effective employer associations and individual employers, or splintered and relatively ineffectual local bargaining units which tend generally to be dominated by strong employers and employer groups. There is little doubt that although in both instances the arrangements are conducive to "peace," the substantive achievements made via bargaining may vary markedly. Yet in light of the 1959 American experience with the work-rule issue, the practices of the British bargaining machinery, for example, with respect to relegation of issues to the proper working level of familiarity in the bargaining hierarchy, are certainly worth more than a casual glance.

# The United Steelworkers and Unionwide Bargaining 

George Seltzer*

Throughout the post-World War II period, economists, businessmen, legislators, and journalists have directed critical attention to pattern or unionwide bargaining. The union most commonly identified with this practice is the United Steelworkers of America (USA). It is charged that the USA, because of its bargaining power, imposes uniform terms on firms throughout its jurisdiction notwithstanding wide differences in product line, competitive circumstances, and financial position. The presumed effect of unionwide bargaining has been described in these terms:

Failure to recognize the special problems of individual producers leads to business failures, lost income, lost jobs, and community damage. It amounts to absentee control with its strong flavor of monopoly, and it undermines the foundation of our economic way of life-competition. ${ }^{1}$

## Steelworkers' Experience, 1946-49

The consequences could indeed be grave if collective bargaining were conducted in the inflexible manner so widely attributed to the USA. In order to ascertain the factual validity of unionwide bargaining, as well as its causal factors and implications, the author of this study previously undertook an examination of collective bargaining relationships involving the union in the period 1946-49. ${ }^{2}$ That analysis disclosed the following trend regarding the nonsteel units ${ }^{3}$ of the USA's District 31 (northern Indiana and metropolitan Chicago):

1. 1946 marked the peak of conformity when at least 75 percent of the units gave general wage increases equal to the key bargain. ${ }^{4}$
2. 1947 registered a sharp decline in conformity since only 40 percent of the units observed the key bargain in terms of general wage increases.
3. 1948 exhibited further deviation from the key bargain in that about 35 percent of the units concluded their agreements before the key bargain and a substantial amount of deviation was
noted among those nonsteel units which negotiated after the key bargain was established.
4. 1949-"the pension and insurance round"displayed a continuation of the movement away from conformity. About 8 months after the signing of the key bargain, approximately 60 percent of the nonsteel units had not made any economic change in their agreements, though the pacts had been reopened almost simultaneously with the basic steel negotiations and fewer than 50 percent of the contracts that were revised made provision for pensions.

In addition, the examination disclosed a striking contrast in the incidence of conformity by nonsteel units with the key bargain depending upon the industrial composition of the relevant labor market. ${ }^{5}$ Thus, in the case of District 31's "Indiana Harbor" subdistrict, a basic steel center, it was found that nonsteel units in this area consistently conformed with the wage increases of the key bargain. On the other hand, the nonsteel units of the "West Side" subdistrict, a diversified light manufacturing area, "showed the same pronounced and progressive movement away from the key bargain wage increase as did those of the district as a whole."

In view of the foregoing findings, which were supported by supplemental analysis of nonsteel units in Akron, Cincinnati, and Pittsburgh, the 1946-49 study concluded:


#### Abstract

(a) For nonsteel units in basic steel centers, unionwide policy was not generally inconsistent with local labor market requirements. (b) The period of greatest conformity with unionwide policy among nonsteel firms coincided with a sellers' market for their products. (c) With the return of more balanced supply-and-demand relationships, the unionwide policy tended to give way where it came into conflict with market conditions. The union tended increasingly to view the key bargain as a benchmark rather than as an inflexible standard. ${ }^{6}$


[^2]
## The Present Study, 1950-60

The task of the present study, therefore, is to ascertain whether or not the tendencies evident in the four rounds of negotiations following World War II continued or were modified significantly in the longer period 1950-60.

Procedurally, this study is based on an analysis of collective bargaining agreements in the Steelworkers District 31, a microcosm of the union as a whole. ${ }^{7}$ In order to isolate the effect of geographic proximity to centers of basic steel production upon conformity with the key bargain, the discussion makes comparisons between the Indiana Harbor and West Side subdistricts. ${ }^{8}$
1950. The fifth round of post-World War II negotiations was patently affected by the outbreak of hostilities in Korea. The key bargain, the United States Steel agreement dated November 30,1950 , provided a general wage increase of 12.5 cents an hour across the board, which averaged approximately 16 cents an hour when job increment adjustments were taken into account.

Comparison of nonsteel agreements with the key bargain during this round was complicated by the protraction of the 1949 negotiations in nonsteel units and by expectations regarding the imposition of governmental wage stabilization.

The Indiana Harbor nonsteel units manifested virtually complete conformity with the key bargain's general wage increase. Among 13 local units ${ }^{9}$ which negotiated general wage increases after the United States Steel agreement, only 1 was recorded below and none above the key bargain. And all three of the agreements which had been negotiated before the United States Steel contract were revised subsequently to adjust to the key bargain.

On the other hand, the West Side units displayed considerable variance. More than half of the 38 local units involved settled for wage increases below the key bargain. These ranged from no change to 11 cents an hour, with the modal increase at 10 cents. Relative size of employment unit, as well as location, seemed to play a significant part in the process of deviation and conformity. A distinctly greater degree of conformity was evident among interdistrict units and those employing 200 or more workers than for
the area as a whole. Regarding the contracts that were signed prior to the key bargain, in this area, too, nearly all were revised subsequently. The pressures of the Korean conflict on labor markets, as well as the improvement of prospects in business conditions generally, apparently made themselves felt in this manner.
1952. ${ }^{10}$ The 1952 negotiations in basic steel occurred in a setting of governmental wage and price stabilization, governmental seizure, and an industrywide strike lasting 59 days. The resultant key bargain, based on the United States Steel agreement dated August 15, 1952, provided for a general wage increase of 12.5 cents an hour, effective March 1, 1952, which averaged about 16 cents an hour when job increment adjustments were taken into account. In addition, the key bargain included improvement in shift premiums, payment for 6 holidays, and provision for 3 weeks' vacation pay after 15 years of service.

The shift premium item, however, is not particularly meaningful in nonsteel negotiations because such units generally operate on a singleshift basis. This is not to say that such provisions are not present in nonstee] contracts. They are, and as a general rule are more favorable than the terms of the key bargain, but the probabilities of their realization in terms of take-home pay are relatively limited. A similar status may be accorded such items as premium pay for Saturday and Sunday work per se-a standard item of relatively long standing in nonsteel contractsand triple time for holidays worked, for which provision is made frequently.

The pay for holidays not worked and the vacation elements of the key bargain also failed to

[^3]receive major attention in nonsteel negotiations during 1952. Paid holidays and somewhat relatively more favorable vacation provisions had been introduced in nonsteel contracts throughout the 1940's-first during World War II and subsequently as a partial offset or substitute for pension provisions or for other less-than-keybargain wage standards. This was the case particularly in the instance of paid holidays and holiday premiums, estimated by the USA as an economic gain of 3.3 cents an hour in the 1952 United States Steel agreement. Thus, at the advent of the 1952 negotiations, at least 95 percent of the West Side nonsteel contracts contained provisions for paid holidays-with 6 virtually universal, though a few afforded 7-and almost 50 percent of the Indiana Harbor local nonsteel contracts provided 6 paid holidays. The remaining contracts in the latter area were revised during the course of the 1952 round so that all met the standard of 6 paid holidays.

Likewise, the union-shop issue, which received great prominence in the basic steel negotiations, was not a significant element in nonsteel bargaining during this round. Many of the latter units had previously settled this issue. More than 80 percent of the local nonsteel units on the West Side and at least 55 percent of such units in the Indiana Harbor area had made provision for either the unqualified or modified union shop prior to the 1952 negotiations.

In view of the foregoing, the general wage increase constituted the effective element of the key bargain for purposes of comparison with nonsteel units. In 1952, as in the past, Indiana Harbor units showed conformity to the key bargain with only limited exceptions. This degree of con-formity-all but 2 of 18 local units-extended to the amount of wage increase but not necessarily to its timing. About one-third of the local units made no provision at all for retroactivity, and some made only partial provision.

On the West Side, on the other hand, though a majority of 51 local units conformed with the general wage increase of the key bargain, at least one-third did not. The below-key-bargain adjustments in this area ranged from 7 to 11 cents an hour, with 10 cents the most frequent increase. Again, the virtual absence in either subdistrict of more-than-key-bargain adjustments is notable.

And, as in previous rounds, the contrasting incidence of conformity and deviation between the West Side and Indiana Harbor is clearly evident.
1953. The key bargain of 1953, the United States Steel agreement of June 12, 1953, provided a uniquely simple standard-a general wage increase of 8.5 cents an hour.

The Indiana Harbor units practically repeated their degree of conformity manifested in the preceding period of negotiations, but the West Side units presented some change. Almost 15 percent of this area's local contracts were settled prior to the key bargain, and most of these provided larger general wage increases than those established later by the key bargain. On the other hand, among the West Side local units settling after the key bargain, at least 35 percent made general wage increases below the key bargain. These ranged from no change to 7.5 cents an hour, with the most frequent adjustments at 5 cents.
1954. The key bargain for this period, the United States Steel agreement, reached June 29, 1954, was established in a setting of economic recession and was comprised of several elements. It provided a general wage increase of 5 cents an hour. In addition, it contained insurance and pension changes estimated by the union as economic gains of 2 and 5 cents an hour, respectively.

With respect to the general wage increase, the Indiana Harbor local units evidenced a greater degree of deviation from the key bargain than they had experienced previously. One-third of the 18 local units in this area registered departure in this respect. Moreover, if outright lack of pensions is taken into account, the configuration of deviation is considerably greater. A majority of the units which conformed in general wage increase made no provision at all for pensions, let alone the 5 -cent current improvement of the key bargain.

Likewise, significant deviation is indicated for the West Side units. In this area, almost 40 percent of the local nonsteel units varied from the key bargain in terms of general wage increases. For the first time, a number of more-than-key-bargain wage increases were observed, generally on the order of 6 and 7 cents an hour. These apparently represented preferences for adjustment in the gen-
eral wage level and take-home pay rather than in improvement in health and welfare programs or establishment of pension provisions. Among the less-than-key-bargain firms, the wage adjustments ranged from no change to 4 cents, with the former occurring in a majority of the cases. Apparently the recession registered its influence in the amount of deviation from the key bargain as well as in its frequency.

Notwithstanding the extent of deviation just noted, the relative occurrence of conformity in the face of economic recession requires some examination. The absolute level of the key bargain per se may be a factor in this process. The 5 -cent-an-hour raise was substantially smaller than any other key bargain general wage increase. Further, 5 cents represented a suitable and acceptable amount in this period for wage increases not only in the USA unionwide context but also for collective bargaining in metals manufacturing generally. ${ }^{11}$ Moreover, the actual extent of con-formity-based merely on general wage increasesis deceptive. Among the units conforming in terms of general wage increase, only 25 percent made any provision for pensions in their agreements.

In brief, the 1954 negotiations manifested significant deviation, whether the general wage increase element standing alone or the package of wages and pensions taken together is the frame of reference. If the latter, the frequency and extent of nonconformity were patently greater and clearly predominant. Evidently the key bargain is relatively more effective as a guide for general wage increases than for other elements of the economic package. With respect to pensions, for example, at least 55 percent of the Indiana Harbor locally negotiated contracts and almost 75 percent of such West Side contracts did not include provisions for pensions after the conclusion of the 1954 negotiations. In short, notwithstanding the lapse of 5 years since the establishment of pensions in basic steel, such programs were still widely absent in nonsteel agreements. Moreover, in the interim, such items as paid holidays, noncontributory insurance programs on the order of 5 cents an hour, and more favorable vacation schedules-which had been regarded as provisions partially offsetting or in lieu of pensions-had been generally eliminated as elements of significant difference between the nonsteel contracts and
the key bargain by upward adjustments of the latter.
1955. In 1955-as in 1950 and 1953-the key bargain was defined solely in terms of a general wage increase. It provided 11.5 cents an hour across the board plus job class increments, which yielded an estimated average total adjustment of 15.2 cents. Once again, this round repeated the familiar incidence of area relationship to the key bargain-substantial conformity in the Indiana Harbor area (at least 75 percent of 20 local units) and almost equally contrasting relative deviation on the West Side.
1956. The 1956 key bargain is unique in several ways. It was the first developed by direct negotiations with a committee of basic steel companies. It is the largest and the most complex package. It affected almost every economic element in collective bargaining-the general wage level, the wage structure, incentive pay, shift premiums, holiday pay, vacation schedules, and insurance and pension programs. It also was an innovating contract for basic steel-the first 3 -year agreement, the introduction of specific cost-of-living escalator adjustments, and the initiation of supplemental unemployment benefits (SUB).

From the standpoint of ascertaining relative conformity or deviation from the key bargain, however, consideration of each of the foregoing items is not necessary. Focus on selected strategic and high cost elements-namely, contract duration, cost-of-living provisions, SUB, and the general wage increase-is sufficient for approximate judgment.

In terms of date of settlement, the West Side again manifested conclusion of contracts prior to the key bargain in at least 25 percent of the local units, while Indiana Harbor registered virtual conformity, notwithstanding the size of unit involved. The record further indicates that nearly 50 percent of the units which settled their negotiations before the basic steel agreement did so for a general wage increase clearly below the level of the key bargain for the initial year of its term.

Among the units completing their negotiations after the key bargain, substantial variation in

[^4]terms of contract duration is indicated between the two areas. Indiana Harbor registered only one exception to the 3 -year duration standard of the key bargain, while not quite 50 percent of West Side units settling after the key bargain negotiated contract terms extending for 3 years. The significance of these departures from the term of the key bargain became evident as subsequent events unfolded. Thus, in 1958, the nonsteel units with less-than-3-year contracts took account of the prevailing economic recession in their negotiations. The resultant adjustments in general wage rates were prevalently and clearly below the standard provided by the key bargain for that period. Moreover, at least 75 percent of such units did not make provision for automatic cost-of-living increases, which ultimately yielded 17 cents an hour under the key bargain.

On the other hand, the units with 3-year agreements recorded virtual conformity throughout 1956-58 to the amounts of the general wage increases in the key bargain. But these units, too, exhibited significant departures from the key bargain's cost-of-living adjustment standard. The deviations were frequent and substantial and took two main forms: no provisions at all or partial departure in terms of the base period or/and the effective date of application of the adjustments. The net result was that about 70 percent of the local units with 3 -year contracts fell short of the 17 cents an hour cost-of-living increase provided by the key bargain-and more than 30 percent made no adjustment at all.

The extent of nonconformity among nonsteel units during this round is extended even further when the SUB element-amounting to 5 cents an hour in the key bargain and a major policy objective of the USA-is taken into account. This item was virtually nonexistent among the West Side local units ( 3 of 37 contracts settled after the key bargain) and was notably absent among those of Indiana Harbor, too ( 4 of 18 contracts negotiated after the key bargain).

Yet, the SUB provisions were not entirely without effect on the 1956 nonsteel negotiations. This is suggested by the marked increase in pen-

[^5]sion provisions among the West Side local units during this round. At the advent of the 1956 negotiations, only 12 pension programs were included in the contracts of such units; at the end of the round, the number had increased to 19. Other factors, too, were undoubtedly involved, but the size and nature of the current key bargain probably provided an important degree of leverage in negotiations. This, however, is not to qualify the overall conclusion of extensive nonconformity in this round but to point up the interrelationships and complexity of the process under examination.

1959-60. The 1959-60 negotiations in basic steel were marked by a record strike of 116 days. The key issues centered on "holding the line" in the case of general wage adjustments and "local working conditions." ${ }^{12}$ The key bargain was finally established on January 5, 1960, by a memorandum of agreement between the Steelworkers and the basic steel coordinating committee. ${ }^{13}$ The union had previously sought to establish the Kaiser Steel agreement of October 26, 1959, as the key bargain but was generally unsuccessful in this endeavor.

The key bargain in this round contained the following: a contract extending for approximately 30 months from the date of signing; no general wage increase at the outset but across-the-board adjustments of 7 cents an hour effective December 1,1960 , and October 1, 1961, plus further widening of job class wage differentials; the elimination of employee contributions to insurance programs, estimated by the USA as a 6.5 -cent hourly increase in take-home pay, effective January 1, 1960; various improvements in pension provisions; the continuation of SUB; and a revised cost-of-living clause limiting increases to 6 cents an hour over the life of the contract, with provision for offset to this amount in the event insurance costs rise.

In this round, as in the preceding ones, significant deviation from the key bargain is evident. This is especially the case among the West Side local units, though it is also apparent in important essentials among the Indiana Harbor units.

Among the West Side units, the preponderance of prior settlements (at least 80 percent of all local units) effectively nullified in any direct sense the influence of the key bargain in this round. These generally provided for 1 - or 2-year terms, with

5 cents an hour the most typical immediate wage increase.

The Indiana Harbor units, on the other hand, tended generally to reserve settlement until after the key bargain was established, despite the USA's efforts to sign contracts especially after the Kaiser agreement was reached late in October. Moreover, the Indiana Harbor units generally adhered to the key bargain's provisions regarding contract duration and general wage adjustments. With respect to the latter, though, there was occasional departure in that the initial wage increase was timed somewhat earlier, apparently as an offset for lack of provision for pensions and/or cost-of-living adjustment and/or SUB.

These fringe items are present in varying degree in local nonsteel contracts. Thus, at the conclusion of the 1959-60 negotiations, SUB was generally marked by its absence. Only 5 of 19 local units in the Indiana Harbor subdistrict and 2 of 66 local units on the West Side made any provision for this item-and among the few that did, downward departure from the key bargain's standards occurred in almost half the cases. With respect to pension programs, on the other hand, almost 75 percent of Indiana Harbor local units made some provision, while at least 60 percent of the West Side units did not. Employment size of collective bargaining unit-as well as locationappears significant in this process of deviation, with the nonconforming units largely concentrated among those employing less than 100 workers.
Frequent departure by nonsteel units over the range of the key bargain's economic elements is clear. Does a similar relationship prevail for its nonmonetary provisions? What, for example, is the record of unionwide bargaining with regard to local working conditions? ${ }^{14}$ This item was described by the President's 1959 Steel Board of Inquiry as "The contract issue that has been the most serious bar to a settlement of the strike . . ." ${ }^{15}$

After the completion of the 1959-60 negotiations, fewer than 20 percent of the West Side locally negotiated contracts contained any substantive provision even resembling a local working conditions clause. In the case of Indiana Harbor, on the other hand, the comparable frequency was almost 50 percent. Thus in this respect, too, the familiar incidence is repeated, namely, significant departure from the key bargain by nonsteel units
negotiating on a local basis, and substantial difference in behavior between such units in proximity to basic steel production (Indiana Harbor) and those relatively remote (the West Side).

## General Observations

In view of the empirical record of nonsteel units during 1946-60 and its analysis, the following observations regarding unionwide bargaining by the United Steelworkers seem warranted: ${ }^{16}$

1. The concepts of the key bargain and unionwide bargaining are given reality by the convolution of union policy and market forces. When these come in conflict, one gives way-and the usual tendency is for union policy to bend.
2. The USA's utilization of the basic steel key bargain as a unionwide standard is influenced by strategic, internal political, and administrative considerations. Such a policy enables the union to use the key bargain as a lever in negotiations, meet the demands of the membership for parity in benefits, and furnish staff personnel with clearcut guidance for negotiations.
3. In practice, the key bargain is utilized by the Steelworkers as a framework for negotiations rather than as a take-it-or-leave-it policy. The concept of the key bargain has not been static. At the end of World War II, the union viewed the application of the key bargain in rather rigid terms. The unionwide strike of 1946 was in part a reflection of this view. With the unfolding of postwar economic conditions, however, and under the necessity of giving account to the circumstances of particular bargaining contexts, the key bargain in its unionwide application evolved from an inflexible mold to a starting point for negotiations. The relative paucity of more-than-key-bargain wage increases among nonsteel units suggests that

[^6]the key bargain is more effective in delineating goals rather than in establishing floors for collective bargaining.
4. The key bargain in many instances probably provides as useful a starting point for contract negotiations as any other set of union demands. This is particularly so in the case of nonsteel units located in labor market areas in which basic steel production accounts for a sizable proportion of total employment.

What are "the appropriate criteria" for wage adjustments in collective bargaining? As a practical matter, this issue is usually resolved by an amalgam of considerations, centering largely on comparisons with what others in the area or industry are doing and the firm's "ability-to-pay." In any event, judgment and discretion play an important part in the process. In this context, the key bargain serves as a barometer for the parties. It indicates the direction, the amount, the form, and the timing of change in wage elements. It provides guidance regarding what is attainable, what is economically practicable, and what is administratively operational. Moreover, the key bargain offers a useful starting point in the ritual of collective bargaining, whereby the respective parties usually demand more and offer less than the amount for which they expect to settle. In the last analysis, from an economic standpoint, what counts is the amount and nature of the settlement, not the demands which initiated negotiations. The usual approach in nonsteel negotiations is for the union committee to demand the key bargain. The burden of departure or deviation then shifts to the employer.
5. The record, nonetheless, is replete with deviation by nonsteel units from the key bargain, however defined. This is especially apparent among the nonsteel units of District 31's West Side, a diversified manufacturing area, where the unionwide policy is not typically reinforced by market conditions. It is also evident in the Indiana Harbor area, a basic steel center, with respect to particular provisions of the key bargain. Thus, notwithstanding the lapse of more than 10 years after the inclusion of pensions in the key bargain, at least 25 percent of the local nonsteel units in Indiana Harbor had not made any provision for pensions by mid-1960.
6. In assessing the degree of conformity that is observed, it is well at the outset to recognize the
commingled impact of the collective bargaining process in industry generally, as well as the influence of a unionwide policy. In 1954, for example, a 5 -cent-an-hour general wage increase was associated with manufacturing units generally, as well as with unionwide bargaining by the Steelworkers.
7. Conformity with the key bargain by nonsteel units, moreover, is more than merely a matter of union policy, desire, or insistence. Compatibility with the underlying economic conditions confronting a firm is central. The usually dif-ferential-and oftentimes contrasting-experience of the West Side and Indiana Harbor local units suggests the importance of relative labor market considerations. The latter units, located in proximity to basic steel production, cannot, generally speaking, get too far out of line with employment terms in basic steel without experiencing employee recruitment, motivation, and/or retention problems.
8. The factor of geographic location also influences the degree of conformity in an institutional sense not usually recognized. The international representative, the staff member assigned to each local union, usually has a prominent role in nonsteel negotiations. In a basic steel area, he is intimately involved with basic steel matters and the application of basic steel contracts, and consequently, he tends to have a basic steel perspective or outlook when he turns to the negotiation of nonsteel contracts. He tends to be more aware, more expectant, and more attached to the key bargain than his counterpart who is relatively remote from and less directly involved with basic steel relationships. This institutional factor serves to reinforce the labor market considerations making for conformity. On the other hand, the international representative in a nonbasic steel area, like the West Side, is accustomed to deviation. It's par for him. He starts his negotiations with the key bargain, but he has experienced departure in the past, and he views the terms of the key bargain less rigorously.
9. Size of employment unit, as well as geographic location, is an important variable in the process of conformity and deviation. The larger the collective bargaining unit, the greater the likelihood of adherence to the key bargain. Relative size, apparently, has dual significance in unionwide bargaining. It is regarded as a factor of strategic
import and as an indirect indicator of financial condition.
10. Interdistrict status of a collective bargaining unit-the most direct way of indicating relative bigness or strategic importance among nonsteel units-represents a related variable regarding conformity with the key bargain. Throughout the period under consideration-and over the range of provisions considered-the interdistrict units manifested a consistently high degree of relative conformity with the key bargain. Various union policy statements set out explicit distinction between interdistrict units, whose contracts are negotiated directly under the international's direction, and those negotiated on a purely local basis. In the case of the former, the Wage Policy Committee Statement of July 27, 1956, for example, declared it to be the union's policy to "arrange" for the application of the key bargain, whereas in the case of the latter units, the policy was expressed as "seek to apply."
11. The nature of the key bargain per se also affects the relative incidence of conformity and deviation. The smaller its value, the less complex its terms, and the shorter its period of applicability, the greater is the probability of conformity. The key bargain, apparently, is relatively more effective as a guide for general wage increases than for other economic provisions, such as pensions and SUB, or for nonmonetary contract terms, such as the union shop and local working conditions.
12. As the key bargain has grown more complex, it has become less suitable as an immediate basis for settlement and, instead, has become a guide for long-term goals. The process of unionwide bargaining apparently involves a time lag regarding the adoption of new and complex elements of the key bargain, and thereby provides a transition period for accommodation. This is illustrated by the pension experience, which now extends over a decade, and at least as long a lag seems indicated for SUB.

## Recommendations of Kaiser-USA Long-Range Committee

In October 1959, the United Steelworkers of America and Kaiser Steel Corp. concluded an agreement settling the 1959 dispute between them. As part of that agreement, the parties established a Long-Range Committee to develop a long-range plan for the equitable sharing of economic progress. This committee consisted of Dr. George W. Taylor, chairman, David L. Cole and Dr. John T. Dunlop as the public members and three representatives, respectively, from the union and the company.

This Long-Range Committee has worked cooperatively and has made progress toward the achievement of the objectives established for it in the Memorandum of Settlement. As a result of the discussions which have taken place in the meetings of this committee, the representatives of Kaiser Steel Corp. and the United Steelworkers of America desire that the services of this committee, in addition to its established purpose, be utilized on a continuing basis in promoting harmonious labor relations between the parties. ${ }^{1}$

The company and the union desire to settle problems as they arise and thus avoid accumulation of unsettled problems, which in the past too often have been resolved only under the pressure of contract termination deadlines. It is believed that the Long-Range Committee can be particularly helpful to the parties in avoiding reliance on deadline pressures by timely suggestions and recommendations. It is clearly understood that the Long-Range Committee will not handle specific grievances.

Experience in recent steel disputes demonstrates that constructive innovations are called for to assist the collective bargaining process in furthering the peaceful resolution of differences. Up to now, the suggested alternative to bilateral
collective bargaining has been governmental intervention. Action by government, however, poses numerous problems, including the danger of impairment or displacement of collective bargaining. Above all, since governmental action may be imposed rather than invited, it is often resented by one or both parties.

The solution, the parties believe, may be assistance to collective bargaining which is not imposed but agreed upon. Given the existence of experienced persons in whom the parties have confidence, such assistance can contribute to the success of collective bargaining while retaining, to the fullest, the freedom which both the United Steelworkers of America and the Kaiser Steel Corp. believe to be essential.

Accordingly, the parties desire to expand the originally declared purpose of the Long-Range Committee and to provide procedures, during the contract period, by which this committee may work with the parties in developing more effective collective bargaining. The parties believe they can thus strengthen the collective bargaining process, substantially increase the opportunities for peaceful settlement, and contribute to the welfare of the Kaiser Steel Corp., the United Steelworkers of America, and the public which depends upon steel.

The Long-Range Committee therefore recommends to the parties that they agree as follows:

1. The Long-Range Committee shall expand its activities so as to become a continuously functioning committee for the purpose of considering those subjects which may serve to promote permanent harmonious relations between the parties. In this connection, the committee may assist the parties in considering problems as they arise so as to minimize reliance on contract deadline pressures. The committee shall continue to meet on a regular basis at times agreeable to the members.
2. The parties will meet for the purpose of collective bargaining no later than 60 days prior to the expiration of their current labor contract and shall make every effort to reach a new agreement prior to the expiration of the current contract.

[^7]3. If necessary, the Long-Range Committee shall be convened no later than 30 days prior to the expiration of the current agreement and shall review the status of negotiations. Upon the basis of this review, the public members of the committee shall then be authorized to take any one or all of the following steps:
(a) Determine to take no action or to postpone action until there has been an opportunity for further bargaining;
(b) Attend the bargaining sessions as observers;
(c) Engage in mediation efforts, including private consultation with representatives of each of the parties;
(d) Issue a private report to the parties summarizing the positions of the parties, defining the
issues in dispute, and making recommendations to the parties; and, finally
(e) Issue a public report, either prior or subsequent to the contract termination date. The public members shall not release a public report until such time as the company and the union have had every reasonable opportunity to come to an agreement.
4. The foregoing procedure is not in any way intended to replace free and responsible collective bargaining between the parties. Both believe this to be fundamental to our American way of life. Therefore, neither the union nor the company agrees to be bound by the recommendations of suggestions of the public members. Their objective is to secure third party assistance of an informed nature and of their own selection.

# Special Labor Force Reports 

Editor's Note.-This is the second half of a two-part article in the series of reports on special labor force subjects formerly covered in Series P-50 of the Bureau of the Census Current Population Reports. The first part, which appeared in the January 1961 issue, discussed recent growth in white-collar employment in comparison with long-term trends and analyzed the structure of the white-collar work force. This part of the article examines personal characteristics, extent of employment, and education and income of white-collar workers.

Reprints combining the two parts of this article will be available upon request to the Bureau or to any of its regional offices (listed on the inside front cover of this issue).

# White-Collar Employment: II-Characteristics 

Carol Barry*

The great increase in white-collar employees during the past decade has focused particular interest on the composition of this segment of the work force. The economic significance of the growth of white-collar occupations can be more fully assessed by examining the characteristics of workers in these occupations. ${ }^{1}$ Expected increases during the 1960's in the proportions of younger workers, older workers, and women in the labor force make it desirable to examine what opportunities white-collar jobs currently provide for these groups. The present educational attainments of white-collar workers indicate, at least partially, the amount of schooling new workers will need in coming years, and the work experience of white-collar employees shows the degree to which these occupations may be a source of the part-time and temporary jobs which many of the additions to the labor force will be seeking.

## Personal Characteristics

Sex. Between April 1950 and April 1960, the number of women employed in nonfarm occupations increased by almost 31 percent to 21.2 million (table 1). The number of women in white-collar and service occupations increased by about 37
percent each, although more than twice as many women are employed in white-collar jobs as in service occupations. The number of women in blue-collar occupations increased by only about 6 percent.

Among white-collar occupations, large increases in the employment of women occurred in the professional and clerical groups. The growth of sales and managerial employment was considerably below that of total female employment.

The number of professional women rose by almost 49 percent between April 1950 and April 1960. While the detailed occupations in which this rise occurred cannot be precisely determined, it is likely that much of the increase was in elementary and secondary school teaching, which accounted for 45 percent of all professional women in April 1960, and in nursing and other medical and health occupations, wbich accounted for 27 percent.

The large majority of clerical jobs added during the 1950 's were filled by women. The number of women in clerical positions increased by 46 percent over the decade, and in April 1960, over half of women white-collar workers held clerical jobs.

For men, the increase in total nonfarm employment between April 1950 and April 1960 was much less, only about 13 percent, bringing total male nonfarm employment up to 39.8 million. Most

[^8]Table 1. Distribution of Persons Employed in Nonfarm Occupations, by Sex, April 1950 and 1960

| Occupational group | Employment level (in thousands) |  |  |  | Percent distribution |  |  |  | Percent change |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1950 |  | 1960 |  | 1950 |  | 1960 |  | 1950-60 |  |
|  | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| All occupations | 35,388 | 16,260 | 39,843 | 21, 229 | 100.0 | 100.0 | 100.0 | 100.0 | 12.6 | 30.6 |
| White-collar workers. | 13, 522 | 8,858 | 16,454 | 12, 130 | 38.2 | 54.5 | 41.3 | 57.1 | 21.7 | 36.9 |
| Professional, technical, and kindred workers...- |  | 1,920 | 4,694 | 2,856 | 7.3 | 11.5 | 11.8 | 13.5 | 60.4 | 48.8 |
| Managers, officials, and proprietors.----------- | 5,438 | 941 | 5,939 | 1,021 | 15.4 | 5.8 | 14.9 | 4.8 | 9.2 | 8.5 |
| Clerical and kindred workers......-. Sales workers...- | 2,786 <br> 2,371 | 4,481 1,516 | 3,127 2,694 | 6, 525 1,728 | 8. <br> 6.7 | 27.9 9.3 | 7.8 6.8 | 30.7 8.1 | 12.2 13.6 | 45.6 14.0 |
| Sales worke |  |  |  |  |  |  |  |  |  |  |
|  | 19, 108 | 3,464 | 20,483 | 3,676 | 54.0 | 21.3 | 51.4 | 17.3 | 7.2 | 6.1 |
| Craftsmen, foremen, and kindred workers...--- | 7,319 | 181 | 8, 366 | 226 | 20.7 | 1.1 | 21.0 | 1.1 | 14.3 | 24.9 |
| Operatives and kindred workers. | 8,715 | 3,215 | 8, 631 | 3,365 | 24.6 | 19.8 | 21.7 | 15.8 | -1.0 | 4.7 |
|  | 3, 074 | 68 | 3,486 | 85 | 8.7 | . 4 | 8.7 | . 4 | 13.4 | 25.0 |
|  | 2, 757 | 3,939 | 2,906 | 5, 423 | 7.8 | 24.2 | 7.3 | 25.6 | 5. 4 | 37.7 |
| Private household workers.-.-.---.-.-.--- Service workers, excluding private household | 152 2,605 | 1,771 $\mathbf{2 , 1 6 8}$ | 36 2,870 | 2,146 3,277 | 7.4 | 10.9 13.3 | 7. ${ }^{1}$ | 10.1 15.5 | -76.3 -10.2 | 21.2 51.2 |
| Service workers, excluding private housenold. | 2,605 | 2,168 | 2,810 | 3,27 |  |  | 7.2 | 15.5 | 10.2 | 51.2 |

Note: Because of rounding, sums of individual items may not equal totals.
of this growth occurred in white-collar occupations, which increased by almost 22 percent-in contrast with increases of slightly more than 7 percent in blue-collar and 5 percent in service occupations.

Increases in white-collar employment for men were heavily concentrated in professional and technical occupations, which rose slightly more than 60 percent over the decade. In fact, three out of every five additional male white-collar workers held professional jobs in April 1960. The increases in the clerical and sales groups were approximately the same as that of total nonfarm employment for men. The managerial group grew at a somewhat lower rate, 9 percent. The rapid increase in the professional group reflects in part the greater numbers of scientists, technicians, and engineers-occupations where men predominate.

Age. In all age groups, without exception, whitecollar jobs make up a greater proportion of total employment for men and women than during the 1950 's. ${ }^{2}$ At the same time, the ratio of bluecollar occupations to all jobs declined markedly in all age-sex groups. While service worker employment increased as a proportion of total nonfarm employment, among men over 45 the proportion remained virtually unchanged and among women over 45 it declined (table 2).

The greatest rate of growth in white-collar jobs for young people under 25 occurred in the professional, technical, and related occupations. Younger white-collar workers showed no significant increase in the manager-official-proprietor

SOURCE: See text footnote 1.
group, where experience and accumulated capital are important assets.

In the prime working age group (25-44), men and women had comparable rates of increase in white-collar and service occupations, but their employment decreased (men, 5 percent; women, almost 15 percent) in blue-collar jobs. The number of professional men in this group increased by about 56 percent, while the number of men in selling jobs did not increase significantly. Comparable increases for women in the same age group were 39 and 15 percent. With the exception of men and women in selling and women in managerial jobs, the number of men and women between 25 and 44 years grew at a substantially higher rate in each white-collar group than in total nonfarm employment.

Men and women over 45 registered large increases in professional jobs. In this age group, clerical and sales occupations also grew at a much faster rate than total nonfarm employment. In fact, the relative increase in the number of women 45 years of age and over in professional, clerical, and sales occupations was much greater than for men or women in any other age or occupation group.

Color. Although their numbers have been gradually increasing, nonwhite workers (approximately 95 percent of whom are Negroes)

[^9]remain underrepresented in white-collar occupations; they represent 3.7 percent of white-collar employment, but 10 percent of total nonagricultural employment. Nonwhite women have made larger proportionate gains than have nonwhitemen, but they are still more underrepresented.

Only one-fifth of employed nonwhite women are white-collar workers, though three-fifths of all employed white women are; these proportions are almost exactly reversed in service occupations (table 3).

Among men, only 16 percent of the nonwhite but almost 44 percent of the white workers employed in April 1960 were in white-collar jobs. Conversely, a much larger proportion of nonwhite workers held jobs as service workers or laborers. Within the white-collar group, half of all nonwhite workers, but two-thirds of all white workers, were employed in professional or managerial capacities.

During the past 10 years, the number of both nonwhite and white men increased more rapidly in white-collar occupations than in other jobs. Although the gain was relatively much greater among nonwhite workers, in 1960, they still represented less than 4 percent of all male white-collar
workers, compared with 9 percent of total male employment. Similarly, among women whitecollar workers, there has been a much larger proportionate increase among the nonwhites than the whites, particularly in clerical work. Nevertheless, nonwhite women in clerical and other white-collar jobs amounted to less than 5 percent of all women in such jobs in April 1960 although nonwhite women represented 13 percent of total female employment.

Traditionally, the disparity between white and nonwhite workers has been especially pronounced among men in managerial jobs and among women in sales work. In these categories of employment, there has been no appreciable change during the past decade.

## Extent of Employment

Auxiliary measures of labor force activitysuch as the extent of full-time and part-time work and of year-round and temporary jobs, and average hours of work-as well as labor force participation itself invariably reflect a considerably greater degree of economic activity by men than women. The variation of work experience among

Table 2. Distribution of Persons Employed in Nonfarm Occupations, by Age and Sex, April 1951 and 1960


[^10]SOURCE: See text footnote 1.
Note: Because of rounding, sums of individual items may not equal totals.
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Table 3. Distribution of Persons Employed in Nonfarm Occupations, by Color and Sex, April 1950 and 1960


Note: Because of rounding, sums of individual items may not equal totals.
white-collar, blue-collar, and service workers is due more to the different sex composition of the several groups than to the economic characteristics of these particular occupations. The same is to a large extent true of variations among white-collar occupations. In occupational groups where women represent a larger proportion of total employment, hours tend to be shorter, part-time work more common, and temporary jobs more frequent (table 4).

Regularity of Employment. In general, whitecollar workers appear to have greater regularity of employment than other groups. White-collar workers are more likely to hold year-round fulltime jobs and to work longer hours per week than are blue-collar or service workers. ${ }^{3}$ Part-time work is much less common in white-collar than in service occupations. Although part-time work occurs more often in white-collar than in bluecollar occupations, this is entirely due to work patterns among women. Moreover, there is strong evidence that much of the part-time work in white-collar jobs is voluntary, while many part-time blue-collar workers are unable to find full-time work because of economic reasons.

Managerial workers have a longer workweek, are more likely to be on the job the year round, and are much less likely to work part time than other white-collar groups. Of course, half of this group are proprietors, many of whom work evenings and weekends. Women in sales work, on the other hand, frequently work part time and have a com-

Source: See text footnote 1.
paratively short workweek. This largely reflects the concentration of women sales workers in retail trade, where store hours and seasonal business peaks permit more part-time and temporary work than in most other industries.

Since 1950, there has been a trend toward more part-time work in every occupational group, and it has been more pronounced among women than men. A fairly marked shift toward part-time work occurred among women in professional and clerical fields, where the proportions employed in such work were close to 20 percent in 1959. ${ }^{4}$ Among blue-collar and service workers, year-round full-time job holders in 1959 formed a slightly lower proportion of all workers than they had in 1950; but in the white-collar group, this was true only of clerical workers.

Unemployment. Despite the swings in business activity over the past 11 years, the unemployment rate among white-collar workers has shown remarkable stability. In periods of peak activity, white-collar workers have a lower unemployment rate than blue-collar or service workers. In recessions, unemployment rises less among whitecollar workers than in the other two groups.

In April 1953, heightened defense production brought unemployment to an 11-year low for the month among blue-collar and service workers, and

[^11]their respective unemployment rates were 3.3 percent and 3.5 percent (table 5). During the 1950's, the lowest unemployment rate for whitecollar workers occurred in 1952, when it was 1.1 percent. By comparison, in April 1960, 7.6 percent of all blue-collar workers, 5.1 percent of all service workers, and 2.5 percent of all whitecollar workers were unemployed.

Among white-collar occupations, the manager-official-proprietor group has the greatest immunity to unemployment. During the month of April over the past 11 years, its unemployment rate ranged from a low of 0.4 percent in 1952 to a high of 2.1 percent in 1958. In April 1960, only 1.2 percent of all such workers were unemployed. The inclusion of proprietors in this group is a factor in the low unemployment rate because a proprietor can become involuntarily unemployed only when his business fails. However, the unemployment rate for managers and officials is also quite low.

Professionals experience only a bit more unemployment than does the managerial group. Their highest unemployment rate for April was 2.2 percent in 1950; their lowest, 0.7 percent in 1952. In 1960 , only 1.5 percent of all profes-
sionals were unemployed. Such steady employment among professionals is due to the stability of the service-producing industries in which many of them work, the relatively large number who are self-employed, the nature of the work they do, and the great demand for such highly trained personnel.

In manufacturing, for example, many professional workers are engaged in operations that have little to do with current output. An obvious illustration is that of a scientist engaged in basic research: His project is not likely to be curtailed during a brief economic slump. Similarly, professionals engaged in product improvement or in the development of new processing techniques are contributing to future, not present, production and are consequently little affected by changes in the level of current production.

For clerical and sales workers, lowest rates of unemployment, 1.6 percent and 1.7 percent, occurred in April 1952. Unemployment among sales workers reached 4.1 percent in April of 1954, 1958, and 1959; it had receded to 3.4 percent by April 1960. Clerical unemployment reached 4.8 percent in April 1958 but was 3.6 percent by April 1960.

Table 4. Regularity of Employment in Nonfarm Occupations, Selected Dates

| Occupation group and sex | Percent of total with work experience working at yearround full-time jobs |  | Percent of total with work experience working primarily at part-time jobs |  | A verage hours of work |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1950 | 1959 | 1950 | 1959 | April $1960{ }^{1}$ |
| Both sexes | 57.1 | 55.3 | 13.3 | 17.0 | 39.5 |
| White-collar workers. | 64.2 | 62.3 | 12.2 |  |  |
| Professional, technical, and kindred worker | 60.3 | 62.0 | 12.2 9.4 | 11.8 | 40.8 39.5 |
| Managers, officials, and proprietors. | 81.1 | 81.3 | 5. 2 | 6.1 | 39.5 49.3 |
| Clerical and kindred workers.- Sales workers.-..-.-.----- | 63.4 | 57.3 | 10.1 | 15.7 | 37.2 |
| Blue-collar workers.---- | 46.7 56.1 | 47.4 54.9 | 29.5 | 31.9 | 37.7 |
| Service workers.---- | 39.0 | 54.9 35.1 | 8.7 31.4 | 11.3 37.8 | 39.4 35.1 |
| Male-- | 66.1 | 65.6 | 8.4 | 10.2 | 41.9 |
|  | 76.9 | 76.5 | 7.4 | 8.3 |  |
| Professional, technical, and kindred workers Managers, officials, and proprietors | 76.4 | 76.9 | 4. 9 | 6. 1 | 42.5 |
| Managers, officials, and proprietors | 84.7 | 85.3 | 3. 2 | 3. 5 | 50.1 |
| Sales workers.-.---.----..- | 73.9 64.4 | 70.5 64 | 7.1 19 | 8.7 | 39.4 |
| Blue-collar workers. | 64.4 60.0 | 64.7 58.6 | 19.9 7.8 | 21.2 10 | 40.6 |
| Service workers... | 61.2 | 57.4 | 16.8 | 10.3 19.4 |  |
| Female.- | 40.3 | 38.5 | 22.5 | 28.3 | 34.9 |
|  | 47.8 | 45.7 | 18.5 | 23.5 | 36.0 |
| Professional, technical, and kindred workers | 36.7 | 39.0 | 15.9 | 20.5 | 34.3 |
| Managers, officials, and proprietors.-. Clerical and kindred workers | 61.9 <br> 57.8 | 62.5 51.5 | 15.5 | 18.7 | 44.4 |
|  | 57.8 26.1 | 51.5 26.9 | 11.7 | 18.7 | 36. 2 |
| Blue-collar workers.- | 38.9 | 26.2 37.2 | 12.7 12.7 | 44.6 15.9 | 33.1 35.3 |
| Service workers..- | 26.1 | 24.7 | 39.8 | 46.4 | 32.2 |

When employment drops sharply in manufacturing, mining, construction, or transportation, clerical personnel are probably the first (and possibly the only) white-collar workers to be laid off. In general, they represent a larger proportion of total employment in these industries than do any of the other three white-collar groups, and to a large extent their duties are more closely tied to current production activity.

The relatively higher unemployment rates among clerical and sales workers also reflect the large number of young people and women in these occupations. Unemployment among adult women frequently is the result of looking for work after an absence from the labor force as well as of being laid off from work. Among young people still in school, this pattern of entering and withdrawing from the labor force is also quite common.

Examination of the frequency of long-term unemployment and the average duration of unemployment reveals fewer differences between whitecollar workers and others than might be anticipated. While there is some evidence that the average duration of unemployment tends to be shorter and that long-term unemployment is not as prevalent for white-collar workers, particularly in recovery periods, the differences are by no means as great as those in average unemployment rates. For one thing, unemployment among white-collar workers is so infrequent that those who do become unemployed are more likely to be marginal workers. For another, the specific training and experience of persons in some professional, managerial, and sales occupations are not as readily transferable to different occupations or industries as are the abilities needed in some less specialized occupations.

## Education and Income

Characteristic of white-collar workers is their generally high level of education. In 1959, the median levels of education for all white-collar groups exceeded 12 years (table 6). Of all the blue-collar and service occupations, only craftsmen-with a median of 11 years' schoolingapproached this mark. Laborers and domestic service workers had a median education of less than 1 year of high school.

Despite a high average level of education, the several groups of white-collar workers differ considerably in the proportions which have completed elementary school, high school, and college. In general, professionals are best educated (although in certain professions-artists, actors, athletes, etc.-formal education may not be essential); only about 6 percent had not completed high school, and over 55 percent had attended college 4 or more years.

Managerial workers show more range in educational attainment than any other white-collar group. While 21 percent in this category in 1959 did not have any high school education, 13 percent had completed at least 4 years of college. Here, again, there is evidence of divergent patterns for proprietors and other managerial workers. Although only about one-fourth of the men who were managers had less than a high school education, about one-half of those in business for themselves had not received a high school diploma.

Clerical workers have proportionately fewer of the less educated and more educated than other white-collar groups. Less than 8 percent of all clerical workers in 1959 had failed to complete the 8th grade, but only 5 percent had completed

Table 5. Unemployment Rates ${ }^{1}$ in Nonfarm Occupations in April, 1950-60

| Occupation group | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All occupations | 5.8 | 2.9 | 2.6 | 2.6 | 5.6 | 4.6 | 3.8 | 3.9 | 7.3 | 5.0 | 4.9 |
| White-collar workers | 2.8 | 1.6 | 1.1 | 1.5 | 2.5 | 1.9 | 1.6 | 1.7 | 3.2 | 2.4 | 2.5 |
|  | 2. 2 | 1.4 | . 7 | . 8 | 1.3 | 1.1 | 1.1 | . 8 | 1.6 | 1.3 | 1.5 |
| Managers, officials, and proprietors | 1.7 | . 7 | . 4 | 1.0 | 1. 5 | 1.3 | . 6 | 1. 0 | 2.1 | 1.4 | 1.2 |
| Clerical and kindred workers..- | 3. 5 | 1.9 | 1. 6 | 1. 7 | 3.2 | 2.6 | 2.2 | 2.4 | 4.8 | 3.3 | 3.6 3.4 |
| Sales workers.-.---.------------ | 4.0 | 2.9 | 1.7 | 2.9 | 4.1 | 2.2 | 2.8 |  | 4.1 | 4.1 | 3.4 |
| Blue-collar workers | 8.4 | 3.6 | 3.8 | 3.3 | 8.5 | 6.8 | 5.6 | 6.2 | 11.8 | 7.5 | 7.6 |
|  | 6. 9 | 2. 2 | 2.7 | 2.7 | 6.1 | 5.3 | 3. 3 | 3.9 | 7.8 | 5.4 | 5.4 |
| Operatives and kindred workers | 7.8 | 4. 2 | 3. 9 | 3. 1 | 9.0 | 6.4 | 6. 2 | 6.6 | 13.3 | 7.5 | 8.0 |
| Laborers | 14.3 | 4.8 | 5. 8 | 5.3 | 12.2 | 11.4 | 8.9 | 10.0 | 16.4 | 11.8 | 11.4 |
| Service workers. | 6.4 | 4.3 | 3.5 | 3.5 | 5.2 | 5.4 | 4.9 | 4.1 | 7.0 | 5.8 | 5.1 |
| Private household workers | 4.7 | 3. 5 | 3. 0 | 2.3 | 4. 0 | 3. 3 | 4. 6 | 3. 1 | 5. 4 | 4. 6 | 3. 7 |
| Service workers, excluding private household. | 7.1 | 4.6 | 3.6 | 3.9 | 5.6 | 6.2 | 5.0 | 4.5 | 7.6 | 6.2 | 5.6 |

Source: See text footnote 1.
college. The pattern among all clerical workers conceals striking differences for men and women.

Differing patterns of educational attainment for men and women are evident in all white-collar occupational groups, but they are clearer in clerical and sales occupations. In general, the educational attainment of women exceeds that of men up to and including graduation from high school. At that point, the pattern reverses: more men than women enter college, and more men than women complete their college education. In clerical jobs, for example, only 5 percent of the women had no high school education, while 80 percent had finished high school. In contrast, 13 percent of
the men had no high school education, and only 70 percent had completed high school. However, 9 percent of the men in clerical jobs had graduated from college, as compared with 3 percent of women.

The educational attainments of men and women in sales work do not conform to this general pattern. In 1959, 20 percent of the women in sales jobs had no high school training; only 13 percent of the men were in this category. About 72 percent of the men and about 55 percent of the women had graduated from high school. And while 15 percent of men with selling jobs had completed college, only 3 percent of the women

Table 6. Educational Attainment of Persons 18 Years Old and Over Employed in Nonfarm Occupations, by Sex, March 1959


[^12]Table 7. Median Income of Persons Employed in Nonfarm Occupations, 1950 and 1959

| Occupation group | Male |  |  | Female |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1950 | 1959 | Percent change | 1950 | 1959 | Percent change |
| White-collar workers: <br> Professional, technical, and kindred workers: |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Self-employed workers... | 6,188 | 10,941 | 76.8 | (1) ${ }^{2}$ | (1) | (1) |
| Managers, officials, and proprietors: |  |  |  |  |  | 58.9 |
| Self-employed workers | 3,263 | 5,299 | 62.4 | 1,129 | 2, 194 | 94.3 |
| Clerical and kindred workers. | 3, 103 | 4,904 | 58.0 | 2,074 | 3,061 | 47.6 |
|  | 3,137 | 4, 892 | 55.9 | 1,109 | 1,606 | 44.8 |
| Blue-collar workers: |  |  |  |  |  |  |
| Craftsmen, foremen, and kindred workers | 3,293 | 5,355 | 62.6 53.4 |  |  | (1) 420 |
|  | 2,790 1,909 | 4, 281 | 53.4 | (1) 1,661 | 2,358 | (12.0 |
| Service workers: |  |  |  |  |  |  |
| Private household workers. |  | ${ }^{(1)}$ |  | 427 | 643 | 50.6 |
| Service workers, excluding private household | 2,303 | 3,391 | 47.2 | 913 | 1,431 | 56.7 |

$$
{ }^{1} \text { Median not shown where base is less than } 200,000 \text {. }
$$

had done so. This pattern of divergence occurs because the overwhelming majority of women in sales occupations are employed in retail trade, whereas about half the men in sales occupations work in such jobs as selling insurance, real estate, and stock and bonds-which demand a higher level of education than does retail selling.

Since 1952, the general level of education for all white-collar groups has been steadily rising. Changes have been most noticeable at the extremes; the proportion of white-collar workers with no high school education has declined sharply, and the proportion who have 4 years of college education has risen. ${ }^{5}$

SOURCE: See text footnote 1.
While white-collar incomes are substantially higher than those of most blue-collar or service workers, there are great variations among whitecollar occupations and even greater variations between men and women in the same occupational group. In 1959, the median income for full-time year-round workers was highest among professional men ( $\$ 7,252$ ), with the male managerial group second $(\$ 6,663)$. The median income for men in both sales and clerical work ( $\$ 5,713$ and $\$ 5,259$ ) was substantially higher than for professional women $(\$ 4,420)$.

[^13] February 1960, pp. 113-122).

Table 8. Income Distribution of Persons Employed in Nonfarm Occupations, 1959

| Occupation group | Male |  |  |  |  | Female |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | $\begin{aligned} & \text { Under } \\ & \$ 2,500 \end{aligned}$ | $\begin{gathered} \$ 2,500 \\ \text { to } \\ \$ 4,999 \end{gathered}$ | $\begin{gathered} \$ 5,000 \\ \text { to } \\ \$ 9,999 \end{gathered}$ | $\begin{gathered} \$ 10,000 \\ \text { and } \\ \text { over } \end{gathered}$ | Total | $\begin{aligned} & \text { Under } \\ & \$ 2,500 \end{aligned}$ | $\begin{aligned} & \$ 2,500 \\ & \text { to } \\ & \$ 4,999 \end{aligned}$ | $\begin{gathered} \$ 5,000 \\ \text { to } \\ \$ 9,999 \end{gathered}$ | $\begin{gathered} \$ 10,000 \\ \text { and } \\ \text { over } \end{gathered}$ |
| All occupations. | 100.0 | 17.5 | 33.9 | 41.2 | 7.4 | 100.0 | 54.5 | 37.9 | 7.2 | 0.4 |
| White-collar workers | 100.0 | 12.9 | 25.6 | 45.6 | 15.9 | 100.0 | 40.7 | 47.2 | 11.4 | 0.7 |
| Professional, technical, and kindred workers | 100.0 | 9.2 | 19. 2 | 51.6 | 19.8 | 100.0 | 32.0 | 44.0 | 22.5 | 1.5 |
|  | 100.0 | 9.1 | 20.7 | 55.4 | 14.8 | 100.0 | 30.0 | 45.5 | 23.6 | 1.0 |
| Self-employed workers.-..-- | 100.0 | 10.5 | 9.9 | 25.4 | 54.2 |  |  |  |  |  |
| Managers, officials, and proprietors Salaried workers............ | 100.0 100.0 | 11.2 | 22.5 17.3 | 43.8 51.3 | 22.7 26.6 | 100.0 100.0 | 40.9 30.5 | 38.4 44.8 | 18.0 23.8 | 2.8 .9 |
| Self-employed workers | 100.0 | 18.0 | 28.1 | 35.7 | 18.5 | 100.0 | 54.6 | 29.9 | 10.5 | 5.2 |
| Clerical and kindred workers | 100.0 | 14.1 | 37.9 | 45.6 | 2.4 | 100.0 | 36.5 | 55.5 | 7.8 | . 2 |
| Sales workers....-. | 100.0 | 22.1 | 29.4 | 38.9 | 9.6 | 100.0 | 76.1 | 22.1 | 1.7 | . 2 |
| Blue-collar workers | 100.0 | 18.8 | 39. 6 | 40.4 | 1.2 | 100.0 | 55.5 | 41.3 | 3.0 | . 2 |
| Craftsmen, foremen, and kindred workers Operatives and kindred workers....-.- | 100.0 100.0 | 9.9 19.8 | 32.7 44.9 | 54.9 35.0 | 2.5 .4 | ${ }^{1} 100.0$ | 55.5 | 42.1 | 2.5 | ${ }^{(2)}$ |
| Laborers..---- | 100.0 | 40.0 | 43.2 | 16.6 | . 2 | (1) |  |  |  |  |
| Service workers. | 100.0 | 34.9 | 42.2 | 22.2 | . 8 | 100.0 | 84.4 | 14.7 | . 9 | ${ }^{(2)}$ |
|  | ${ }^{1}{ }^{1} 0$ |  |  |  |  | 100.0 | 96.2 | 3.7 | ${ }^{(2)}$ | ${ }^{2}$ |
| Service workers, excluding private household.- | 100.0 | 34.2 | 42.5 | 22.4 | . 8 | 100.0 | 76.9 | 21.6 | 1.4 | ${ }^{(2)}$ |

[^14]Much of the difference in median income for men and women who are year-round full-time workers results from the fact that, in any broad occupational group, women are more likely to be employed in the lower paying jobs. Among professionals, for example, a large proportion of women are teachers or nurses, whereas many of the men are doctors, dentists, lawyers, engineers, etc.

By and large, professional men and men in managerial positions not only have higher median incomes than clerical and sales workers, they are also much more likely to be in the highest income brackets. There are, however, sharp income distinctions between salaried persons and the selfemployed in both professional and managerial groups. While professional men in practice for themselves do considerably better than salaried persons, the reverse is true in managerial occupations. The median income for all self-employed professional men (including part-year and parttime) in 1959 was $\$ 10,941$, but only 15 percent of the salaried professionals had incomes of $\$ 10,000$ and over. (See tables 7 and 8.) The median annual income for male managers and officials was $\$ 7,080$; for proprietors, $\$ 5,299$.

The income distribution of male sales workers reflects quite clearly their diversified occupations. While the median income in 1959 was $\$ 4,892,22$ percent had annual incomes of less than $\$ 2,500$, a larger proportion than in any other white-collar group. Although these figures reflect primarily the numbers employed in retail trade and other low-paying sales jobs, they also point up the number of men who work part time in sales jobs.

The high-income persons holding white-collar jobs tend to be self-employed professionals-such as doctors, lawyers, and dentists. Low-income
persons, for the most part, are sales persons or proprietors. Yet despite the wide variation among occupation groups and between men and women, white-collar workers are usually much better paid than blue-collar or service workers.

The trends in income by occupation over the past 10 years do not indicate that the differences in income of white-collar and blue-collar workers have been diminishing. In fact, in terms of absolute dollars there is some evidence that the differences in median incomes have actually increased during this period.

During the 1950's, white-collar jobs increased for men and women of all ages and for nonwhite as well as white workers. Increases among men were especially pronounced in professional and technical occupations; among older women, in professional, clerical, and sales occupations; and among nonwhite workers, in professional and clerical occupations. The number of women working part time in white-collar occupations increased substantially during the 1950 's, particularly in professional and clerical jobs. The expected growth in white-collar employment during the 1960's will undoubtedly continue to provide job opportunities for these groups, but as young workers begin to enter the labor market in large numbers, they may be preferred for many of the clerical and sales jobs. The increasing educational requirements for the professions may postpone the entrance of young people into professional work until completion of extended periods of preparation, thus enhancing the need for mature professionals in all fields, including teaching.

## Summaries of Studies and Reports

## ILO Report on U.S. Trade Unions

## I-The Law and Its Operation

Editor's Note.-The following article was excerpted, with minor editorial changes, from The Trade Union Situation in the U.S., a report of a mission from the International Labor Office. In this report, the emphasis has been placed on the right of the workers to form trade unions and the right of the unions to exist and function. Further excerpts, as well as excerpts of the ILO mission report, The Trade Union Situation in the U.S.S.R., will be published in the next issue.

From the middle of March until June 1959, the mission was in the United States to carry out a factual survey relating to freedom of association as defined in the Freedom of Association and Protection of the Right to Organize Convention, 1948 (No. 87). Members of the mission visited 22 cities in 13 States and the District of Columbia. Some of the persons interviewed had jurisdiction over wide areas; for instance, the regional director of the Federal Mediation and Conciliation Service in San Francisco was able to speak with authority not simply of California but of the 11 Western States as well as of Alaska and Hawaii. The report notes that "all the visits and interviews mentioned above were undertaken on the mission's own initiative. The United States Government left the mission entirely free to go wherever it wanted and to talk to anyone it pleased. The mission was not accompanied on its journeys by any representative of the Government, of the trade unions, or of the employers."

The trade union movement in the United States is a strong force, participating in the economic, social, and political life of the community. With few exceptions, trade union rights are secure and
freedom of association is a reality. But in a democracy, uniformity of public opinion is not to be expected and the pendulum of public opinion swings in regard to the trade unions as in regard to other matters. Although legislation has been passed in recent years which the trade unions have resented, it is possible to discern an increasing acceptance of the labor movement as an integral part of the national society. This is true not only in formal relations between the trade unions, the Government, and the legislature but also in the mind of the public, of which trade union members and their families are, of course, a part. Whatever criticisms there may be of so-called "excesses" on the part of the unions, there does not seem to be any profound hostility among the general public to unions as such. This certainly constitutes a change in opinion in the present century, perhaps even in the present generation. In other words, there does not appear to be a climate of opinion in which any fundamental attack on the principle of freedom of association is to be expected. On the contrary, the very existence of the strong trade union movement in the United States is one of the guarantees that freedom of association will continue to be respected in the future.

## Public Opinion Toward Unions

In those communities in which organized labor is strong and has been strong for many years there is, of course, a greater degree of public acceptance of the unions than in those areas where unions are weak. For example, in New York and Milwaukee, which the mission visited, the unions are a major factor in the life of the city and are accepted and respected for the part they play, while in Dallas, which the mission also visited, trade union organization is weaker and public opinion generally is hostile to it.
In some cases where a single industry predominates, individual unions, such as the United Mine Workers in the coal-mining towns of Pennsylvania
and West Virginia, the United Steelworkers in Pittsburgh, or the United Automobile Workers in Detroit, have become an integral part of the community. Elsewhere, the fact that a very high proportion of workers in all industries are organized may lead to public recognition and acceptance of trade unions. This is the case in Milwaukee, as mentioned, in San Francisco, and in Chicago, to name examples among places visited by the mission. On the other hand, throughout a very wide area of the country (the Southeastern States and Texas), the idea of labor organization has not yet taken firm root.

At any period, the Government's attitude toward the unions, as expressed in the statements and actions of the legislative, judicial, and executive branches, is likely to be a reflection of the state of public opinion. The personal views of the State governors and the political composition of the State legislatures at a given time may also have an important bearing on the official attitude toward the unions in the various States.

## The Law and Its Operation

Numerous legislative provisions exist in the United States concerning not only the principle of freedom of association and the protection of its exercise in practice, but also a wide range of trade union activities. Alongside provisions relating to the right of workers to organize and to select representatives of their own choosing are provisions which affect trade union activity in regard to collective bargaining, strikes, boycotts, and the settlement of industrial disputes.

Generally speaking, there is no legal provision or practice under which a trade union or employers' organization can be required to obtain previous authorization before it may come into existence or function on behalf of its members. Nor are these organizations subject to dissolution or suspension by administrative authority. Their freedom to establish and join federations and confederations or international organizations is never in question. Moreover, the workers' and employers' organizations have the right to draw up their constitutions and rules, to elect their representatives in full freedom, to organize their administration and activities, and to formulate their programs without interference by the public authorities; these activities are subject, of course, to the under-580795-61-4
standing that workers and employers and their respective organizations, like others, must observe the law of the land. There are laws which in some respects affect the conduct of labor-management activities, and consequently there may be some doubt as to whether certain of the regulations or practices may restrict absolute freedom of association.

These laws do not detract from nor replace the preponderant practice of voluntary labor-management relations. Nevertheless, the existence of this legislation and jurisprudence has far-reaching consequences for trade union action. In many circumstances the correct legal procedures have to be known and followed. Under the terms of the existing legislation, trade unions are also frequently engaged in filing or replying to charges, preparing briefs, giving testimony in hearings of various kinds, and presenting their cases in court. For these purposes and for the interpretation and application of legislative provisions, collective agreements, National Labor Relations Board orders, and decisions of the courts, the unions are constantly obliged to seek legal opinion. The employers, too, continually use the services of legal advisers in their relations with the unions, both during negotiations and for the daily application of collective agreements. Indeed, one of the characteristics of the American system of industrial relations is its tendency to be legalistic. For all these reasons, the unions in the United States are obliged to expend much time, effort, and money in conforming with legal procedures and participating in litigation. A great deal of this activity has a direct bearing on freedom of association.

## National Labor Relations Act

Section 7 of the National Labor Relations Act reaffirms the workers' right to form and join trade unions, to bargain collectively through representatives of their own choosing, and to engage in other concerted activities for the purpose of collective bargaining or mutual aid and protection. Further, the Taft-Hartley Act provides that workers likewise have the right to refrain from these activities to the extent allowed by a collective agreement which includes a union security clause authorized by the act. The curtailment of this right by collective agreement is only partial because, as will be seen later, the closed shop is
prohibited by law and the States are empowered to declare any other union security clause to be illegal.

The categories excluded from the act comprise farm workers, domestic servants, any persons employed by their parents or spouses, and all workers covered by the Railway Labor Act. Nor is the act applicable to independent contractors and supervisors. The employers excluded from the act are the Federal and State Governments (or any of their political subdivisions), the Federal Reserve Banks, publicly owned undertakings, and hospitals operated as nonprofitmaking establishments. These last three types of employers were not mentioned in the Wagner Act.

Persons excluded from the act who are not otherwise covered by Federal statutes dealing with labor relations come under State legislation, which must conform with the Constitution.

The exercise of the trade union rights specified in section 7 of the act is covered by the constitutional guarantees of freedom of speech, the press, and assembly. These safeguards do not apply, however, to "subversive activities." There are two acts designed to suppress Communist activities, and in some respects, they affect the operations of trade unions. These enactments are the Subversive Activities Control Act, 1950, and the Communist Control Act, 1954. According to the regulations now in force, it is forbidden for a member of a Communist organization to hold any post or office in a trade union. Similarly, any trade union proved to belong to one of the categories of Communist organizations specified by the act forfeits its right to all the benefits granted under the Taft-Hartley Act.

These provisions clearly are related to the right to organize. However, the Department of Justice has initiated proceedings against only two trade unions under the 1950 and 1954 acts, and despite a delay of many years, the proceedings have not yet been concluded. On the other hand, the mission was also informed that in spite of these laws certain leaders of trade unions, one of them quite large and powerful, were believed to have pro-Communist leanings.

The free election of trade union officials is affected by the Landrum-Griffin Act, which forbids any members of the Communist Party or any persons who have been convicted of certain offenses to take office in a trade union for a period of
several years unless they are granted an exemption from the prohibition by the Federal Parole Board or unless their citizenship rights are restored.

There remains the question of the right of the individual to join a trade union. Section 8(b)(1) of the Taft-Hartley Act entitles a trade union to make its own rules about the admission of members and the retention of membership.

When considering the problem of the right of a union to refuse membership to certain groups of persons, it must be remembered that under U.S. legislation, a union wields exclusive powers of the utmost importance at the plant level and exercises functions assigned to it by law. If a minority of workers in any plant are denied the right to belong to the union which has exclusive powers in the plant, they are deprived at the same time of any participation in the organization which represents them. The position would be different if there were a system of proportional representation whereby minorities could take part in the functions assigned to unions. But there is no provision for minorities in the existing bargaining system.

The Majority System. One of the features of the U.S. trade union structure is the statutory granting of certain fundamental privileges to the organization which represents the majority of the workers in a given bargaining unit.

The determination of the sole representative or bargaining agent and also of the bargaining unit is clearly of the utmost importance in view of the wide powers wielded by the organization selected. Not only does the majority union negotiate the collective agreement on behalf of all the workers, but it also serves as a channel for any individual complaints the workers or employees may wish to submit through the grievance or arbitration machinery set up under the agreement. The union decides whether an individual grievance warrants submission to an arbitrator, and the worker has no power to insist that action should be taken along these lines. The worker can appeal directly to his employer, but even so any settlement must not be inconsistent with the agreement, and the trade union representative must be given an opportunity of being present when the settlement is reached. For its part, the bargaining agent is required to represent fairly all the workers in the
unit concerned and must not discriminate between union members and nonmembers. ${ }^{1}$ The same applies to any welfare schemes organized by the union with the financial assistance of the employer; these schemes must benefit all the workers covered by the collective agreement, even if they are not members of the union.

The Wagner Act had stipulated that it was for the Board to decide whether the employer unit, the craft unit, the plant unit, or a subdivision of any of these was the most appropriate for collective bargaining purposes. Generally speaking, the Board in its decisions takes into account the unit that has evolved in collective bargaining over the years. The Taft-Hartley Act imposed certain restrictions on the Board; professional workers could not form a unit together with other workers unless the professional workers themselves decided to do so; the Board could not refuse to allow the establishment of a craft unit on the ground that it had previously established a different unit for the same workers unless a majority of the employees in the proposed craft unit voted against separate representation (in other words, craft units would be given preference if they wished to split off from a bigger unit); persons employed as guards in an establishment could not belong to the same unit as the other workers.

The Taft-Hartley Act also stipulates that the number of workers organized by a union in a particular plant would not be a controlling factor in determining the bargaining unit. It has been alleged that the act thereby departed from the Board's previous practice and that this change implied that if a union asked for elections to be held among an organized group of workers in order to appoint the bargaining agent, the Board could reject the petition on the ground that the group did not constitute an appropriate unit. The mission heard complaints about this innovation in the Taft-Hartley Act, which it was stated hampered in certain cases the unions' attempts to organize the workers-for example, employees of an employer operating a number of plants.

[^15]The Board can intervene to decide whether a union is no longer sufficiently representative to act as an exclusive bargaining agent on the workers' behalf. No new election may be held within 12 months of any valid election. If a contract already exists, it must be allowed to expire before application is made for the decertification of the union, provided that the contract is not for more than 2 years. ${ }^{2}$

As the mission was told many times, the clauses of the Taft-Hartley Act dealing with the determination of the majority union have involved insuperable difficulties in the building industry. The Landrum-Griffin Act now authorizes collective agreements between an employer in the building industry and a union whose members belong to the same trade, even if the majority character of the organization has not previously been established.

Unfair Labor Practices by Employers. As a general principle, the act states that it is an unfair practice for an employer "to interfere with, restrain, or coerce employees in the exercise of the rights guaranteed in section $7 .{ }^{\prime \prime}{ }^{3}$ The principle embodied in this provision is repeated in the four following subsections which deal with special instances of abusive practices: domination or interference with the formation or administration of a trade union or the contribution of financial or other support; discrimination in regard to hire or tenure of employment or any term or condition of employment in order to encourage or discourage membership in any labor organization (except with respect to union security clauses); discharge of, or any other form of discrimination against, an employee for having filed charges or given testimony under the act; refusal to bargain collectively with the representatives of the employees subject to the provisions concerning bargaining agents.

In 1935, it was found that company unions still covered a fifth of the workers in the country and that over half of them discharged none of the functions involved in collective bargaining. The Wagner Act outlawed employer-dominated unions, and as a result, a high proportion of them had to disappear. Nevertheless, cases involving this form of unfair practice still come before the Board every year. The Board's decision depends on whether there has been domination by the
employer or interference. In the former case, the Board orders the dissolution of the union, and in the latter, it requires the employer to cease any relations with the organization concerned until the latter has proved that it is entitled to be the sole representative in an election supervised by the Board.

The Landrum-Griffin Act requires employers to inform the Secretary of Labor of any payment to a labor organization or officer or agent of a labor organization with the aim of influencing, interfering with, or curtailing their employees' right to organize.

The Taft-Hartley Act introduced a clause applicable to both employers and unions under the terms of which a statement of opinions and their dissemination in any form would not constitute or be evidence of an unfair labor practice if they contained no threat of reprisal or force or promise of benefit. This is known as the "free speech section" and combined with the ample case law built up by the Board on this basis, it has been criticized by trade unionists and lawyers. Its harmful effects on the unions' attempts to organize the workers were specifically mentioned to the mission. Under this section, it was not an unfair practice, for example, for the employer to state that if the union won the elections, he would be forced to transfer the plant. ${ }^{4}$
In many such cases, the Board decided that there had been no threat but merely a "prediction of prophecy." But in other cases, the Board found that activities of this character constituted unfair labor practices. The cases concerned involved such occurrences as open or veiled threats of reprisals; promises of economic benefits; or concessions intended to forestall employee participation in, or prevent the success of, organizational activities; and the promotion or repudiation of petitions.

The exercise of freedom of speech is also bound up with another question which was mentioned to the mission, namely that of "captive audiences." The fact that an employer had forced his employees to listen to his attacks on the union in the plant during working hours was considered by the Board to be an unfair labor practice under the Wagner Act. Some judges, however, rejected this interpretation, basing their decision on the safeguards embodied in the first amendment to the

Constitution. Once the new section had been introduced by the Taft-Hartley Act, the Board allowed captive audiences on condition that the employer granted similar facilities to the union. This decision was reversed by a Federal court of appeals, and accordingly, the Board subsequently decided that there was no unfair labor practice involved in the exercise of freedom of speech by an employer even if he denied a similar right to his employees within the plant. However, speeches of this character within the 24 -hour period prior to an election may constitute interference with the election processes warranting setting aside the elections.

The intimidating effect on the workers and their union activities, which follows from an abuse of "freedom of speech," particularly in thinly industrialized areas without much tradition of trade unionism, or in industries which are in difficulties, is obvious and does not call for further comment.

Unfair Labor Practices by Unions. Under the Taft-Hartley Act, it became an unfair practice for a labor organization to restrict the exercise of the employees' rights of association listed in section 7 or to bring coercion to bear on employees for the same reason. ${ }^{5}$

In accordance with this clause, the Board has, for example, forbidden coercive action by union pickets against the supervisors in a plant where a strike was in progress, on the ground that it deterred workers from abandoning the strike. It has also ruled against a union which refused to back certain workers when they submitted their personal grievances because they supported a rival union, and against another union which negotiated a union shop agreement with an employer before the workers were hired. The more typical cases involve such unlawful strike activities as assaults, threats of physical violence, mass picketing, or threatening employees who seek protection of the provisions of the law covering unfair labor practices.
The Taft-Hartley Act makes it an unfair labor practice to compel an employer to recognize or bargain with a union when there exists another union which has been certified by the Board as the workers' sole representative. The Landrum-

[^16]Griffin Act added some detailed provisions which seriously restrict organization and recognition picketing; the implications of these provisions have been criticized by the unions.

The act also prohibits certain practices which are generally known as "secondary boycotts." The act sets out to prevent the indirect coercion that a union may be able to exercise on an employer with whom it is in direct conflict, through the employees of another employer. These clauses proved complicated to operate because of the difficulty of distinguishing between a primary and a secondary boycott. The Landrum-Griffin Act supplements the Taft-Hartley Act in order to curtail still further the possibility of enforcing secondary boycotts. In addition, it forbids henceforth the conclusion of agreements which contain hot-cargo clauses.

Union Security Clauses. The provisions of the act on union security clauses agreed on between employers and unions rule out the closed shop, which denies a job to any worker who is not a member of the union. In practice, however, the mission was informed a number of times that the closed shop is still quite common, sometimes in the form of a tacit agreement between the employer and the union and sometimes in the form of a clause openly included in the collective agreement.
Section 14(b) of the Taft-Hartley Act allows union security agreements to be forbidden outright by individual States. In other words, the Federal Government authorizes the States to forbid within their own borders practices which are considered legitimate under national law (union shop, maintenance of membership, agency shop). At the time of the mission's visit, 19 States bad availed themselves of this power by passing laws making it illegal to require a worker to be a member of a union in order to hold a job.
As regards the effect that right-to-work laws have had on the organizing of workers, the unions contend that in some circumstances they hamper their expansion and in any event weaken the trade union movement. Professor Frederic M. Meyers, who has made a survey of the practical effect of this type of legislation in Texas, came to the conclusion that its impact on the rate of growth of the trade unions has been negligible. In Texas, the
mission met a lawyer specializing in labor law who took the opposite view.

An evaluation of these laws depends on a series of practical circumstances which affect their operation, for example, the degree of trade union tradition and education in the area concerned, the employers' attitude towards trade unions, and so forth. The denial to an organization of the right to negotiate a union shop clause, and the insistence on the right of the individual not to join the organization in the event of the existence of certain circumstances which are unfavorable to the organization, such as lack of trade union spirit among the workers or of sympathy for the union among the employers, can unquestionably affect the growth of the trade union movement.

The Right To Strike. The effect of the legislation on unfair labor practices on the right to strike is a matter of considerable importance. The TaftHartley Act states that none of its clauses may be construed in such a way as to interfere with or impede or diminish the right to strike except as specifically provided for in the act.

One provision makes it an unfair practice to engage in any strike covered by section 8(b)(4) relating to secondary boycotts, recognition of an uncertified union, and jurisdictional disputes. The act also forbids any strike which aims at infringing any of the trade union rights of the individual as defined in section 7; the imposition of a union security clause prohibited by law or the breach of the safeguards afforded by the act to workers in the event of the existence of a union shop; and infringement of a collective agreement. In the case of strikes which may imperil the national bealth or safety, the act lays down a special procedure granting wide powers to the President of the United States.

In American practice, the system of picketing is an integral part of any strike. Except in cases where pickets use violence, the system is protected by the constitutional principle of freedom of speech. However, while the Supreme Court has considered some cases, no definitive rules are laid down as to the extent of such protection.

Most of the criticisms made to the mission concerned the procedure which makes it possible to interrupt a strike by court order (although only for 5 days), simply on a petition from an employer
in due legal form without the union concerned being given a chance to state its case.

In assessing the consequences of a strike for the individual workers themselves, a distinction must be made according to whether it is due to economic reasons, an unfair practice on the part of the employer, or an unfair practice on the part of the union. In the first case, the employer can fill a striker's job permanently, and only when he does so is the worker considered to have forfeited his status as an employee. On the other hand, if the replacement is not permanent, be retains his right to the job and can apply for reinstatement. If the strike has taken place because of an unfair practice on the part of the employer, the latter is required to reinstate the worker ${ }^{6}$ even if this involves discharging his replacement. Finally, if the strike is due to an unfair practice on the part of the union, the employer has the power to discharge any worker taking part. The same applies to unprotected (but not illegal) and illegal strikes.

## Situation of Certain Occupations

State and Local Jurisdiction. As was pointed out by the United States Supreme Court in the case of Garner v. Teamsters Union, ${ }^{7}$ the Taft-Hartley Act left much legislative power in the hands of the States although Congress had "refrained to tell us how much."
A few salient examples are given below which show how the local authorities can intervene, often with a restrictive purpose-leaving aside the right-to-work laws. Both trade union officials and students of union affairs told the mission that these restrictions usually occur locally in the less industrialized States.

As regards freedom to form trade unions, there are State laws and municipal ordinances which require union organizers to register and, in some cases, to pay a substantial sum for each new member they recruit. In one instance, the permission of the county board of managers was even required before a union organizer could operate. These regulations have been declared unconstitutional by the U.S. Supreme Court but they continue to be made.

Some States have passed laws which require the unions to register and to publish details of their finances. In one instance, a permit from the State authorities was necessary before a union
could operate, but the Supreme Court of Colorado ruled that this was unconstitutional. ${ }^{8}$ No observations were made to the mission about this feature of State legislation, which does not appear to hamper the unions.

The attitude of the States toward picketing and strikes is important. It is in these cases that the theory of Federal preemption has most frequently been applied. Picketing was originally authorized with little restriction as a result of Thornhill v. Alabama. Subsequently, however, its scope has been curtailed as part of the official policy pursued by the different States toward trade unionism and freedom to work. Since the Garner case, it has been established that the States can restrict picketing in the event of a dispute affecting intrastate commerce, provided it violates the State's declared policy. On the other hand, restrictions on picketing may not take the form of a general ban on the practice. In the case of disputes affecting interstate commerce, only the Taft-Hartley Act applies, and the Board has jurisdiction except when acts of violence occur or there is a threat to law and orderin which cases the State naturally retains its jurisdiction. Violence, of course, can easily occur during picketing, and when this happens the State has ample power to intervene.

Another factor to be borne in mind is the effect of court verdicts intended to hamper a strike even if they are later quashed by a higher court. Thus, for example, the mission was told that restraining orders had been granted against strikes and pickets even when it was known that the orders would subsequently be rescinded. By this means, the unions had been forced to participate in legal proceedings with a resulting loss of time and failure of the strike. The mission was unable to evaluate this practice, however.

Railway and Civil Aviation Personnel. Since 1926, railway personnel have been covered by a special enactment-the Railway Labor Actwhich in 1936 was extended to include commercial airlines. In 1934, the act was amended so as to safeguard more effectively the workers' right to

[^17]organize without coercion, influence, or intimidation by the employers. In addition, machinery was set up to deal with disputes concerning trade union representation; the National Mediation Board forms part of this machinery. The National Railroad Adjustment Board, a body composed of an equal number of representatives of labor and management selected by the respective parties, was also established to settle disputes arising out of the interpretation and operation of agreements.

Agricultural Workers. Agricultural workers are expressly excluded from the Taft-Hartley Act. It follows that trade unionism among this class of worker is only protected by the standards of the Constitution itself, which of course makes no exceptions in this respect, and by State laws on labor organizations, which in some cases also include agricultural workers. Although this protection might appear to be evident and beyond question, it is not accepted by large sections of the population or even by many who are more closely acquainted with the situation. It was suggested to the mission that the fact that farm workers are excluded from the bulk of social legislation has been interpreted by many people as meaning that the official policy of the United States and of the State Governments is to deny them any right of association at all. This, however, is an extreme position which it would be difficult to justify.

The absence of any law effectively protecting the right of agricultural workers seems to be one of the reasons why they are virtually unorganized. Although in principle they have a constitutional right to associate, the unfavorable, not to say hostile, atmosphere in which they have to operate makes most of their efforts to do so completely futile. State laws on unions seem to offer little practical protection to these workers.

Public Employees and Workers in Publicly Owned Establishments. Public employees and workers in publicly owned establishments are excluded from the Taft-Hartley Act and are subject to separate legal regulation depending on whether they are employed by the Federal Government or by State, county, or municipal authorities. The Lloyd-La Follette Act of 1912 specifically guaranteed postal workers the right to organize, and this has since been interpreted as covering all employees of the Federal Government. The Taft-Hartley Act
denies the right to strike to these employees and to workers in publicly owned undertakings under penalty of dismissal and forfeiture of the right to reinstatement for a period of 3 years. The workers' unions usually renounce this right in their rules. A law was passed in 1955 (Public Law 550) repealing this provision of the TaftHartley Act and establishing that salaried employees and wage earners directly employed by the Government or in one of its undertakings are required to sign a sworn statement renouncing the right to strike.

Though the right of Federal employees to form trade unions is not questioned, their unions are now trying to win recognition as the representatives of the employees in any given administrative unit and as advisory bodies on wages and conditions of work. In practice, this recognition has already been largely achieved, but the unions would like it to be guaranteed by law. They also advocate the establishment of legal machinery for dealing with individual grievances with arbitration as the final stage of the process. At the present time, each branch of the administration has its own method of dealing with disputes of this kind.

Only in a few cases have Federal agencies signed collective agreements with the unions representing their employees, e.g., the Tennessee Valley Authority, the Alaska Railroad, the Inland Waterways Corporation, and the Bonneville Power Administration.

The right to form trade unions, which has been legally recognized for Federal employees, is a source of legal controversy in the case of other public employees. The majority of local governments are silent on the rights of their employees. Although in many cases there is bitter opposition toward trade unions, the tendency is toward the recognition of the right to organize and to bargain collectively. This recognition takes many forms. In some well-known cases, such as the cities of New York and Philadelphia, for example, municipal employees are officially granted the right to form unions and to bargain collectively. In others, however, although the former of these rights is granted, they are not allowed to negotiate collective agreements.

The legal argument put forward by local administrative authorities in refusing to sign an agreement is that they have no power to bind their
respective governments contractually unless specifically authorized to do so by law. Accordingly, many of the so-called agreements are no more than unilateral declarations by the administration recognizing the union, fixing wages and conditions of work, and sometimes even including a union shop clause. On the other hand, there is a growing tendency to conclude collective agreements as is done in private industry (a system advocated by the American Federation of State, County and Municipal Employees).

In 1956, there were 120 of these collective agreements and 210 unilateral declarations in force; by the time of the mission's visit, the number of collective agreements had risen to 202 while the number of unilateral statements had fallen to 90 .

In 120 of these agreements, the union was recognized as the sole representative of all the employees in the unit.

Of the questions which immediately arise in considering freedom of association in any country, the state of the law is, of course, one of the most important. The mission therefore began by directing its inquiries toward this point. But it quickly became apparent that any survey of freedom of association in the United States must also deal extensively with labor-management relations and the employers' attitude toward the trade unions, for in a country as firmly attached as the United States to free private enterprise, whatever affects the unions also affects the employers, and vice versa.

## Wages in Pressed or Blown Glass and Glassware Industries, May 1960

Earnings of production and related workers in the pressed or blown glass and glassware industries in May 1960 averaged $\$ 2.11$ an hour, exclusive of premium pay for overtime and for work on holidays, weekends, and late shifts, according to a survey conducted by the Bureau of Labor Statistics. ${ }^{1}$ Men, comprising two-thirds of the 75,372 production workers within the scope of the study, averaged $\$ 2.26$ an hour, compared with $\$ 1.83$ for women. Regionally, ${ }^{2}$ average hourly earnings ranged from $\$ 1.90$ in the Southeast region to $\$ 2.44$ in the Pacific region. Slightly more than two-thirds of the production workers studied were employed in the Middle Atlantic and Great Lakes regions combined, with averages of $\$ 2.08$ and $\$ 2.12$, respectively.

Data were reported separately for the two major industries within the scope of the survey. Production workers in the glass containers industry averaged $\$ 2.11$ an hour, compared with $\$ 2.12$ for workers in plants producing other pressed or blown glass and glassware. In both industries, earnings of individual workers were distributed over a wide
range, with the middle half of the workers in the glass containers industry earning between $\$ 1.76$ and $\$ 2.40$ an hour and those in the pressed or blown glassware (except containers) industry earning between $\$ 1.84$ and $\$ 2.34$ an hour. A few workers in each of the industries were paid less

[^18]than $\$ 1$ an hour, and only 2 percent in glass containers plants and 4.3 percent in the other industry earned less than $\$ 1.50$ an hour.

Among the occupations selected for separate study, highest earnings were reported for men hand glassware pressers (\$3.15) and glassblowers (\$3.07) in the pressed or blown glassware (other than containers) industry. In the glass containers industry, the highest paid workers studied were the metal moldmakers, who averaged $\$ 2.87$ an hour- 6 cents an hour more than workers similarly employed in the pressed or blown glassware (except containers) industry. Women selectors, numerically the most important occupation studied separately in either industry, averaged $\$ 1.87$ in the glass containers industry and $\$ 1.84$ in the other industry.

The study also provides information on certain establishment practices, including hours of work, paid vacations, paid holidays, and health insurance, and pension plans.

## Industry Characteristics

The glass manufacturing industry in the United States may be considered as consisting of three separate industries: the flat glass industry, which includes establishments primarily engaged in manufacturing plate, sheet, and other flat glass; the glass containers industry; and the pressed or blown glass and glassware (except containers) industry, which embraces the production of practically all glassware other than flat glass and containers. The Bureau's study is limited to the last two named industries.

Most glass is made by melting together silica (in the form of sand), an alkali (such as potash or soda), and other base ingredients (usually lime). These materials are fused together in furnaces at temperatures of $2700^{\circ} \mathrm{F}$. or hotter and become liquid. It is in this state that glass can be poured and cast; in the viscous state, it can be blown (by human breath or compressed air) and forced to take the shape and impression of a mold.

The glass containers industry is highly mechanized. Raw materials are mixed in large hoppers, carried by overhead rails or moving belts, and fed continuously into the melting furnaces. The molten glass is automatically fed into the molds of a forming machine and blown to shape by com-
pressed air. (None of the establishments in the Bureau's sample used hand methods to form glass containers.) The containers pass on moving belts through annealing ovens, or lehrs, to be cooled slowly. After the annealing process, the containers are inspected and packed or sent to the finishing departments if decorative work is required.

The pressed or blown glass and glassware (except containers) industry is also substantially mechanized. However, about a fourth of the production workers within the scope of the survey were in establishments producing handpressed articles, and about a sixth in plants manufacturing hand-blown products.

Employment in individual establishments surveyed in both industries in May 1960 varied greatly, ranging from less than 100 to more than 2,000 , although glass containers plants generally tended to be larger than those manufacturing other pressed or blown glassware. Thus, 41 of the 86 glass containers plants within the scope of the survey employed more than 500 workers each, whereas only 13 of the 89 plants in the other industry had that number of employees and half of the industry's plants employed between 100 and 500 workers.

Approximately half of the production workers in the glass containers industry were employed in metropolitan areas, whereas more than threefifths of the workers in the pressed or blown glassware (except containers) industry were employed in smaller communities.

Men accounted for slightly more than threefifths of the production-worker employment in the glass containers industry and nearly threefourths of such employment in the other industry. Women were usually employed in such routine tasks as inspecting and finishing.

Incentive methods of wage payment applied to two-fifths of the production workers in the glass containers industry and to slightly more than a third of the workers in the industry producing other pressed or blown glassware. Regionally, the proportion of workers paid on an incentive basis in the glass containers industry ranged from nearly a third in the Southeast to three-fifths in the Border States. In the other industry, the proportion of incentive-paid workers ranged from a fourth in the Middle Atlantic region to nearly half
in the Great Lakes region. Earnings of workers paid on a time-rate basis were usually determined by formal rate structures providing a single rate for a given job.
Labor-management contracts covering all or a majority of the production workers were reported by each of the glass containers plants included in the Bureau's sample and by plants employing 94 percent of the workers in the other pressed or blown glassware industry. Virtually all of the nonunion establishments were located in the Border States. The American Flint Glass Workers' Union of North America and the Glass Bottle Blowers Association of the United States and Canada (both AFL-CIO) were the major unions in the industries. The American Flint Glass Workers typically had contracts covering moldmakers and repairmen in both the glass containers and the other pressed or blown glassware industries, and all production workers in the latter industry. The Glass Bottle Blowers' contracts
covered production workers (except moldmakers and repairmen) in most glass containers plants studied.

## Average Hourly Earnings

Straight-time hourly earnings of production and related workers in the pressed or blown glass and glassware industries in May 1960 averaged $\$ 2.11$ (table 1). The estimated 50,194 men and 25,178 women within the scope of the survey had average earnings of $\$ 2.26$ and $\$ 1.83$ an hour, respectively. Nationally, the earnings levels for the glass containers and the other pressed or blown glassware industries were nearly identical- $\$ 2.11$ compared with $\$ 2.12$ an hour. Regionally, however, there was no consistent wage relationship between the two industries. In the Middle Atlantic and Great Lakes regions, workers in the glass containers industry earned 12 and 9 cents an hour, respectively, less than workers in the other pressed or

Table 1. Percent Distribution of Production Workers in the Pressed or Blown Glass and Glassware Industries, by Average Straight-Time Hourly Earnings, ${ }^{1}$ United States and Selected Regions, ${ }^{2}$ May 1960

| Average hourly earnings ${ }^{1}$ | $\begin{gathered} \text { Pressed or blown } \\ \text { glass and glassware } \end{gathered}$ | Glass containers |  |  |  |  |  | Other pressed or blown glass and glassware ${ }^{4}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { glass and glassware }}{\text { United States }{ }^{3}}$ | United States | Middle Atlantic | Border States | Southeast | Great Lakes | Pacific | United States ${ }^{3}$ | Middle Atlantic | Border States | Great Lakes |
| Under \$1.00 |  | $\begin{aligned} & (0) \\ & (5) \\ & (0) \end{aligned}$ |  | (8) | ${ }^{(5)} 0$ |  |  |  |  |  | (8) |
| \$1.00 and under \$1.10-- |  |  | $\bigcirc$ | 0.1 |  |  |  | 0.5 |  |  |  |
| \$1.20 and under \$1.30-. |  |  |  | $\begin{array}{r} .4 \\ 1.4 \end{array}$ | . 1 | 0.1 |  |  | $\begin{array}{r}0.1 \\ \hline\end{array}$ | $\begin{aligned} & 2.7 \\ & 4.3 \\ & 6.0 \end{aligned}$ | 0.1 |
| \$1.40 and under \$1.50- |  | 1.3 | . 2 |  | 5.11 | $\begin{aligned} 1.8 \\ 5 \end{aligned}$ |  |  | . 8 | 4.8 2.9 | $\stackrel{.9}{9}$ |
| \$1.50 and under \$1.60- |  | 14.0 | 4.2 15.7 15 | 2.9 14.6 | 14.2 | $\begin{array}{r} 5.3 \\ 16.9 \end{array}$ | ${ }^{(6)} 0$ | $\begin{aligned} & 1.8 \\ & 5.2 \end{aligned}$ | $\stackrel{.6}{4.1}$ | 2.99.818 | 4.46.06.0 |
| \$1.70 and under \$1.80 |  | 7.9 9.7 | 10.7 <br> 12.8 | 4.14.64.6 | 7.3 14.5 | 10.0 | 1.0 |  |  |  |  |
| \$1.80 and under \$1.90- |  | 12.58.7 |  |  |  | 10.19.010.5 | 11.9 11.0 | 18.2 13.3 |  | 12.6 14.5 | ${ }^{23.1}$ |
| \$2.00 and under $\$ 2.10$ |  |  | 15.7 8.6 | 14.9 9.3 |  |  | 8.1 | 13.3 9 | 17.8 11.3 | 7.8 | 10.68.28.9 |
| \$2.10 and under \$2.20- |  | 5.64.7 | 8.7 | 6.3 | 1.8 | 4.4 | 12.9 | 9.4 | 12.3 | 3.5 |  |
| \$2.20 and under \$2.30 |  |  | 3.33.2 | 6.94.7 | 2.82.82.8 | 4.3 <br> 3.5 <br> 3.7 | 7.3 | 4.8 <br> 4.5 <br> .8 | 5.05.7 | 3.0 <br> 3.6 <br> 1 | 8.9 5.4 |
| \$2.30 and under \$2.40- |  | 5.1 |  |  |  |  | 16.0 |  |  |  | 5.4 <br> 3.9 <br> 3.8 |
| \$2.40 and under $\$ 2.50$ and under $\$ 2.60$ |  | 4.2 | 3.6 <br> 4.2 | 5.0 4.9 | 3.5 <br> 3.5 | 3.63.63.0 | 6.0 | ${ }_{2}^{2.8}$ | 3.22.45 | 1.7 2.0 | 2.8 <br> 2.9 <br> 5.9 |
| \$2.60 and under \$2.70- |  | 3.4 | 3. 1 | 3.9 | 1.2 |  | 5.53.7 | ${ }_{5}^{2.6}$ |  | 2.1 |  |
| \$2.70 and under \$2.80 |  |  |  | 5.1 |  | 2. 6 |  | ${ }_{2.9}$ | 5.7 2.3 |  | 5. <br> 4 |
| \$2.80 and under \$2.90- |  | 3.92.1 | 3.51.31.3 |  | 4.2 |  | 3. 5 | 3.11.4 | 3.11.7 | 1.9 | $\begin{array}{r}3.9 \\ 1.5 \\ \hline\end{array}$ |
| \$ \$3.00 and under $\$ 3.00$ |  |  |  | 2.7 | 1.5 | 4.1 2.7 2.7 |  |  |  | .8 1.5 <br> .9 .9 |  |
| \$ $\$ 3.10$ and under $\$ 3.20$ - |  | ${ }_{1.3}^{1.5}$ | 1.0 .6 | 1.4 | 1.2 .2 | 2.0 1.3 | 2.1 | . 7 | . ${ }^{5}$ | . 6 | . 8 |
| \$3.20 and under $\$ 3.30-$ |  | . 9 | $\stackrel{.3}{2}$ | .3.1.3 | . 1 | .5.3.1.1 | 3.91.91.2 | .5 <br> .4 <br> .3 | .3 <br> .4 <br> .4 |  |  |
| \$3.30 and under \$3.40- |  | $\stackrel{4}{2}$ |  |  |  |  |  |  |  | $\begin{array}{r}1.1 \\ .5 \\ .5 \\ \hline .5\end{array}$ | .4.32.0 |
| \$3.50 and over------- |  | . 3 | (5) |  | . 1 |  | 1.4 | 1.7 | 1.1 |  |  |
| 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: | $\begin{aligned} & 7,372 \\ & 50,194 \\ & 25,178 \end{aligned}$ | $\begin{aligned} & 49,137 \\ & 31,002 \\ & 18,135 \end{aligned}$ | $\begin{gathered} 16,606 \\ 10,568 \\ 6,038 \end{gathered}$ | $\begin{aligned} & 7,455 \\ & 4,460 \\ & 2,995 \end{aligned}$ | $\begin{aligned} & 3,020 \\ & 2,139 \\ & 881 \end{aligned}$ | $\begin{gathered} 14,268 \\ 8,731 \\ 5,537 \end{gathered}$ | $\begin{aligned} & 6,273 \\ & 4,028 \\ & 2,245 \end{aligned}$ | $\begin{array}{r} 26,235 \\ 19,192 \\ 7,043 \end{array}$ | $\begin{array}{r} 10,676 \\ 8,297 \\ 2,379 \end{array}$ | $\begin{aligned} & 4,746 \\ & 3,344 \\ & 1,402 \end{aligned}$ | $\begin{gathered} 10,114 \\ 6,981 \\ 3,133 \end{gathered}$ |
| All workers.--------- |  |  |  |  |  |  |  |  |  |  |  |
| Women--.---- |  |  |  |  |  |  |  |  |  |  |  |
| Average hourly earnings: All workers.....--- | $\begin{gathered} \$ 2.11 \\ 2.26 \\ 1.83 \\ 1.83 \end{gathered}$ | $\begin{gathered} \$ 2.11 \\ 2.27 \\ 1.83 \end{gathered}$ | $\begin{gathered} \$ 2.04 \\ 2.18 \\ 1.78 \end{gathered}$ | $\begin{array}{r} \$ 2.16 \\ 2.36 \\ 1.86 \end{array}$ | $\begin{gathered} \$ 1.90 \\ 1.99 \\ 1.71 \end{gathered}$ | $\begin{gathered} \$ 2.08 \\ 2.26 \\ 1.79 \end{gathered}$ | $\begin{array}{r} \$ 2.44 \\ 2.63 \\ 2.12 \end{array}$ | $\begin{aligned} & \$ 2.12 \\ & 2.23 \\ & 1.83 \\ & 1.83 \end{aligned}$ | $\begin{gathered} \$ 2.16 \\ 2.24 \\ 1.87 \end{gathered}$ | $\begin{gathered} \$ 1.94 \\ 2.06 \\ 1.64 \end{gathered}$ | $\begin{array}{r} \$ 2.17 \\ \begin{array}{r} 2.30 \\ 1.89 \end{array} \end{array}$ |
| Men.-.-------- |  |  |  |  |  |  |  |  |  |  |  |
| Women. |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{1}$ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts. <br> ${ }_{2}^{2}$ For definition of regions, see text footnote 2. <br> a Includes data for regions in addition to those shown separately. <br> 4. Excludes establishments primarily engaged in the manufacture of textile glass fibers. <br> ${ }^{5}$ Less than 0.05 percent. |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

blown glassware industry; in the Border States, on the other hand, the glass containers workers earned 22 cents an hour more than workers in the other industry.

Earnings of individual workers in both industries ranged from about $\$ 1$ to more than $\$ 3.50$ an hour. As the following tabulation indicates, earnings of the middle half of the workers in each industry and in most regions were within a range of 50 to 66 cents an hour.

Range of earnings of the middle half of production workers

United States_-.Middle Atlantic Border States.
$\qquad$ Southeast.-----------Great Lakes
Pacific

|  | Other pressed or |
| :--- | ---: |
| Glass containers | blown glassware |
| $\$ 1.76-\$ 2.40$ | $\$ 1.84-\$ 2.34$ |
| $1.74-2.25$ | $1.89-2.33$ |
| $1.83-2.49$ | $1.62-2.13$ |
| $1.60-2.09$ | ------ |
| $1.71-2.37$ | $1.85-2.45$ |
| 2. $12-2.68$ | -------- |

Factors contributing to this fairly wide dispersion of individual earnings include differences in pay levels among establishments, the use of incentive wage systems, and the variety of skills required. Earnings of women were much more closely grouped than those of men, owing in large measure to the concentration of the former in similar jobs (e.g., more than three-fifths of the women in the glass containers industry and more than a third in the other pressed or blown glassware industry were employed as selectors). Thus, earnings of nearly half the women in the glass containers industry were within a range of $\$ 1.50$ to $\$ 1.80$, and earnings of two-fifths of the women in the other industry ranged from $\$ 1.80$ to $\$ 1.90$.
Nationally, production workers in establishments with 500 or more employees averaged 12 cents an hour more than workers in smaller establishments in the glass containers industry ( $\$ 2.14$ compared with $\$ 2.02$ ) and 13 cents an hour more in the other pressed or blown glassware industry ( $\$ 2.17$ compared with $\$ 2.04$ ). This general relationship was also noted in each of the regions for which comparisons could be made, except in the Great Lakes region where identical averages ( $\$ 2.17$ ) were recorded for other pressed or blown glassware workers in the two establish-ment-size groups.

Earnings of glass containers workers in metropolitan areas ${ }^{3}$ averaged, on a national scale, 14

[^19]cents an hour more than those of workers in the smaller communities; in the pressed or blown glassware (except containers) industry, workers in metropolitan areas had a wage advantage of 3 cents an hour.

## Occupational Earnings

Wages for occupational classifications accounting for approximately three-fifths of the production workers in the glass containers industry and two-fifths of the workers in the other pressed or blown glassware industry were studied separately. In the glass containers industry, average hourly earnings ranged from $\$ 2.87$ for men employed as metal moldmakers to $\$ 1.63$ for women janitors (table 2). Operators of machines forming glass containers, numerically the most important men's job classification studied, averaged $\$ 2.64$ an hour. Other numerically important jobs and their nationwide averages were forming machine upkeep men (who adjust and repair forming machines), $\$ 2.86$; forklift truck operators, $\$ 2.11$; selectors, $\$ 1.96$; and material handling laborers, $\$ 1.90$. Women employed as selectors, who accounted for 64 percent of the women production workers in the glass containers industry, averaged $\$ 1.87$ an hour, compared with $\$ 1.84$ for those employed as carton assemblers and $\$ 1.83$ for silk-screen decorators.

Regionally, occupational earnings in the glass containers industry were usually highest on the Pacific Coast and lowest in the Southeast. In the following tabulation, regional wage averages for a selected list of numerically important jobs are expressed as a percent of the average recorded in the Southeast region.

|  | Middle Atlantic | Border States | Great | Pacific |
| :---: | :---: | :---: | :---: | :---: |
| Men | [Southeast $=100]$ |  |  |  |
| Forming-machine operators_- | 99 | 106 | 100 | 109 |
| Laborers, material handling-- | 118 | 134 | 121 | 138 |
| Moldmakers, metal. | 98 | 99 | 100 | 112 |
| Selectors . | 108 | ---- | 103 | 127 |
| Truckers, power (forklift).--- | 111 | 120 | 114 | 137 |
| Women |  |  |  |  |
| Selectors | 102 | 108 | 104 | 122 |

There was much less difference among regional averages for the comparatively high-wage occupations (e.g., forming-machine operators and

Table 2. Average Straight-Time Hourly Earnings ${ }^{1}$ of Production Workers in Selected Occupations in the Glass Containers Industry, United States and Selected Regions, ${ }^{2}$ May 1960

metal moldmakers) than for the low-wage jobs such as material handling laborers and selectors.

In the pressed or blown glassware (except containers) industry, highest average hourly earnings were recorded for men employed as hand glassware pressers (\$3.15) and glass blowers (\$3.07) (table 3). Occupations in which workers averaged between $\$ 2.75$ and $\$ 3$ an hour included forming-machine operators (\$2.79), forming-machine upkeep men (\$2.76), pressed-ware punty gatherers (\$2.77), maintenance machinists (\$2.75), and metal moldmakers (\$2.81). Material handling laborers, numerically the most important men's job studied, averaged $\$ 1.92$ an hour. Women employed as selectors, numerically the most important women's job studied separately, averaged $\$ 1.84$ on a nationwide basis.

The Middle Atlantic and Great Lakes regions together accounted for nearly four-fifths of all employment in the pressed or blown glassware (except containers) industry. Although occupational averages in these two regions were closely similar in a number of instances, there was no consistent relationship.

## Establishment Practices

Data were also obtained on work schedules and selected supplementary benefits, including paid holidays and vacations, retirement pension plans, life insurance, sickness and accident insurance, and hospitalization and surgical benefits. Information on establishment practices presented in this article is limited to production workers; however, forthcoming BLS Report 177 also provides such information for office workers.

Scheduled Weekly Hours and Shift Practices. Work schedules of 42 hours a week applied in May 1960 to three-fifths of the production workers in the glass containers industry and were prevalent in all regions for which this information was available except the Pacific Coast, where all establishments reported weekly work schedules of 40 hours. Nearly three-fourths of the production workers in the pressed or blown glassware (except containers) industry were scheduled to work 40 hours a week in May 1960, although slightly more than half of the workers in the Great Lakes region were
employed in establishments having work schedules of 42 hours a week.

Half of the production workers in the glass containers industry and almost two-fifths in the other industry were employed on late shifts at the time of the study. Virtually all of them received extra pay, the most common differentials reported being 6 cents an hour for the second shift and 8 or 9 cents for the third shift.

Paid Holidays. All glass containers manufacturing establishments in the Bureau's sample provided paid holidays to their production workers, most commonly 7 days a year (table 4). About a fifth of the workers in the Southeast region were employed in establishments providing 5 paid holidays annually, and 6 days annually were granted by establishments employing a fourth of the workers in the Middle Atlantic region and a sixth of the workers in the Great Lakes region.

In the pressed or blown glassware (except containers) industry, paid holiday provisions applied to 95 percent of the production workers. Provisions for 7 paid holidays were most commonly reported, although 6 days were reported for substantial numbers of workers, particularly in the Border States.

Paid Vacations. Provisions for paid vacations were reported by all glass containers establishments. A large majority of the production workers were in establishments providing 1 week's vacation pay after 1 year of service, 2 weeks after 5 years of service, and 3 weeks after 15 years.

Vacation provisions were also common in the pressed or blown glassware (except containers) industry, applying to all of the production workers in the Middle Atlantic and Great Lakes regions and to about three-fourths of the workers in the Border States. In both the Middle Atlantic and

Table 3. Average Straight-Time Hourly Earnings ${ }^{1}$ of Production Workers in Selected Occupations in the Pressed or Blown Glass and Glassware Industry (Except Glass Containers), United States and Selected Regions, ${ }^{2}$ May 1960


Table 4. Percent of Production Workers in Glass Containers and Other Pressed or Blown Glass and Glassware Establishments With Formal Provisions for Selected Supplementary Wage Benefits, ${ }^{1}$ United States and Selected Regions, ${ }^{2}$ May 1960


${ }^{1}$ If formal provisions for supplementary benefits in an establishment were applicable to half or more of the workers, the benefits were considered applicable to all workers. Because of length-of-service and other eligibility requirements, the proportion of workers currently receiving the benefits may be smaller than estimated.
${ }_{2}^{2}$ For definition of regions, see text footnote 2.
${ }^{8}$ Includes data for regions in addition to those shown separately.
4 The periods of service shown were arbitrarily chosen and do not necessarily reflect the individual provisions for progression. For example, the changes indicated at 5 years may include changes occurring between 1 and 5 years.

Great Lakes regions, the large majority of the production workers were in establishments providing 1 week's vacation pay after 1 year of service, 2 weeks after 5 years, and 3 weeks after 15 years. Three-fifths of the workers in the Middle Atlantic region and a fourth of those in the Border States were employed in establishments providing 4 weeks of vacation pay after 20 years of service.

Health, Insurance, and Pension Plans. Life, hospitalization, and surgical insurance, for which employers paid at least part of the cost, were available to virtually all of the production workers in the glass containers industry and to a large majority of the workers in the pressed or blown glassware (except containers) industry. Accidental death and dismemberment insurance and medical insurance was provided by establishments
${ }^{6}$ Includes provisions in addition to those shown separately.
6 Less than 0.5 percent.
7 Vacation provisions were virtually the same after longer periods of service.
${ }^{8}$ Tabulations were limited to full-day holidays; additional half-day holidays were also provided in some establishments. Because of rounding, sums of individual items may not equal totals.
? Includes only those plans for which at least a part of the cost is borne by the employer, and excludes legally required plans such as workmen's compensation and social security. Although sick leave plans were included among those studied, none of the establishments in the Bureau's sample reported such provisions.
employing 71 percent of the production workers in the glass containers industry and 45 percent of the workers in the pressed or blown glassware (except containers) industry. Catastrophe insurance was not common except among pressed or blown glassware establishments in the Middle Atlantic region.

Retirement pension benefits (other than those available under Federal Old-Age, Survivors, and Disability Insurance) were provided by establishments employing 96 percent of the production workers in the glass containers industry and 73 percent of the workers in the pressed or blown glassware (except containers) industry.
-Charles M. O'Connor
Division of Wages and Industrial Relations

## Job Pay Levels and Trends

## in 60 Labor Markets

Pat levels for office workers and workers in maintenance, power plant, custodial, and material handling jobs tended to be highest in the larger West Coast and North Central areas among the 60 major labor markets surveyed by the U.S. Department of Labor's Bureau of Labor Statistics during late 1959 and early $1960 .{ }^{1}$ Areas outside these regions which recorded above-average pay levels reflected the importance of employment in comparatively high-wage industries. Thus two of the smaller Southern areas, Beaumont-Port Arthur, Tex., and Charleston, W. Va., had pay levels that ranked among the highest in nearly all jobs studied.

Pay rates differed widely among and within geographic areas and industry groups, and even within individual establishments. Part of the spread in rates paid to workers in the same job and area was accounted for by interindustry differences in pay. Average earnings of plant and office workers tended to be higher in manufacturing than in nonmanufacturing industries, and each of these groups included a wide variety of industries and establishments that differed in level of rates paid. This would also partially explain intercity wage differences; the areas studied varied substantially in industrial composition. Maximum wage differences among the 60 areas were greater for unskilled plant workers than for skilled maintenance and office workers.

Twenty of the 60 areas were also surveyed in $1959 .{ }^{2}$ The median increase in earnings during the year in the 20 areas was 3.9 percent for women industrial nurses, skilled maintenance men, and unskilled men plant workers. Weekly salaries of women office workers increased 3.6 percent.

## Pay Levels, 1959-60

Office Occupations. Secretaries and general stenographers were numerically the most important among the women's office jobs studied. There were about 139,000 secretaries and 100,000 stenographers in the 60 areas. Among women office workers, secretaries had the highest average weekly salaries in 46 of the 60 areas; their average salaries ranged from $\$ 67.50$ in Portland (Maine),
to $\$ 98$ in Detroit (table 1). The proportion of secretaries with salaries of $\$ 90$ or more ranged from less than a tenth in Greenville and Jackson to more than two-thirds in Detroit and Los Angeles-Long Beach. Women accounting clerks (class A) had the highest average salaries in 12 areas; their average salaries ranged from $\$ 68.50$ in Portland (Maine), Charlotte, and Des Moines to $\$ 94$ in Paterson-Clifton-Passaic and Charleston. Stenographers were highest paid in Dayton, averaging $\$ 88$ a week; their salaries were equal to those of secretaries in Dayton. In the other areas, differences between the salaries of secretaries and general stenographers ranged from $\$ 5$ in Portland (Maine) to $\$ 17.50$ in York, Cincinnati, and Milwaukee.

Among the lower paid women's office jobs, average salaries of office girls ranged from $\$ 43.50$ in New Orleans to $\$ 69$ in Allentown-BethlehemEaston. They averaged over $\$ 50$ a week in 33 of the 44 areas in which earnings were shown for this occupation.

Among men's office jobs studied, accounting clerks (class A) had average salaries ranging from $\$ 81$ in Lawrence-Haverhill to $\$ 122.50$ in Beau-mont-Port Arthur; in 44 areas, they averaged $\$ 95$ or more. Average salaries of payroll clerks ranged from $\$ 77$ in York to $\$ 123.50$ in Beaumont-Port Arthur. In 25 areas, they averaged $\$ 90$ or more a week. Tabulating-machine operators (class A) had the highest weekly salaries of men office employees in 24 areas, including New York City and Chicago. Average salaries for this group ranged from $\$ 87$ in Jacksonville to $\$ 121.50$ in BeaumontPort Arthur. Earnings of tabulating-machine operators (class B) ranged from $\$ 72.50$ in Boston to $\$ 112$ in Beaumont-Port Arthur. In 22 areas, they averaged more than $\$ 85$ a week.

[^20]Professional and Technical Occupations. Among five professional and technical occupations studied, draftsmen leaders received highest pay, with area averages ranging from $\$ 126$ a week in Seattle to
$\$ 170$ in New York City. Salaries of draftsmen leaders exceeded those of senior draftsmen by about $\$ 26$, on the average; and seniors averaged $\$ 28$ more than junior draftsmen (table 2).

Table 1. Average Weekly Salaries ${ }^{1}$ for Women in 12 Office Occupations, 60 Areas, Winter 1959-60 ${ }^{2}$

| Area | $\begin{aligned} & \text { Clerks, } \\ & \text { account- } \\ & \text { ing, } \\ & \text { class A } \end{aligned}$ | Clerks, account ing, class B | Clerks, file, class B | Clerks, payroll | Comptometer operators | Keypunch operators | Office girls | Secretaries | Stenographers, general | Switchboard operators | Typists, class A | Typists, class B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Northeast |  |  |  |  |  |  |  |  |  |  |  |  |
| Albany-Schenectady-Troy, N.Y | \$81. 50 | \$67. 50 | \$53.50 | \$73. 50 | \$71.00 | \$70.00 | \$54.00 | \$86.00 | \$75.00 | \$66. 50 | \$75.00 | \$57.00 |
| Allentown-Bethlehem-Easton, Pa,-N.J. | 82.50 | 66. 00 | 64.50 | 61.50 | 79.50 | 76.00 | 69.00 | 78.00 | 68.50 | 62.00 | 76. 50 | 62.00 |
| Boston, Mass.-- | 75.50 | 62.00 | 50.50 | 69.00 | 65.00 | 63.50 | 50.50 | 79.00 | 67.00 | 65. 50 | 65.50 | 55.50 |
| Buffalo, N.Y | 84.00 | 65.00 | 55. 50 | 73. 00 | 69.00 | 69.50 | 55.50 | 85.50 | 74.00 | 65.50 | 71.00 | 59.00 |
| Lawrence-Haverhill, Mass.-N.H | 73.00 | 63.00 | 53.50 | 63. 50 |  | 65. 50 |  | 81.00 | 64. 50 | 64.00 |  | 53.50 |
| Newark and Jersey City, N.J | 85.50 | 67. 00 | 54.50 | 76.50 | 75.00 | 68.50 | 57. 50 | 89.00 | 73. 50 | 72.00 | 69.00 | 60.00 |
| New Haven, Conn. | 84.50 | 65.50 | 53.00 | 71.50 | 79.50 | 71.50 | 59.50 | 85.50 | 73.00 | 67.50 | 66.50 | 60.00 |
| New York, N.Y. | 88.00 | 69.00 | 57.50 | 80.00 | 73. 50 | 68.50 | 55.00 | 91.50 | 74.50 | 72. 50 | 70.00 | 62.50 |
| Paterson-Clifton- | 94.00 | 67. 50 | 53.00 | 75.50 | 72.00 | 70.00 | 58.50 | 86.50 | 72.50 | 72. 50 | 75.50 | 63.50 |
| Philadelphia, Pa | 78.50 | 61. 50 | 51.00 | 69.00 | 65.50 | 63.50 | 49.00 | 84.50 | 69.00 | 65.00 | 72.00 | 56.50 |
| Pittsburgh, Pa | 90.50 | 72. 50 | 58.50 | 81.50 | 72.00 | 72.00 | 55.50 | 89.50 | 75.50 | 74.00 | 75.00 | 62.50 |
| Portland, Maine | 68. 50 | 54.50 | 48.00 | 59. 50 | 65.50 | 61.50 |  | 67.50 | 62.50 | 51.00 | 58.00 | 48.50 |
| Providence, R.I.-Mass | 74. 00 | 54. 50 | 47. 50 | 63. 50 | 62.50 | 59.00 | 46.50 | 73.50 | 60.00 | 56.50 | 58.50 | 48.00 |
| Waterbury, Conn | 84.50 | 66.50 | 54.00 | 77. 50 | 65.50 | 70.50 |  | 91.00 | 75.50 | 73.50 | 73.00 | 62.00 |
| Worcester, Mass | 82.00 | 63.00 | 51.00 | 66.50 | 65.50 | 58.50 | 50.50 | 82.00 | 66.50 | 62.50 | 64.00 | 55.00 |
| York, Pa | 77.00 | 55.00 | 49.00 | 66.50 |  | 66. 00 |  | 83.50 | 66.00 | 59.00 | 59.50 | 56.00 |
| South 83.50 |  |  |  |  |  |  |  |  |  |  |  |  |
| Atlanta, Ga | 83. 50 | 63.50 | 51.00 | 72.50 | 70.00 | 69. 50 | 52.50 | 84.00 | 72.50 | 63.00 | 62.50 | 54. 50 |
| Baltimore, Md | 77. 50 | 64.00 | 50.00 | 69.00 | 69.00 | 65.50 | 52.00 | 82.00 | 67.00 | 62.50 | 71.00 | 54.50 |
| Beaumont-Port A | 92.00 | 73.00 | 60.50 | 81.50 | 70.00 | 77.00 |  | 96.00 | 81.50 | 62.00 | 80.00 | 60.50 |
| Birmingham, Ala | 79. 50 | 63.00 | 52.00 | 69.50 | 61.00 | 68.50 | 47.50 | 84.50 | 70.00 | 62.00 | 66.50 | 53.00 |
| Charleston, W. V | 94.00 | 62.00 | 55.00 | 86.50 | 59.00 | 78.00 | 61.50 | 89.50 | 83.00 | 66.00 | 87.00 | 58.50 |
| Oharlotte, N.C | 68.50 | 61.50 | 50.00 | 63.50 | 60.00 | 59.00 |  | 74. 00 | 62.00 | 57.00 | 66.50 | 51.00 |
| Dallas, Tex. | 77.00 | 62.00 | 49.00 | 70.50 | 67.50 | 64.50 | 51.50 | 82.00 | 71.00 | 59.50 | 63.50 | 53.00 |
| Fort Worth, T | 76.50 | 57.50 | 44.00 | 62.00 | 64.00 | 61.00 | 51.50 | 73.00 | 64.50 | 61.00 | 62.00 | 48. 50 |
| Greenville, S.O | 69.50 | 52.00 | 45.00 | 57.00 |  | 53. 50 |  | 72.00 | 61.50 | 48. 50 |  | 47.00 |
| Houston, Tex | 86. 50 | 67.50 | 53.50 | 80.50 | 67.50 | 73.50 | 52.00 | 88.50 | 76.50 | 68. 50 | 67.00 | 58.00 |
| Jackson, Miss | 75. 50 | 58.00 | 46.00 | 66.50 | 53.50 | 57. 50 |  | 70.00 | 60.00 | 47. 50 | 56. 00 | 52.00 |
| Jacksonville, F | 71.50 | 61.50 | 48.00 | 71.00 | 60.00 | 59.50 | 49.50 | 73.00 | 63.00 | 49.50 | 54.00 | 48.50 |
| Lubbock, Tex | 71.50 | 52.50 | 49.50 | 67.00 | 52.00 | 61.00 |  | 74.00 | 65.00 | 48.50 | 59.50 |  |
| Memphis, Tenn | 73.00 | 55.00 | 51.00 | 63.50 | 57.50 | 60.00 | 50.00 | 71.00 | 63.00 | 46.00 | 60.00 | 48.00 |
| Miami, Fla | 78.50 | 63.50 | 50.00 | 71.00 | 59.50 | 67.00 | 48. 50 | 76.50 | 66.50 | 55.00 | 64.00 | 52.50 |
| New Orleans, L | 77.00 | 59.00 | 48.00 | 66.00 | 61.50 | 63.50 | 43.50 | 79. 50 | 64.50 | 51.50 | 64.50 | 52.00 |
| Richmond, Va | 75.50 | 60.50 | 51.50 | 70.50 | 61.00 | 66.00 | 52.00 | 81.50 | 72.00 | 62.00 | 62.00 | 54.00 |
| Savannah, Ga | 81.00 | 59.00 |  | 77.00 |  | 67.50 |  | 85.00 | 78.50 | 50.00 |  | 54.00 |
| Washington, D.C.-Md.-Va | 80.00 | 64.50 | 52.00 | 75. 50 | 69.50 | 68.00 | 52.50 | 85.00 | 75.50 | 59.00 | 67.00 | 61.00 |
| North Central |  |  |  |  |  |  |  |  |  |  |  |  |
| Akron, Ohio | 87.50 | 66.50 | 54.00 | 81.00 | 69.00 | 77.50 | 52.00 | 92.00 | 76.00 | 70.00 | 70.50 | 61. 50 |
| Canton, Ohio | 76.50 | 75. 50 | 56.50 | 81.00 | 65.50 | 70.50 |  | 82.50 | 69.50 | 67.50 | 71.50 | 57.00 |
| Chicago, Ill | 91.50 | 72.50 | 60.50 | 81.00 | 77.00 | 75.50 | 60.50 | 93.00 | 78.00 | 73.00 | 75.00 | 65.00 |
| Cincinnati, Ohio | 84.00 | 64.50 | 52.50 | 74.50 | 67.50 | 68.50 | 49.00 | 87.50 | 70.00 | 68.00 | 68.50 | 58.00 |
| Cleveland, Ohio | 85.50 | 71.00 | 58.00 | 78.50 | 74.50 | 74.00 | 58.50 | 93.50 | 76.50 | 73.50 | 77.00 | 63.00 |
| Dayton, Ohio | 80.50 | 61.50 | 58.00 | 77.50 | 71.50 | 74.00 | 55.00 | 88.00 | 88.00 | 67.00 | 80.00 | 63.50 |
| Des Moines, Io | 68.50 | 58. 00 | 47.50 | 68.50 | 62.50 | 57.00 | 47.00 | 79.00 | 64.00 | 55.50 | 59.50 | 50.50 |
| Detroit, Mich...- | 93.50 | 72.00 | 59.00 | 84.50 | 81.00 | 80.50 | 63.50 | 98.00 | 87.00 | 77.00 | 87.50 | 68.00 |
| Indianapolis, Ind | 78.50 | 67.00 | 52.50 | 78.00 | 73.50 | 70.50 | 57.00 | 87.50 | 82.00 | 63.50 | 74.00 | 57.50 |
| Kansas City, Mo.-Kans | 81.00 | 63.00 | 52.50 | 73.00 | 71.00 | 67.50 | 49.50 | 84.50 | 72.50 | 61.50 | 74.00 | 56.50 |
| Milwankee, Wis --------- | 87.00 78.50 | 66.50 62.00 | 56.50 52.50 | 72.50 71.00 | 67.00 69.00 | 67.50 63.00 | 53.00 47.50 | 89.00 79.00 | 71.50 68.50 | 67.50 65.00 | 72.00 | 60.00 56.50 |
| Muskegon-Muskegon Height | 78.50 83.00 | 62.00 74.00 | 52.50 | 71.00 68.00 | 69.00 72.50 | 63.00 64.50 | 47.50 | 79.00 82.00 | 68.50 69.50 | 65.00 60.50 | 64.50 | 56. 50 |
| Rockford, M11.-..........- | 80.50 | 66.50 |  | 72.00 | 72.50 70.00 | 64.50 64.00 |  | 88.00 | 69.50 | 60.50 | 75.50 | 56.00 |
| St. Louis, Mo.-Ill | 85.00 | 63.00 | 55. 50 | 71.00 | 71.00 | 70.50 |  | 85.00 | 70.00 | 65.50 | 69.00 69.00 | 58.00 |
| Sioux Falls, S. Dak | 69.50 | 59.00 | 47.00 |  |  |  |  | 74.00 | 63.50 |  | 69.00 | 52. 50 |
| South Bend, Ind | 79.00 | 63.50 |  | 73.00 | 73.50 | 68.50 | 61.50 | 88.50 | 74.00 | 67.00 | 77.00 | 57.50 |
| West |  |  |  |  |  |  |  |  |  |  |  |  |
| Albuquerque, N. Mex | 81.50 | 63.50 | 52. 50 | 79.00 |  |  |  | 90.50 | 75.00 | 58.50 | 71.50 | 55. 50 |
| Denver, Colo | 78.50 | 65.00 | 54.50 | 74. 50 | 67.00 | 64.50 | 50.50 | 85.00 | 71.50 | 62.50 | 66.50 | 56.50 |
| Los Angeles-Long Beach, Calif | 90.50 | 73.50 | 62.00 | 86.00 | 83.50 | 80.00 | 61.50 | 94.50 | 81.50 | 75.50 | 78.50 | 65.50 |
| Phoenix, Ariz | 81.00 | 65.00 | 58.00 | 71.50 | 63. 50 | 70.00 |  | 80.50 | 72.00 | 58.50 | 68.50 | 56.50 |
| Portland, Oreg.-Wash | 85.00 | 70.00 | 55.00 | 79.00 | 73.50 | 73.00 | 51.00 | 85.50 | 74.50 | 68.00 | 68.00 | 59.00 |
| San Bernardino-Riverside-Ontario, Calif | 80.00 | 69.00 | 60.50 | 72. 50 |  | 81.50 |  | 86.00 | 76.50 | 72.00 | 70.00 | 62.50 |
| San Francisco-Oakland, Calif.- | 87.00 | 73. 50 | 58.50 | 87.50 | 80.00 | 76.00 | 60.50 | 91.50 | 80.50 | 75.00 | 74.00 | 64.00 |
| Seattle, Wash_ | 81.50 | 71.50 | 61.00 | 77.50 | 72.50 | 73. 50 | 53.50 | 90.00 | 77.50 | 70.00 | 73.00 | 61.00 |

${ }^{1}$ Earnings based on hours for which employees receive their regular straight-time salaries.
${ }^{2}$ Areas were surveyed during the following months: 1959, AugustSeattle; September-Baltimore, Cleveland; October-Boston, Buffalo, Dallas, St. Louis; November-Fort Worth, Philadelphia, Portland (Maine), San Bernardino-Riverside-Ontario; December-Canton, Dayton, Denver, Jacksonville, Miami, Pittsburgh, W ashington; 1960. January-Detroit, Indianapolis, Kansas City, Memphis, Minneapolis, San Francisco-Oakland; February-Cincinnati, Des Moines, Jackson, Newark and Jersey City, New Haven, New Orleans, Richmond, Sioux Falls, York; March-Albany-

Schenectady-Troy, Allentown-Bethlehem-Easton, Birmingham, Providence, Waterbury; April-Charleston, Charlotte, Chicago, Los AngelesLong Beach, Milwaukee, New York, Phoenix, Rockford, South Bend; Muskegon Heights, Paterson-Clifton-Passaic, Portland (Ores,-W ash ) and June-Akron, Atlanta, Houston, Lawrence-Haverhill, Lubbock, Savannah, Worcester.
Note: Dashesi ndicate no data reported or data that do not meet publi cation criteria.

Table 2. Average ${ }^{2}$ Weekly Salaries ${ }^{1}$ for Four Professional and Technical Occupations, 60 Areas, Winter

| Area | Draftsmen (men) |  |  | Industrial nurses (women) | Area | Draftsmen (men) |  |  | Industrial nurses (women) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Leader | Senior | Junior |  |  | Leader | Senior | Junior |  |
| Northeast |  |  |  |  | South-Continued |  |  |  |  |
| Albany-Schenectady-Troy, N.Y Allentown-Bethlehem-Easton, Pa.N.J. |  |  | \$92.00 | \$94.00 | New Orlean | \$132.00 | \$114.00 | \$84. 50 | \$90. 50 |
|  |  |  |  |  | Richmond, Va ${ }_{\text {Savannah, }}$ |  | 123.00 106.00 |  | 95.00 86.50 |
|  | \$146. 50 154.00 | \$116.50 | 98.50 90.50 | 92.00 84.50 |  | 128.50 | 109.00 109 | 85.00 | 86.00 |
| Buffalo, N.Y | 154.00 | 123.50 | 94.50 | 95.50 |  |  |  |  |  |
| Lawrence-Haverhill, Mass.- |  | $96.00{ }^{2}$ | 74.00 | 82.00 | North Central |  |  |  |  |
| Newark and Jersey City, N.J | 141.50 | 116. 50 | 88.50 | 91.50 91.50 |  | 159.00 | 124.00 | 99.00 | 91.50 |
| New Haven, Conn | 135.00 170.00 | 107.50 128.00 | 82.00 90.50 | 91.50 96.50 | Akron, Ohio- | 153.00 | 128.00 | 101. 50 | 91.50 93.50 |
| New York, N.Y.-----1-1-- | 170.00 | 115. 00 | 93.00 | 93. 50 | Chicago, Ill. | 149.00 | 126. 50 | 95.00 | 95.50 |
| Philadelphia, Pa_........... | 161.00 | 116.00 | 97.50 | 89.50 | Cincinnati, Obio-Ky | 139.00 | 116. 50 | 92.00 | 94.50 |
| Pittsburgh, Pa | 162.50 | 131.50 | 96.00 | 98. 50 | Cleveland, Ohio | 145.50 | 120.50 | 94.50 | 97.00 |
| Portland, Maine |  |  |  | 76. 92 | Dayton, Ohio-- | 138.00 | 126.00 | 104.00 | 88. 50 |
| Providence, R.I.-Mas |  | 106. 00 | 83. 50 | 73. 00 |  |  | 108.00 141.50 | 76.50 98.50 | 88.50 102.00 |
| Waterbury, Conn |  | 113. 50 | 86.50 | 91.50 86.50 |  | 128.00 | 144.50 | 98.50 | 102.00 96.00 |
| Worcester, Mass | 142. 50 | 117.50 104,00 | 83.00 | 78.00 |  | 144.00 | 113.00 | 90.00 | 96.00 91.50 |
|  | 126. 50 | 104.00 |  |  | Milwaukee, Wis | 148.00 | 118.00 | 93.00 | 89.50 |
|  |  |  |  |  | Minneapolis-St. Paul, Minn | 141. 50 | 111.00 | 87.50 | 88.00 |
|  |  |  |  |  | Muskegon-Muskegon Heights, Mich | 133.50 | 111.00 | 87.50 | 85. 00 |
| Atlanta, Ga - | 147.00 | 115. 50 | 87.50 | 94.00 | Rockford, M--- | 127.00 | 114.00 | 86.00 | 82.50 |
| Baltimore, Md........---- | 148.00 | 113.00 | 81.00 | 93.50 | St. Louis, Mo.-Il | 157.00 | 120.00 | 95.00 | 89.00 |
| Beaumont-Port Arthur, Tex | 161. 50 | 129. 50 | 95.50 | 111.50 95.50 |  |  |  |  |  |
| Birmingham, Ala |  | 124.50 | 88.00 | 95.50 101.50 | South Bend, Ind |  | 138.00 | 101.00 | 92.50 |
| Charleston, W. ${ }^{\text {Cob }}$ |  |  | 108.5081.0078.5072.00 | 101.50 | West |  |  |  |  |
| Dallas, Tex- | 131.50 | 105. 50 |  | 86. 00 |  |  |  |  |  |
| Fort Worth, Tex |  | 98.00 |  | 103.00 | Albuquerque, N. Mex |  |  | 87. 50 |  |
| Greenville, S.C |  | 100.50 |  | 73.00 | Denver, Colo -...-.-.-.-.--1- | 149.00 |  | 85.50 91.50 |  |
| Houston, Tex | 135.00 | $\begin{array}{r} 109.00 \\ 93.50 \\ 106.00 \end{array}$ | $\begin{aligned} & 81.50 \\ & 64.50 \end{aligned}$ | 102.00 | Los Angeles-Long Beach, Calif........- | 149.50 | 119.00 111.50 | 91.50 92.00 | 101.00 92.50 |
| Jackson, Miss |  |  |  |  | Phoenix, Ariz <br> Portland, Oreg.-Wash |  | 111.50 | 92.00 93.00 | 92.50 87.50 |
| Memphis, Tenn |  | 116.50 | 73. 50 | 83.50 |  |  | 134.00 | 98.50 | 96.50 |
| Miami, Fla.... |  | 111. 50 | 82.50 | 78.50 | San Francisco-Oakland, Calif | 133. 50 | 119.50 | 94.50 | 96. 50 |
|  |  |  |  |  | Seattle, Wash | 126.00 | 105. 50 | 89.00 | 98.50 |

## ${ }^{1}$ For definition, see footnote 1, table 1.

2 For survey months, see footnote 2, table 1.
Industrial nurses-the only profession in which women's earnings were studied-received weekly pay ranging from $\$ 73$ in Providence and Greenville to $\$ 111.50$ in Beaumont-Port Arthur. Their salaries exceeded those of secretaries in all areas except Providence, York, Akron, Rockford, and Denver, by amounts ranging from 50 cents to $\$ 14$.

Plant Occupations. Tool and die makers, the highest paid skilled workers studied in nearly all areas, had average hourly earnings ranging from $\$ 2.46$ in Miami to $\$ 3.47$ in San Francisco-Oakland (table 3). Hourly averages for tool and die makers exceeded $\$ 3$ in 24 of 44 areas where data permitted publication. Average pay rates for maintenance electricians ranged from $\$ 1.87$ in Greenville to $\$ 3.16$ in Charleston, Detroit, and Birmingham. Electricians' pay exceeded $\$ 2.75$ an hour in 37 of 57 areas. Maintenance machinists' pay ranged from $\$ 2.21$ in Charlotte to $\$ 3.17$ in Detroit.

[^21]Note: Dashes indicate no data reported or data that do not meet publica-
tion criteria.
Truckdrivers, material handling laborers, and janitors were numerically the most important among the custodial and material movement jobs studied. Earnings of truckdrivers ranged from $\$ 1.59$ in Lubbock to $\$ 2.82$ in San Francisco-Oakland, with average rates over $\$ 2.25$ in 31 areas. There were about 187,000 material handling laborers in the 60 areas, and their average hourly earnings ranged from $\$ 1.24$ in Greenville to $\$ 2.44$ in San Francisco-Oakland. Average hourly earnings of men janitors ranged from $\$ 1.03$ in Jackson to $\$ 2.19$ in Akron, with about 145,000 workers coming under study in the 60 areas.

## Pay Variations in Occupational Earnings

Individual earnings ${ }^{3}$ varied considerably not only among occupations and labor markets but also within the same occupations and labor markets. Earnings presented are averages and do not indicate either the wide range of earnings that may occur within a given occupation or the overlapping of pay rates among occupations, industry
divisions, and labor markets. The averages may approximate the actual earnings of only a few of the workers. In order to better understand and
use the averages, it is necessary to note individual earnings. For example, although stationary engineers in Albany-Schenectady-Troy averaged

Table 3. Averagt Hourly Earnings ${ }^{1}$ for Men in 14 Plant Occupations, 60 Areas, Winter 1959-60 2


1 Average hourly earnings are straight-time hourly earnings, excluding
premium pay for overtime and for work on weekends, holidays, and late premium pay for overtime and for work on weekends, holidays, and late hifts.
${ }_{2}$ For survey months, see footnote 2 , table 1.
${ }^{3}$ Other than in tool and die jobbing shops.
Note: Dashes indicate no data reported or data that do not meet publica-
tion criteria.
$\$ 2.54$ an hour, nearly two-thirds were earning less than $\$ 2.50$ an hour and most of the remainder were earning more than $\$ 2.80$ an hour. In Detroit, on the other hand, tool and die makers averaged $\$ 3.28$, with earnings of 82 percent of the workers concentrated between $\$ 3.20$ and $\$ 3.40$ an hour.

Part of the spread in rates for the same job within an area and in average earnings between areas is due to different distributions of workers by industry. Each of the 60 areas has a wide variety of industries that differ in level of rates paid and in their employment of workers in the jobs studied. Manufacturing industries employed more than half of the workers within the scope of the surveys in 38 of the 60 areas studied. ${ }^{4}$ Nearly all of the areas surveyed in the Northeast and North Central regions were predominantly industrial. Nonmanufacturing industries dominated employment in Boston and New York City in the Northeastern region and Des Moines and Kansas City in the North Central region. On the other hand, manufacturing firms employed more than half of the workers in only 2 of 8 Western areas and 7 of the 19 Southern areas studied. In general, average earnings of plant and office workers tended to be higher in manufacturing than in nonmanufacturing industries. However, each of the broad divisions includes a wide variety of industries with different pay levels. A majority of the manufacturing workers in Beaumont-Port Arthur and Charleston were employed in relatively high-wage industries-oil refineries in the former and chemicals in the latter. Such nonmanufacturing industries as public utilities and wholesale trade are characterized by pay levels that frequently equal or exceed manufacturing averages

[^22]for comparable work in the same area. For example, accounting clerks (class A) in manufacturing establishments in Philadelphia averaged $\$ 94.50$ weekly, somewhat above the areawide average of $\$ 92$. In public utilities in Philadelphia, accounting clerks (class A) averaged $\$ 111$ a week.

Because of the spread or variation in individual earnings within an area, it is commonplace to find some workers in jobs requiring lesser skill or training who receive higher salaries or average hourly earnings than those in jobs requiring higher skills. For example, in Chicago, secretaries averaged $\$ 94.50$ a week in manufacturing compared with an average of $\$ 66.50$ for typists (class B) in this industry group. Nevertheless, nearly 12 percent of the typists (class B) were earning $\$ 75$ or more, while 15 percent of the secretaries in the area were earning $\$ 75$ or less. This overlap in individual earnings is also common among areas and industry groups which have widely divergent average earnings levels.

## Differences in Pay Rates for Men and Women

With few exceptions, areawide averages for men exceeded those for women in the same job categories and areas. The average amounts by which men's average weekly salaries exceeded those of women were as follows: Accounting clerks (class A), $\$ 19.50$; accounting clerks (class B), $\$ 19$; order clerks, $\$ 22.50$; payroll clerks, $\$ 20.50$; tabulating-machine operators (class A), $\$ 6.50$; tabulating-machine operators (class B), $\$ 8$; tabu-lating-machine operators (class C), $\$ 5.50$; and office boys and girls, $\$ 3.50$. Among plant workers, men's average hourly earnings exceeded those of women as follows: janitors, porters, and cleaners, 31 cents; shipping packers, 36 cents; and passenger elevator operators, 20 cents. These are averages of pay differences from among the various areas in which comparable data were available; they do not represent a comparison of earnings in identical establishments. ${ }^{5}$

## Trends in Occupational Earnings, 1953-60

Average pay levels of women industrial nurses, skilled men maintenance workers, and unskilled men plant workers each increased 3.9 percent between the 1959 and 1960 surveys. ${ }^{6}$ Weekly salaries of women office workers increased 3.6 percent during this period.

Table 4. Indexes of Average Weekly or Hourly Earnings ${ }^{1}$ for Selected Occupational Groups Studied in 20 Labor Markets, ${ }^{2}$ 1954-60 ${ }^{3}$
[1953 $=100$ ]

| Occupational group and year | Northeast |  |  |  |  |  | South |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Boston | Buffalo | Newark and Jersey City | New York City | $\begin{aligned} & \text { Philadel- } \\ & \text { phia } \end{aligned}$ | $\begin{aligned} & \text { Provi- } \\ & \text { dence } \end{aligned}$ | Atlanta | Baltimore | Dallas | Memphis |
| Office workers (women): |  |  |  |  |  |  |  |  |  |  |
| 1954 | 105.2 108.3 | $\stackrel{(4)}{10}_{10.3}$ | 105.7 1098 | 104.3 108.0 | 107.1 110.8 | (4) | 103.0 105.2 | (4) 112.9 | 105.6 110.9 | 104.1 106.2 |
| 1956 | (4) | (4) ${ }^{\text {a }}$ | 114.0 | 114.3 | 114.6 | 113.0 | 111.8 |  | 115.3 | 113.2 |
| 1957. | 117.0 | 115.2 | (4) | 120.3 | 122.0 | (4) | 115. 6 | (4) | 122.0 | 118.0 |
| 1958 | 123.8 |  | 125.0 | 124.5 | 129.0 | (4) | 122.1 | 129.7 | ${ }_{131}^{127.6}$ | 120.8 |
| 1960 | 130.3 134.7 | 132.3 128.6 | 129.3 135.6 | 128.2 138.4 | 134.1 138.6 | 130.9 | 132.5 132.9 | 134.2 139.6 | 135.5 131.6 | 127.7 |
| Industrial nurses (women):-----------10.0 |  |  |  |  |  |  |  |  |  |  |
| 1954 | 106. 5 | ${ }^{(4)} 107$ | ${ }_{109.7}^{10.2}$ | 104.2 109.9 | 107.1 110.3 | (4) | 105.3 109.9 | (17) 117 | 99.2 106.8 | 114.3 114 |
| 1956 | ${ }_{\text {(4) }} 108.1$ |  | 111.2 | 115.5 | 115.1 | 114.5 | 119.8 |  | 109.8 | 121.0 |
| 1957 | 117.7 | 117.1 | (4) | 121.1 | 122.2 | (4) | 124.4 | (4) | 117.4 | 126.1 |
| 1958 | 123.4 | (5) | 126.1 | 126.8 | 130.2 | (1) | 131.3 | 132.8 | 122.7 | 130.3 |
| 1959 | 130.6 | 131.4 | 132.1 | 131.0 | 134.9 | (1) | 137.4 | 139.1 | 127.3 | 134.5 |
| 1960.... | 136.3 | 136.4 | 136.6 | 135.9 | 142.1 | 124.8 | 143.5 | 146.1 | 130.3 | 140.3 |
| Skilled maintenance workers (men): 10 (4) 1005 |  |  |  | 104.5 | 107.2 | (4) | 105.3 |  | 105.9 |  |
| 1955 | 107.2 | 106.7 | 109.5 | 109.7 | 111.9 | (5) | 108.3 | 115.7 | 109.9 | 106.5 |
| 1956 | (4) | (4) | 115.4 | 113.4 | 116.4 | 113.8 | 114.1 | (1) | 115.0 | 115.2 |
| 1957 | 116.4 | 119.5 | ${ }^{(4)}$ | 117.7 | 122.5 | (1) | 119.1 | (4) | 119.4 | 121.4 |
| 1958 | 122.5 | ${ }^{(5)}$ | 127.4 | 122.7 | 128.8 | (4) | 1131.4 | 134.5 <br> 114.6 | 1124.2 | 129.0 |
| 1959 | 129.1 | 131.3 136.2 | 132.3 137.4 | 133.6 128.1 | 132.9 139.7 | $\stackrel{(4)}{135.0}$ | 131.5 136.7 | 141.6 146 | 131.8 137.6 | 131.9 137.1 |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| 1955 | ${ }_{\text {(4) }} 107.6$ | ${ }_{(4)}^{107.6}$ | 111.5 | 108.1 113.5 | 115.5 | 110.5 | 122.6 | (1) ${ }^{\text {(1). }}$ | 112.1 | 117.2 |
| 1957 | 114.4 | 118.2 | (4) | 119.6 | 120.9 | (4) | 128.6 | (4) | 116.6 | 125.6 |
| 1958 | 119.7 | (8) ${ }^{\text {c }}$ | 128.4 | 125.1 | 118.1 | ${ }^{(4)}$ | 135.7 | 140.0 143.6 | 123.5 130.6 1 | 131.2 132.4 |
| 1959 | 128.2 133.3 | 132.4 136.8 | 134.7 138.9 | 130.4 136.1 | 134.5 140.8 | $\stackrel{4}{128.3}$ | 137.1 139.3 | 143.6 151.5 | 134.1 <br> 130.6 | 133.9 |
| Number of months between 1953 and 1960 studies |  |  |  | 86 | 85 | 87 | 87 | 83 | 86 | 84 |
|  | 79 | 78 | 87 |  |  |  |  |  |  |  |
| Occupational group and year | North Central |  |  |  |  |  | West |  |  |  |
|  | Chicago | Cleve- land | $\underset{\text { City }}{\text { Kansas }}$ | $\underset{\text { kee }}{\text { Milwau- }}$ | $\begin{gathered} \text { Minneap- } \\ \text { olis-St. } \\ \text { Paul. } \end{gathered}$ | St. Louis | Denver | $\begin{gathered} \text { Los Ange- } \\ \text { les-Long } \\ \text { Beach } \end{gathered}$ | Portland | $\begin{gathered} \text { San Fran- } \\ \text { cisco- } \\ \text { Oakland } \end{gathered}$ |
| Office workers (women): |  |  |  |  |  |  |  |  |  |  |
| ${ }_{1955}^{1954}$--...------ | 105.8 109.5 | ${ }^{(4)} 110.3$ | (4) | ${ }_{(4)}^{104.5}$ | 106.3 109.9 | 105.7 110.1 | 105.7 108.8 | 104.6 108.4 | 104.7 110.3 | 104.4 107.6 |
| 1956 | 114.3 | (4) |  | 110.1 | 114.1 | 114.7 | 113.3 | 113.5 | 116.0 | 111.7 |
| 1957 | 120.5 | ${ }_{131.0}^{122.0}$ | ${ }_{\text {(1) }}^{123.6}$ | (5) | ${ }_{1250}^{121.3}$ | (0) | (125. 8 | 124.5 120.5 | 122.3 | 1183.3 |
| 1958 | 129.9 | ${ }_{(1)}^{131.9}$ |  | 128.7 | 129.2 | 128.9 | 130.4 | 130.2 | 130.3 | 129.2 |
| 1960 | 133.6 | 136.7 | 138.0 | 133.4 | 133.3 | 134.6 | 135.5 | 135.7 | 135.1 | 132.8 |
| Industrial nurses (women): |  |  |  |  |  |  |  |  |  |  |
| 1955---------- | 105.9 110.3 | ${ }_{112.0}$ | (4) | ${ }_{\text {(4) }} 105$ | 111.2 | 109.4 1096 | 1108.0 | 105.4 108.1 | 101.6 108.5 | 104.3 110.9 |
| 1956. | 116.9 | (6) |  | 115.0 | 118.1 | 116.8 | 115.2 | 112.8 | 113.2 | 113.8 |
| 1957 | 122.8 | 124.8 | ${ }^{126.6}$ | (8) ${ }^{1315}$ | 124.4 | ${ }^{(8)} 128$ | ${ }_{129} 6$ | 119.5 125.5 | 115.5 | 129.0 |
| 1958 | 130.9 135.3 | ${ }_{(4)}^{138.3}$ |  | 137.0 | 133.9 | 136.0 | 132.0 | 130.2 | 131.8 | 136.2 |
| ${ }_{1960}^{1959}$ | 139.7 | 145.9 | 143.0 | 140.2 | 138.6 | 142.4 | 136.0 | 135.6 | 135.7 | 139.9 |
| Skilled maintenance workers (men):----- |  |  |  |  |  |  |  |  |  |  |
| 1954 | 106.3 | (4) 110 | (4) | ${ }_{\text {(4) }}^{105.9}$ | 106.6 110.2 | 107.1 110.5 | 1183.1 | 105.5 108.7 | ${ }_{109.6}^{105.5}$ | 104.0 106.5 |
| 1955 | 115.5 |  |  |  | 115.5 | 117.3 | 120.9 | 114.8 | 115.0 | 110.4 |
| 1957 | 121.3 | 121.9 | 124.8 | ${ }_{(5)}$ | 121.7 |  |  | 119.4 | 121.2 | 118.6 |
| 1958 | 127.6 | 130.5 | (4) | 128.2 | 126.7 | 129.0 | 135.2 | 125.7 | 128.3 | 125. 6 |
| ${ }_{1960}^{1959}$ | 133.6 137.4 | ${ }^{(4)} 139$ | ${ }_{1}^{(4)} 14$ | 133.2 139 | 132.6 137.1 | 134.4 140.1 | 140.6 146.6 | 132.5 136.8 | 134.0 138.9 | 132.2 136.0 |
| Unskilled plant workers (men): |  |  |  | $\text { 104. } 6$ | 106.4 | 108.5111.7 |  | 106.0109.8 | 104.9110.6 | 106.1109.3 |
|  |  |  |  |  |  |  | $\begin{aligned} & 108.0 \\ & 114.2 \end{aligned}$$123.8$ |  |  |  |
| 1955 | 1119.4 | ${ }_{124}^{(1)}$ | ${ }^{(424.3}$ | ${ }_{(6) 11}$ | 117.1124.6 | 116.6 |  | 113.6 | 113.9 |  |
| ${ }_{1957}^{1956}$ |  |  |  |  |  | (s) 11.6 | (4) <br> 137.3 <br> 13 | 119.6 | 119.1 | 113.2111.4125.9 |
| 1958 | 124.8 | (134.5 |  |  | 130.9 |  |  | 125.9 |  |  |
| 1959 | 124.8 130.6 |  | (4) ${ }_{134}$ | 131.2 134.5 | 133.4142.6 | 1271.5136.9 | 145.1153.0 | 132.3136.8 | 130.1135.4 | 133.4139.1 |
| 1960 | 133.8 | 142.1 | 134.9 | 134.5 |  |  |  |  |  |  |
| Number of months between 1953 and 1960 studies. | 85 | 83 | 87 | 84 | 86 | 83 | 85 | 86 | 92 | 84 |

${ }^{1}$ Average weekly earnings relate to standard salaries that are paid for standard work schedules. Average hourly earnings are straight-time hourly earnings, excluding premium pay for overtime and for work on weekends,
holidays, and late shifts.
${ }^{2}$ Limited to the 20 areas which were included in the 1960 studies and also surveyed in 1953, the base year of the indexes.
${ }^{3}$ Fiscal years ending June 30.
Not surveyed this period.
${ }^{5}$ Surveys were limited to plant workers in manufacturing industries in Milwaukee and to plant workers in manufacturing and public utilities industries in Buffalo and St. Louis.

For 11 areas ${ }^{7}$ which have been studied in each year since 1957, median area increases for the four groups were as follows:

|  | Percent increases |  |  |
| :---: | :---: | :---: | :---: |
|  | 1957-58 | 1958-59 | 1959-60 |
| Women office workers | 4. 3 | 3. 4 | 3. 4 |
| Women industrial nurses | 5. 1 | 3. 7 | 3. 8 |
| Men skilled maintenance workers. | 5. 3 | 4. 6 | 3. 9 |
| Men unskilled plant worke | 5. 2 | 4. 9 | 3.9 |

For the 20 areas studied in both 1959 and 1960, increases in earnings ranged as follows: Women office workers, from 2.1 percent in New Orleans to 5.1 percent in Seattle; women industrial nurses, from 2.3 percent in Milwaukee to 7.1 percent in New Orleans; skilled maintenance men, from 0.9 percent in New Orleans to 5.1 percent in Philadelphia; and for unskilled men plant workers, from 0.1 percent in New Orleans to 5.7 percent in Seattle (table 4).

Over the 7-year period between 1953 and 1960, median increases in all-industry average earnings for workers in the four occupational groups considered ranged from 34.6 percent for women office workers to 38.6 percent for industrial nurses in the 20 areas which were studied in both 1953 and 1960. Larnings of unskilled plant and skilled maintenance groups increased 36.8 and 37.4 percent, respectively.

Percentage increases in earnings levels over the 7 -year period varied substantially among areas. (See table 4.) Increases for women office workers ranged from 27.7 percent in Memphis to 39.6 percent in Baltimore. The greatest interarea variation in increases for the same job group occurred among unskilled plant workers: from 28.3 percent in Providence to 53.0 percent in Denver.

The length of the " 7 -year period" varied among areas. Correction for this variation was made possible by computing for each area the average 12 -month rate of increase for each of the four groups over the span of survey study. Twelvemonth average increases in the salaries of women office workers varied from 3.6 percent in Memphis to 5.0 percent in Detroit. Earnings of women industrial nurses showed an average 12 -month rate of increase ranging from 3.1 percent in Providence to 5.6 percent in Baltimore and Cleveland.

[^23]Increases for skilled maintenance men ranged from a 12 -month average of 4.1 percent in New York to 6.1 percent in New Orleans. Earnings of men unskilled plant workers increased at a 12 -month average rate ranging from 3.5 percent in Providence to 6.2 in Baltimore and Denver. Median area 12 -month average increases for the four groups were as follows: Women office workers, 4.4 percent; women industrial nurses, 4.9 percent; skilled maintenance men, 4.6 percent; and unskilled men plant workers, 4.6 percent.

The highest percentage increases in earnings did not necessarily result in the highest increases in terms of cents per hour. For example, from 1953 to 1960, the earnings of unskilled plant workers rose 39.3 percent in Atlanta and 36.8 percent in Los Angeles-Long Beach. These percentage increases were equivalent to about 48 cents in Atlanta and 55 cents in Los Angeles-Long Beach. Thus even though the percentage differential in earnings for unskilled plant workers in these areas narrowed during this period, the cents-per-hour differential increased.

Among the 20 areas which were studied in both 1953 and 1960, percentage differences between earnings of skilled maintenance men and unskilled men plant worker groups varied from an increase of more than 3 percent in Providence to a decrease of more than 3 percent in Kansas City, compared with 1953 percentage differences. Differentials between the skilled and unskilled groups have narrowed in 11 areas and increased in 9 areas. Cents-per-hour differences, however, increased in all areas over this period.

On the whole, there was great similarity between the relative wage or salary increases for workers in manufacturing establishments and the relative increases for all industries shown in table 4. With few exceptions, differences in relative increases over the 7 -year period between manufacturing and areawide earnings were less than 2 percentage points. It should be noted that most industrial nurses and the great majority of the skilled maintenance workers, for example, were employed in manufacturing industries. The few instances of wide differences between manufacturing and areawide earnings increases can be traced to situations where nonmanufacturing employment predominates.

-John H. Hawkes<br>Division of Wages and Industrial Relations

## Wages in Nonferrous Foundries, May 1960

Earnings of production workers in nonferrous foundries in May 1960 averaged $\$ 2.29$ an hour, exclusive of premium pay for overtime and for work on weekends, holidays, and late shifts, according to a survey conducted by the Bureau of Labor Statistics. ${ }^{1}$ Straight-time hourly earnings of the middle half of the workers ranged from $\$ 1.94$ to $\$ 2.60$. Men, accounting for slightly more than nine-tenths of the 46,258 production workers, averaged $\$ 2.32$ an hour, women averaged $\$ 1.93$.

Among the five regions ${ }^{2}$ for which separate data are presented, average hourly earnings were highest in the Pacific region (\$2.40) and lowest in the Middle West (\$2.04). Half of the workers in the industry were concentrated in the Great Lakes region; as a group, they averaged $\$ 2.35$ an hour. Highest average earnings among eight labor markets studied separately ${ }^{3}$ were recorded in Detroit (\$2.43); the lowest were found in New York City (\$2.09).

Men wood patternmakers, the highest paid of the occupational groups studied separately, averaged $\$ 3.52$ an hour; watchmen, at $\$ 1.61$ an hour, had the lowest average. Machine molders, numerically the most important molder category, averaged $\$ 2.57$.

The study also provides separate wage data by size of community (metropolitan and nonmetropolitan areas) and size of establishment, by major type of metal and major method of production, and by unionization. Information is also presented on hours of work, shift differentials, and selected supplementary benefits such as paid holidays and vacations, and health, insurance, and pension plans.

## Industry Characteristics

The nonferrous foundry industry group includes establishments primarily engaged in manufacturing castings and diecastings of nonferrous metals and alloys. These establishments generally operate on a job or order basis, manufacturing castings for sale to others or for interplant transfer. Establishments within the scope of the Bureau's study employed an estimated 46,258 production and related workers in May 1960.4

Shipments by foundries producing nonferrous castings for sale totaled 1,424 million pounds in 1959. ${ }^{5}$ Of this total, about 546 million pounds were aluminum or aluminum-base alloy; 402 million pounds, copper or copper-base alloy; 443 million pounds, zinc or zinc-base alloy; 23 million pounds, magnesium or magnesium-base alloy; and 10 million pounds, lead or lead-base alloy.

Five principal casting methods, based primarily on different types of molds, are used by the industry. Most foundries employ a single method; however, two or more methods were reported by foundries employing about a third of the production workers covered by the study. Sandcasting was the principal method in foundries employing 45 percent of the industry's work force in May 1960. In this method, sand is packed in a container (called a flask) around a pattern of the object to be cast. The pattern is removed and molten metal is poured into the mold cavity to form the desired shape. The sand mold can be used only once.
Diecasting, another common method, is a machine process in which molten metal is forced under high pressure into steel dies from which the resulting castings are automatically ejected. Diecasting plants accounted for 37 percent of the production workers within the scope of the survey.
Permanent mold casting, a third method, induces molten metal into metal molds (which may be used repeatedly) by force of gravity or centrif-

[^24]ugal force. Twelve percent of the production workers were employed in plants primarily engaged in producing permanent mold castings.

Investment casting and shell molding, the two remaining principal methods employed by the industry, accounted for only a small proportion of the work force. Investment casting utilizes ceramic molds made by coating a wax or plastic pattern with refractory clay. After the coating hardens, the wax is melted out leaving a mold cavity into which the casting metal is poured. In shell molding, resin-bonded sand shells made from master metal patterns replace green sand molds. The advantages of both methods are greater precision and good surface finish.

Separate earnings data were developed for the three major casting methods. As illustrated in the tabulation below, the relative importance of these casting methods differed substantially according to the type of metal cast.

|  | Percent of workers in foundries primarily producing castings of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\underset{\text { num }}{\text { Alumi- }}$ | Brass, bronze, copper | $\begin{gathered} \text { Magne- } \\ \text { sium } \end{gathered}$ | $\begin{aligned} & \text { Other } \\ & \text { metals }_{1} \end{aligned}$ |
| Sandcasting | 40 | 87 | 100 | 5 |
| Diecasting | 36 | 5 | ---- | 78 |
| Permanent mold casting | 20 | 7 | ---- | 2 |
| Other | 4 | 1 | ---- | 15 |
| Total | 100 | 100 | 100 | 100 |

${ }_{1}$ Primarily zinc.
Note: Because of rounding, sums of individual items may not equal 100.
The Great Lakes region accounted for half of the production workers within the scope of the survey. A fourth were employed in the Middle Atlantic region and about a tenth in the Pacific region. Approximately four-fifths of the workers were employed in metropolitan areas. ${ }^{6}$ Among the five regions for which separate data are presented, the proportions of workers in metropolitan areas varied from about three-fourths in the Great Lakes region and the Middle West to all in the Pacific region. The eight local labor markets studied separately accounted for slightly more than a third of all production workers.

The industry is predominantly composed of comparatively small establishments. Foundries with fewer than 250 workers accounted for nearly three-fourths of all production workers studied; no establishment reported as many as 2,500 employees. The proportion of workers in three

[^25]establishment-size groups differed by predominant type of metal cast, as follows:

|  | Percent of workers in establishments primarily producing castings of |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Alumi- | Brass, bronze copper | $\begin{gathered} \text { Magne- } \\ \text { sium } \end{gathered}$ | $\begin{aligned} & \text { Other } \\ & \text { metals }{ }^{1} \end{aligned}$ |
| 8-49 workers | 30 | 55 | 9 | 11 |
| 50-249 workers | 43 | 37 | 54 | 38 |
| 250 or more workers | 27 | 7 | 37 | 52 |
| Total | 100 | 100 | 100 | 100 |

${ }^{1}$ Primarily zinc.
Note: Because of rounding, sums of individual items may not equal 100.
Establishments with collective bargaining agreements covering a majority of their workers employed nearly three-fifths of the industry's production workers in May 1960. Approximately a third of the workers in New England were employed in plants with such contract coverage. In the other four regions for which data are presented, the proportions varied from about half in the Pacific region to seven-tenths in the Middle West. The proportion of workers covered by union contracts was virtually the same in metropolitan and nonmetropolitan areas-slightly more than half. In plants employing 250 or more workers, the proportion was about three-fourths, compared with three-fifths and one-third, respectively, in the two smaller size groups (50-249) and (8-49). In each of the major regions, union contract coverage was more prevalent in the larger establishments than in smaller establishments. Plants with a majority of their workers covered by union contracts accounted for about half of the workers in aluminum foundries, fourfifths in magnesium foundries, and approximately three-fifths in brass, bronze, and copper foundries and in establishments primarily producing castings of other nonferrous metals.

Women accounted for about 7 percent of the production workers in the industry; about 10 percent in the Great Lakes, Middle West, and Pacific regions, and less than 5 percent in the other two regions. Among the eight labor market areas studied separately, the proportions ranged from 15 percent in Detroit to less than 5 percent in Newark and Jersey City and Philadelphia.

Earnings of approximately a fifth of the production workers were based on incentive wage plans. The proportions varied from less than 5 percent in the Middle West and Pacific regions to about 30 percent in the New England and Middle Atlantic regions.

Table 1. Number and Average Straight-Time Hourly Earnings ${ }^{1}$ of Production Workers in Nonferrous Foundries, by Selected Characteristics, United States and Selected Regions, ${ }^{2}$ May 1960

| Item | United States ${ }^{3}$ |  | New England |  | Middle Atlantic |  | Great Lakes |  | Middle West |  | Pacific |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number workers | Average hourly earnings ${ }^{1}$ | Number workers | Average hourly earnings ${ }^{1}$ | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { workers } \end{gathered}$ | Average hourly earnings ${ }^{1}$ | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { workers } \end{gathered}$ | Average hourly earnings ${ }^{1}$ | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { workers } \end{gathered}$ | Average hourly earnings ${ }^{1}$ | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { workers } \end{gathered}$ | A verage hourly earnings ${ }^{1}$ |
| All production workers | 46, 258 | \$2. 29 | 3, 015 | \$2.08 | 11, 561 | \$2. 30 | 23,433 | \$2. 35 | 1,748 | \$2.04 | 4,408 | \$2. 40 |
| Men.------------1. | 42, 990 | 2. 32 | 2,915 | 2. 10 | 11, 292 | 2. 31 | 21, 153 | 2. 38 | 1,583 | 2.06 1.85 | 3, 9997 | 2.47 1.67 |
| Wize of establishment: | 3,268 | 1.93 | 100 | 1.54 | 269 | 1.94 | 2,280 | 2.01 | 165 | 1.85 | 411 | 1. 67 |
| 8-49 workers | 13,945 | 2.13 | 1,036 | 1.95 | 3,127 | 2.11 | 5,703 | 2.14 | 623 | 1.83 | 2, 063 | 2. 51 |
| 50-249 workers | 19, 065 | 2. 22 | 1,520 | 1.98 | 4,581 | 2.23 | 8,794 | 2.26 | 1,125 | 2.15 | 2,345 | 2.29 |
| 250 or more workers | 13,248 | 2. 56 |  |  | 3,853 | 2. 55 | 8,936 | 2.56 |  |  |  |  |
| Size of community: <br> Metropolitan areas ${ }^{4}$. | 37, 501 | 2.29 | 2, 629 | 2.11 | 9,886 | 2. 30 | 17, 135 | 2. 35 | 1,350 | 2.15 | 4,408 | 2.40 |
| Nonmetropolitan areas.--- | 8,757 | 2.28 | 386 | 1.89 | 1,675 | 2.31 | 6,298 | 2.33 | 398 | 1.68 |  |  |
| Major type of metal: <br> Aluminum | 21,845 | 2.28 | 1,918 | 2.08 | 5,351 | 2.40 | 10, 896 | 2.33 | 810 | 1.86 | 2,073 | 2. 30 |
| Brass, bronze, copper 6 | 10, 474 | 2.27 | 1,804 | 2.16 | 3,831 | 2. 17 | 3, 638 | 2.31 | 316 | 2.07 | 1,089 | 2.71 |
| Magnesium | 2,474 | 2.46 |  |  | 559 | 2. 52 | 1,153 | 2.55 |  |  | 498 | 2.48 |
| Major method of production: ${ }^{7}$ | 20,862 | 2.24 | 1,609 | 2.06 | 6,283 | 2.23 | 8,301 | 2.29 | 810 | 1.93 | 2,084 |  |
| Diecasting | 17, 299 | 2. 33 | 1,875 | 2.08 | 3,973 | 2. 52 | 9, 923 | 2. 32 | 716 | 2.17 | 1, 576 | 2. 20 |
| Permanent mold casting-- | 5,376 | 2. 41 |  |  | 925 | 2.16 | 3, 344 | 2. 50 | 222 | 2.03 | 572 | 2. 26 |
| Unionization: |  |  |  |  |  |  |  |  |  |  |  |  |
| Establishments with- <br> Majority covered | 25, 977 | 2. 42 | 978 | 2. 39 | 7, 561 | 2. 44 | 13,481 | 2.43 | 1,218 | 2.14 | 2,122 | 2. 59 |
| None or minority | 20,281 | 2.13 | 2,037 | 1.93 | 4,000 | 2.05 | 9, 952 | 2.23 | 530 | 1.81 | 2, 286 | 2.22 |

${ }^{1}$ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.
${ }_{2}$ The regions used in the study include: New England-Connecticut, Maine, Massachusetts, New Hamsphire, Rhode Island, and Vermont; Middle Atlantic-New Jersey, New York, and Pennsylvania; Great LakesMlinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin; Middle WestIowa, Kansas, Missouri, Nebraska, North Dakota, and South Dakota; and Pacific-California, Nevada, Oregon, and Washington.
Pacific-California, Nevada, Oregon, and $\begin{aligned} & \text { Includes data for regions in addition to those shown separately. }\end{aligned}$.
"The term "metropolitan area" as used in this study refers to the Standard

## Average Hourly Earnings

Production workers in nonferrous foundries averaged $\$ 2.29$ an hour in May 1960, exclusive of premium pay for overtime and for work on weekends, holidays, and late shifts (table 1). The estimated 42,990 men in the industry averaged $\$ 2.32$ an hour, compared with $\$ 1.93$ for the 3,268 women. Earnings of production workers in the Great Lakes region, where the industry is most heavily concentrated, averaged $\$ 2.35$ an hour. In the other four regions for which separate data are presented, average hourly earnings ranged from $\$ 2.04$ in the Middle West to $\$ 2.40$ in the Pacific region.

Individual earnings ranged from $\$ 1$ to more than $\$ 3.50$ an hour (table 2). In the earnings array, earnings of the middle half of the workers ranged from $\$ 1.94$ to $\$ 2.60$. In the two major regions, the Great Lakes and Middle Atlantic, earnings of the middle half ranged from $\$ 2.04$ to $\$ 2.62$ and $\$ 1.89$ to $\$ 2.64$, respectively.

Earnings of production workers in establishments employing 250 or more workers averaged $\$ 2.56$ an hour, compared with $\$ 2.22$ for those in establishments with 50 to 249 workers and $\$ 2.13$ in plants with 8 to 49 workers. In the Great

Metropolitan Statistical Areas established under the sponsorship of the U.S Bureau of the Budget.
${ }^{5}$ The survey included establishments processing other types of metal in addition to those shown separately.
${ }^{6}$ Includes other copper-base alloys.
7 The survey included establishments employing other methods of production in addition to those shown separately.
Note: Dashes indicate no data reported or data that do not meet publica tion criteria.

Lakes region, the average hourly earnings of workers in these three establishment-size groups were $\$ 2.56, \$ 2.26$, and $\$ 2.14$, and in the Middle Atlantic region, their earnings were $\$ 2.55, \$ 2.23$, and $\$ 2.11$, respectively.

Average hourly earnings for production workers were virtually the same in metropolitan and nonmetropolitan areas in the Great Lakes region ( $\$ 2.35$ and $\$ 2.33$ ) and the Middle Atlantic region ( $\$ 2.30$ and $\$ 2.31$ ), as well as nationwide ( $\$ 2.29$ and $\$ 2.28$ ). In the New England and Middle West regions, however, wage advantages of 22 and 47 cents, respectively, were recorded for workers in metropolitan areas.

There was little difference in the average hourly earnings of workers in foundries primarily engaged in producing aluminum castings and those producing brass, bronze, and copper castings, either nationwide ( $\$ 2.28$ and $\$ 2.27$ ) or in the Great Lakes region (\$2.33 and \$2.31, respectively). In the remaining regions, differences were greater.

In foundries principally engaged in the sandcasting method of production, workers averaged $\$ 2.24$ an hour; in diecasting plants, $\$ 2.33$; and in establishments primarily producing permanent-
mold castings, $\$ 2.41$. The relationship differed considerably among the regions; for example, in the Middle Atlantic region, hourly earnings of workers in these types of foundries averaged $\$ 2.23$, $\$ 2.52$, and $\$ 2.16$ and in the Pacific region, $\$ 2.63$, $\$ 2.20$, and $\$ 2.26$, respectively.

Production workers in establishments with union contracts averaged $\$ 2.42$ an hour, compared with $\$ 2.13$ in establishments in which none or a minority of the workers were covered by such contracts. Regionally, workers in union establishments had a wage advantage ranging from 20 cents in the Great Lakes region to 46 cents in New England.

In considering the wage differences noted in the preceding paragraphs, it must be emphasized that the exact influence of any one characteristic cannot be fully isolated. For example, as indicated earlier, wages in nonferrous foundries tend to be higher in large establishments than in small establishments. Large establishments tend to be more highly unionized and to make greater use of incentives. Size, unionization, method of wage payment, and possibly other characteristics, such as location and method of production, may all play a role in the determination of wage levels.

In a study such as this, their separate influence cannot be disentangled.

Production workers' hourly earnings averaged $\$ 2.43$ in Detroit, $\$ 2.41$ in Newark and Jersey City, $\$ 2.36$ in Chicago, $\$ 2.34$ in Milwaukee, $\$ 2.30$ in Cleveland, $\$ 2.24$ in Los Angeles-Long Beach, $\$ 2.23$ in Philadelphia, and $\$ 2.09$ in New York City.

## Occupational Averages

Wages for occupational classifications accounting for slightly more than half of the production workers were studied separately (table 3). Men wood patternmakers had the highest average earnings, $\$ 3.52$ an hour. Other occupational groups with average hourly earnings above $\$ 2.75$ included tool and die makers (\$3.12), maintenance electricians ( $\$ 2.82$ ), and millwrights ( $\$ 2.80$ ). Lowest average earnings, $\$ 1.61$ an hour, were recorded for watchmen. Nearly 3,300 workers were employed as diecasting-machine operators1,290 who set up and operated the machines averaged $\$ 2.52$ an hour; 1,986 operators who did not set up the machines averaged $\$ 2.43$. The floor, hand bench, and machine molders, accounting

Table 2. Percentage Distribution of Production Workers in Nonferrous Foundries, by Average StraightTime Hourly Earnings, ${ }^{1}$ United States and Selected Regions, ${ }^{2}$ May 1960

| Average hourly earnings ${ }^{1}$ | United States ${ }^{3}$ |  |  | New England | Middle Atlantic | Great Lakes | $\begin{gathered} \text { Middle } \\ \text { West } \end{gathered}$ | Pacific |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Men | Women |  |  |  |  |  |
| \$1.00 and under \$1.10 | 0.2 | 0.2 | 0.3 | 0.9 | 0.1 | 0.1 | 0.5 | (4) |
| \$1.10 and under \$1.20 | . 4 | . 4 | . 7 | 1.3 | . 2 | . 2 | . 6 | 0.1 |
| \$1.20 and under \$1.30 | . 8 | . 7 | 2.7 | 1.3 | .2 | . 5 | 2.3 | . 7 |
| \$1.30 and under \$1.40 | 1.3 | 1.0 | 5. 8 | 2.3 | . 6 | . 9 | 1.9 | . 5 |
| \$1.40 and under \$1.50 | 2.1 | 1.9 | 5.1 | 4.3 | 3.3 | 1.1 | 4.7 | 1.2 |
| \$1.50 and under \$1.60 | 3.1 | 2.9 | 6.8 | 4.9 | 4.3 | 1.7 | 8.3 | 3.0 |
| \$1.60 and under \$1.70 | 3.5 | 3.3 | 6.0 | 8.6 | 4.1 | 2.2 | 2. 2 | 3. 5 |
| \$1.70 and under \$1.80 | 5.8 | 5.5 | 9.2 | 6.6 | 6.8 | 4.8 | 7.6 | 4.6 |
| \$1.80 and under \$1.90 | 5.5 | 5.3 | 8.2 | 11.2 | 6.1 | 4.2 | 8.7 | 5.0 |
| \$1.90 and under \$2.00 | 6.5 | 6.5 | 6.8 | 7.2 | 6.4 | 6.6 | 10.8 | 4.9 |
| \$2.00 and under \$2.10 | 7.0 | 6.7 | 11.6 | 9.3 | 6. 5 | 7.0 | 8.4 | 6.2 |
| \$2.10 and under \$2.20 | 7.5 | 7.3 | 11.1 | 4.7 | 7.3 | 8.3 | 5.3 | 9.6 |
| \$2.20 and under \$2.30 | 8.2 | 8.3 | 7.0 | 5.5 | 6.5 | 9.7 | 3.5 | 9.1 |
| \$2.30 and under \$2.40 | 9.1 | 9.1 | 9.0 | 5.3 | 7.6 | 10.7 | 19.3 | 5.5 |
| \$2.40 and under \$2.50 | 7.8 | 8.1 | 4.6 | 4.7 | 9.1 | 7.7 | 2.7 | 9.2 |
| \$2.50 and under \$2.60 | 6.1 | 6.5 | 1.6 | 4.0 | 4.4 | 7.8 | 4.0 | 5.3 |
| \$2.60 and under \$2.70 | 4.6 | 4.9 | . 9 | 2.5 | 3.7 | 5.5 | 3.8 | 5.6 |
| \$2.70 and under \$2.80 | 4.0 | 4.2 | 1.2 | 4.4 | 3. 7 | 4.5 | . 9 | 3.2 |
| \$2.80 and under \$2.90 | 3.1 | 3.3 | . 5 | 3.3 | 3.3 | 3.4 | 1.0 | 2.0 |
| \$2.90 and under $\$ 3.00$ | 2.7 | 2.9 | . 5 | 2.0 | 2.6 | 2.7 | . 7 | 5.2 |
| \$3.00 and under \$3.10 | 3.3 | 3.5 | . 1 | 3.0 | 3.0 | 3.5 | 1.8 | 4.8 |
| \$3.10 and under $\$ 3.20$ | 2.1 | 2.2 | . 2 | . 5 | 3.2 | 1.8 | . 2 | 3.0 |
| \$3.20 and under \$3.30 | 1.3 | 1.4 | . 1 | . 8 | 1.7 | 1.5 | . 1 | . 9 |
| \$3.30 and under \$3.40 | . 9 | 1.0 | (4) | . 1 | 1.1 | 1.0 | . 5 | . 6 |
| \$3.40 and under \$3.50 | - 6 | - 7 | . 1 | . 1 | . 8 | . 6 |  | 1.3 |
| \$3.50 and over.---. | 2.3 | 2.5 | . 1 | 1.1 | 3.4 | 1.8 | . 1 | 4.8 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of workers. | 46, 258 | 42,990 | 3,268 | 3,015 | 11,561 | 23,433 | 1,748 | 4,408 |
| Average hourly earnings ${ }^{1}$ - | \$2. 29 | \$2.32 | \$1.93 | \$2.08 | \$2.30 | \$2.35 | \$2.04 | \$2.40 |

[^26][^27]580795-61-5
for a total of 3,929 workers, had average hourly earnings of $\$ 2.59, \$ 2.43$, and $\$ 2.57$, respectively. The 3,877 men chippers and grinders averaged $\$ 2$ an hour.

Women chippers and grinders and routine (class C) inspectors, accounting for nearly a fourth of all women production workers, averaged $\$ 2.06$ and $\$ 1.82$, respectively.

Average hourly earnings of workers in the selected occupations in the Middle Atlantic, Great Lakes, and Pacific regions were generally equal to or higher than the national averages; the New England and Middle West averages were usually below the national levels. Among the eight labor market areas studied separately, occupational averages for machine molders ranged from $\$ 2.31$ an hour in Detroit to $\$ 2.95$ in Milwaukee; floor molders' averages ranged from $\$ 2.46$ in Philadelphia to $\$ 2.91$ in Los Angeles-

Long Beach; and chippers' and grinders' averages ranged from $\$ 1.84$ in Los Angeles-Long Beach to $\$ 2.29$ in Cleveland.
Information on occupational earnings was also developed by establishment size, community size, type of metal cast, primary method of production, and labor-management contract status, and is presented separately in the comprehensive report. In most occupations, highest averages were recorded for workers in the larger establishments, in the larger communities, and in establishments having union contracts. Occupational averages in foundries producing brass, bronze, or copper castings were typically higher than those in aluminum foundries, but lower than those in magnesium foundries.
Incentive-paid workers typically had higher occupational average hourly earnings than workers paid time rates. For example, in the Great

Table 3. Number and Average Stratght-Time Hourly Earnings ${ }^{1}$ of Production Workers in Selected Occupations in Nonferrous Foundries, United States and Selected Regions, ${ }^{2}$ May 1960

| Occupation and sex | United States ${ }^{3}$ |  | New England |  | Middle Atlantic |  | Great Lakes |  | Middle West |  | Pacific |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\left\lvert\, \begin{gathered} \text { Number } \\ \text { of } \\ \text { workers } \end{gathered}\right.$ | A verage hourly earnings ${ }^{1}$ | $\left\|\begin{array}{c} \text { Number } \\ \text { of } \\ \text { workers } \end{array}\right\|$ | Average hourly earnings ${ }^{1}$ | $\left\|\begin{array}{c} \text { Number } \\ \text { of } \\ \text { workers } \end{array}\right\|$ | Average hourly earnings ${ }^{1}$ | $\left\|\begin{array}{c} \text { Number } \\ \text { of } \\ \text { workers } \end{array}\right\|$ | Average hourly earnings | $\left\|\begin{array}{c} \text { Number } \\ \text { of } \\ \text { workers } \end{array}\right\|$ | $\begin{aligned} & \text { A verage } \\ & \text { hourly } \\ & \text { earnings 1 } \end{aligned}$ |  | Average hourly earnings ${ }^{1}$ |
| Men |  |  |  |  |  |  |  |  |  |  |  |  |
| Chippers and grinders. | 3,877 | \$2.00 | 491 | \$1. 86 | 878 | \$2.02 | 1,719 | \$2. 11 | 174 | \$1. 74 | 397 | \$1.99 |
| Core assemblers and finishers | , 469 | 2.24 | 43 | 2.05 | 118 | 2. 21 | 272 | 2. 28 |  |  | 29 | 2. 27 |
| Coremakers, hand - | 1,156 | 2. 36 | 80 | 2. 25 | 305 | 2.22 | 454 | 2.37 | 15 | 2.25 | 199 | 2. 74 |
| Coremakers, machine. | 574 | 2.41 | 28 | 2.18 | 166 | 2.41 | 298 | 2. 50 | 34 | 1.86 | 38 | 2. 49 |
| Diecasting-machine operators (set up and operate) | 1,290 | 2. 52 |  |  | 330 | 2. 60 | 858 | 2. 51 | 13 | 2.18 | 81 | 2. 51 |
| Diecasting-machine operators (operate only) | 1,986 | 2.43 | 137 | 2.49 | 486 | 2.53 | 932 | 2. 43 | 134 | 2.18 | 273 | 2.47 |
| Electricians, maintenance.-...------- | 189 | 2. 82 |  |  | 55 | 2. 79 | 120 | 2.83 |  |  |  |  |
| Furnace tenders.-. | 1,752 | 2. 20 | 150 | 2.06 | 381 | 2. 18 | 954 | 2. 26 | 48 | 2.08 | 115 | 2.37 |
| Guards--------- | 119 | 2. 19 |  |  | 40 | 2.11 | 75 | 2.21 |  |  |  |  |
| Inspectors, class A | 220 678 | 2.62 2.36 | 12 | 2.15 | $\begin{array}{r}49 \\ 295 \\ \hline\end{array}$ | 2.63 <br> 2.36 | 117 307 | 2.65 |  |  | 15 | 3.27 2.47 |
| Inspectors, class B | 833 | 2.11 | 25 | 1.69 | 298 | 2.07 | 452 | 2.17 |  |  | 50 | 2.20 |
| Laborers, material handling | 855 | 1.90 | 89 | 1. 69 | 118 | 2.03 | 550 | 1. 98 |  |  | 7 | 2.20 |
| Maintenance men, general utility-.- | 620 | 2. 43 | 35 | 2.17 | 98 | 2.48 | 372 | 2. 46 | 32 | 2.24 | 43 | 2. 64 |
| Mechanics, maintenance. | 213 | 2.68 |  |  | 64 | 2.68 | 119 | 2. 71 | 6 | 2.27 | 20 | 2.64 |
| Millwrights. | 113 | 2.80 |  |  |  |  | 64 | 2.97 |  |  |  |  |
| Molders, floor | 852 | 2. 59 | 58 | 2.41 | 232 | 2.61 | 331 | 2. 57 | 31 | 2.22 | 114 | 2.95 |
| Molders, hand, benc | 1,247 | 2. 43 | 85 | 2.36 | 411 | 2.45 | 513 | 2. 40 | 11 | 2. 52 | 104 | 2.92 |
| Molders, machine | 1,830 | 2. 57 | 235 | 2. 40 | 442 | 2. 69 | 779 | 2. 60 | 116 | 2.17 | 162 | 2.88 |
| Patternmakers, wood --.-.---.-...-- | 396 | 3. 52 | 40 24 | 3. 25 | 61 | 3. 32 | 148 | 3. 49 | 9 | 2. 75 | 100 | 4. 12 |
| Permanent-mold-machine operators | 907 | 2. 44 | 24 | 2.30 | 175 | 2. 40 | 434 | 2. 60 | 66 | 2.02 | 192 | 2.27 |
| Polishers and buffers, metal.......-- | 670 | 2.62 |  |  | 104 | 2.74 | 441 | 2. 69 |  |  |  |  |
| Polishing- and buffing-machine operators | 310 | 2.29 |  |  | 14 | 1.94 | 151 | 2.61 |  |  |  |  |
|  | 695 | 2.11 | 42 | $2.21-$ | 151 | 2.13 | 292 | 2.25 | 39 | 1.73 | 71 | 2.33 |
| Sand mixers, hand and machine...- | 311 | 1.95 | 27 | 1.86 | 80 | 1.95 | 128 | 1.99 | 10 | 1.75 | 40 | 2.25 |
| Shakeout men | 920 | 1.91 | 72 | 1.92 | 165 | 1. 72 | 470 | 1.94 | 32 | 1.72 | 134 | 2.18 |
| Shell-mold machine operators...--. | 106 | 2.17 |  |  | 41 | 2. 27 | 46 | 2.02 |  |  |  |  |
| Tool and die makers- | 1,174 | 3.12 | 74 | 2.86 | 174 | 3.15 | 699 | 3. 13 | 33 | 2.63 |  | 3.33 |
| Truckers, power (forklift) | 263 54 | 2. 20 | 12 | 2.22 | 71 | 2.12 | 167 | 2.26 |  |  | 7 | 1.97 |
| Truckers, power (other than forklift) Watchmen | 54 139 | 2.12 1.61 | 17 | 1.57 | 35 25 | 2.20 1.61 | 16 72 | 1.97 1.65 | 9 | 1. 58 | 11 | 1.36 |
| Women |  |  |  |  |  |  |  |  |  |  |  |  |
| Chippers and grinders.-...--------- | 298 | 2.06 |  |  |  |  | 254 | 2.14 |  |  |  |  |
| Inspectors, class C--.-.-----.-.-.--- | 460 | 1.82 | 22 | 1.61 | 38 | 2.09 | 343 | 1.79 |  |  | 25 | 1.83 |
| ators.- | 63 | 2.23 |  |  |  |  | 63 | 2.23 |  |  |  |  |

[^28]${ }^{8}$ Includes data for regions in addition to those shown separately.
Note: Dashes indicate no data reported or data that do not meet publication criteria.

Table 4. Percent of Production Workers Employed in Nonferrous Foundries With Formal Provisions for Selected Supplementary Wage Benefits, ${ }^{1}$ United States and Selected Regions, ${ }^{2}$ May 1960

${ }^{1}$ If formal provisions for supplementary benefits in an establishment were applicable to half or more of the workers, the benefits were considered applicable to all workers. Because of length-of-service and other eligibility requirements, the proportion of workers currently receiving the benefits may requirements smaller than estimated.
be smaller than estimated.
2 For definition of regions, see footnote 2, tahle 1.
${ }^{3}$ Includes data for regions in addition to those shown separately.
4 Vacation payments such as percentage of annual earnings were converted to an equivalent time basis. The periods of service were arbitrarily chosen and do not necessarily reflect the individual provisions for progression. Thus the changes indicated at 5 years may include changes occurring between 1 and 5 years.

Lakes region, machine molders who were paid on an incentive basis averaged $\$ 2.79$, compared with $\$ 2.48$ for time-rated workers. In the Middle Atlantic region, the corresponding hourly averages were $\$ 2.96$ and $\$ 2.42$.

The extent of the dispersion of workers' earnings differed by occupation and by area. For example, earnings of the middle four-fifths of the men operating diecasting machines in Chicago were within a range of $\$ 1.69$ to $\$ 3.02$ an hour; and in Los Angeles-Long Beach, from $\$ 2.13$ to $\$ 2.72$. The corresponding ranges for machine molders in those areas were $\$ 2.67$ to $\$ 3.50$ and $\$ 2.56$ to $\$ 3$.
${ }_{6}^{5}$ Because of rounding, sums of individual items may not equal totals.
6 Less than 0.5 percent.
days were provided in limited to full-day holidays; additional half-day holidays were provided in some establishments.
${ }^{8}$ Includes only those plans for which at least a part of the cost is borne by the employer and excludes legally required plans such as workmen's compensation and social security.
in Unduplicated total of workers receiving sick leave or sickness and accident
insurance shown separately.

## Selected Establishment Practices

Data were obtained on work schedules and supplementary benefits, including paid holidays and vacations, retirement plans, life insurance, sickness and accident insurance, and hospitalization, surgical, and medical benefits for production and office workers.

## Scheduled Weekly Hours and Shift Practices. A

 work schedule of 40 hours a week was in effect in establishments employing nine-tenths of the production workers and about the same proportionof the office employees in May 1960. This was the predominant schedule for production workers in each of the five regions and eight areas studied separately. About a fifth of the production workers in the Middle Atlantic region and a tenth in New England were scheduled to work 45 hours or more. Office employees in New York City generally worked less than 40 hours a week.

Approximately 15 percent of the production workers were employed on second-shift operations and 4 percent on third- or other late-shift operations during the payroll period studied. The wage differentials paid these workers varied greatly, but most commonly amounted to 5 or 10 cents above first-shift rates for second-shift work and 10,12 , or 15 cents for third-shift work.

Paid Holidays. Paid holidays were provided nearly all production and office workers. The most common provisions were 6 or 7 days annually, with additional half days in several instances. These were also the predominant provisions in each of the regions and areas studied separately, except New York City, where most workers received 8 days or more a year.

Paid Vacations. Virtually all production and office workers were eligible for paid vacations after qualifying periods of service. Three-fourths of the production workers were eligible for 1 week of vacation after 1 year of service and 2 weeks after 5 years (table 4). Three-fifths were employed in establishments which provided vacations of at least 3 weeks after 15 years of service. Vacation provisions differed among the regions and areas of industry concentration. For example, the proportion receiving 3 weeks or more after 15 years of service varied from about two-fifths in New England to nearly seven-tenths in the Great Lakes and Pacific regions and from approximately a third in New York City and Philadelphia to four-fifths in Milwaukee.

Vacation provisions for office workers were generally more liberal than those for production workers. After 1 year of service, three-fifths of the office workers were eligible for 2 weeks or more, as compared with less than a tenth of the production workers. Four-week vacations after 25 years' service were reported in establishments employing a fourth of the office and about an eighth of the production workers.

Health, Insurance, and Pension Plans. Life, hospitalization, and surgical insurance, for which employers paid at least part of the cost, were available to nearly nine-tenths of the production and office workers. Sickness and accident insurance was applicable to three-fourths and accidental death and dismemberment and medical insurance to three-fifths of the workers in both groups. Provisions for these types of insurance varied among the regions and areas for which separate data are presented. For example, medical insurance coverage included 45 percent of the production workers in the Middle West and 85 percent in the Pacific region, 10 percent in Philadelphia and 81 percent in Chicago.

Retirement pension plans (other than benefits available under Federal Old-Age, Survivors, and Disability Insurance) were provided by establishments employing nearly two-fifths of the production workers and three-fifths of the office employees.

Other Benefits. Nonproduction bonuses, usually either Christmas, yearend, or profit sharing, were provided in establishments employing almost a third of the production workers and two-fifths of the office employees.

Provisions for automatic cost-of-living pay adjustments, unemployment benefits (in addition to those provided by State unemployment insurance), and severance pay for involuntary separation (except retirement) were in effect in establishments employing the following proportions of production workers in the United States and selected regions:

|  | Percent of workers in establishments providing- |  |  |
| :---: | :---: | :---: | :---: |
|  | Cost-ofliving adjustments | Supplemen- <br> tary unem- <br> ployment benefits | $\begin{gathered} \text { Severance } \\ \text { pay } \end{gathered}$ |
| United States.- | 27 | 12 | 15 |
| New England...---.-. | 13 | 8 | 10 |
| Middle Atlantic_ | 27 | 21 | 11 |
| Great Lakes_- | 33 | 12 | 17 |
| Middle West. | 26 | -- | -- |
| Pacific. | 17 | -- | 25 |

These three types of benefits for office workers were reported by establishments employing about a fifth, virtually none, and a fourth, respectively, of the office employees.
-Fred W. Mohr
Division of Wages and Industrial Relations

## Significant Decisions in Labor Cases*

Labor Relations

Bonuses: A U.S. court of appeals held ${ }^{1}$ that the National Labor Relations Board was not warranted in finding that an employer violated sections 8(a) (1) and (3) of the National Labor Relations Act as amended by denying Christmas bonuses to employees who had engaged in a lengthy strike during the year at one of its plants.

Since 1946, employees at all the company's plants had received gratuitous Christmas bonuses except as follows: 1951-Pittsburgh production and maintenance men who had been on strike for 46 workdays; 1955-Fresno employees who had worked for the company only since August of that year; 1956-all employees; and 1957Santa Clara workers who had been on strike for 57 workdays. The company's failure to grant the bonus to the Santa Clara strikers resulted in the filing of unfair labor practice charges against the company.

The NLRB overruled the trial examiner's findings and found the employer guilty of violating sections 8(a) (1) and (3) of the National Labor Relations Act. It ruled that the company was motivated by a desire to punish strikers, and thus to interfere with and discourage protected union activity, basing its ruling upon the wording of a bonus resolution by the board of directors ("except that no Christmas gift is to be made to the striking employees at the Santa Clara Plant"), comments by two plant officials, and the conclusion the Board drew that prior to 1957 it had been customary for the company to pay a bonus to all or none of its employees.

The court set aside the Board's decision on the ground that it was based on insubstantial evidence. The court pointed out that an essential element in cases of this kind is evidence that the employer's intention was to encourage or discourage union activity. Citing the Supreme Court's decision
in the Radio Officers Union case, ${ }^{2}$ the court noted that there were situations in which a violation of the law might be found if the natural or foreseeable consequence of an employer's conduct was to encourage or discourage union activity, regardless of motive. However, the court stated that the rule growing out of that case constituted an exception to the general rule and applied only in cases where the employer's discrimination was based solely on union activity or membership. The court concluded that in this case, the exceptional rule of Radio Officers did not apply since the kind of discrimination which impelled the rule was absent. It was then up to the Board to predicate a conclusion of unlawful intent upon more specific evidence; a showing of the discriminatory treatment plus its natural and foreseeable consequences would not suffice.
The court accepted the company's contention that in denying the bonus it was simply applying its Five Factor Formula which took into consideration, among other things, plant productivity and continuity of work effort; it held that the employer here had discriminated on the basis of group productivity, not participation in a prolonged strike. The court rejected the Board's reliance on Radio Officers ${ }^{3}$ and held that the fact that protected union activity is the direct cause of a business condition upon which an employer predicated discrimination among his employees did not mean that the basis for discrimination was the protected union activity. The court noted several cases in which the business condition upon which the employer predicated his discriminatory action was the direct result of participation in protected union activity by those employees. ${ }^{4}$
The court concluded that although the strike may have caused the business condition (poor productivity) which was used as a criterion for

[^29]withholding the bonus, the protected union activity was not in itself the basis of the employer's discrimination. The court also concluded that the unlawful act itself, not proximity to it, must be shown.

The court held that the Board could not reasonably infer from the history of the company's past bonuses that the company had followed a general practice of rewarding all of its employees or none of them, since the company had shown that each of its bonus decisions since 1946 resulted from applying the Five Factor Formula.

With respect to the reference to "striking employees" in the bonus resolution, the court pointed out that motivation was not to be inferred from the terms of designation. The court also refused to be guided by comments attributed to two company officials, by virtue of the denial of one that he made the statement in question, and the fact that the other was a newcomer to the plant and unaware of the bonus formula.

Therefore, the court concluded that the evidence in support of the Board's decision was fatally insubstantial, and in the absence of sufficient evidence to show that the employer's intent was to discourage protected activity, the Board's order could not stand.

Suspension of Union Security Clause. A U.S. court of appeals held ${ }^{5}$ that the NLRB had the authority to order a 2 -year suspension of a union-security clause at a union-represented plant to effect the employment of employees of another plant who were unlawfully discharged for nonmembership in the union.

In this case, a union local called a strike at a company's plant in one city in order to enforce its objections to the utilization by the company of another plant in a neighboring city but beyond the territorial jurisdiction of the union. As a result of the strike, the company liquidated the neighboring enterprise and discharged its employees, some of whom were later employed in the unionized plant. The Board found ${ }^{6}$ that both the union and the company had discriminated unlawfully against the employees in the neighboring plant by discharging them or causing their discharge in circumstances calculated to encourage union membership, and ordered the company to employ the workers in the unionized plant as vacancies occurred.

In enforcing the Board's order, however, the court modified it in certain respects. The court rejected the union's contention that the object of the strike was to protect employees of the unionized plant against "farming out" work opportunities to another shop, because at the time of the strike the orders which had been placed with the unionized plant and farmed out to the other one represented work in excess of plant capacity at the former plant. Thus the court agreed with the Board's refusal to believe that the "mere possibility that . . . workers [at the unionized plant] might lose work in the indefinite future was the basic reason for the strike," especially when other evidence showed that the union officers were concerned that the union's jurisdiction was not recognized in the neighboring unit.

The court also noted that although normally an unfair termination of employment because of nonmembership in a union would have been redressed by a requirement that the employees be restored to a work status at their original place of employment, free of any obligation to join the union, this was impossible here because the plant in which they had worked had been closed. The court upheld the Board's authority to order a 2 -year suspension of the union-security clause on the ground that a remedy which was reasonably adapted to correct the injurious effects of an unfair labor practice and thus effectuate the objectives of the statute should be recognized as within administrative discretion and not be disturbed by a reviewing court.

The court held that the Board's order was not enforceable insofar as it made the employer jointly and severally liable with the union for backpay to the injured employees. The court based this holding on the fact that it was only after the failure of an attempt to secure the normal legal remedy against an unfair labor practice that the employer yielded to this economic coercion. Therefore, the court reasoned that the imposition of primary liability on the union would tend to discourage such coercion in the future. The court concluded that the workers would be fully protected if the employers were held secondarily liable.

[^30]The court further declared that the Board's order was too broad insofar as it directed the union to cease and desist from such activity in relation to "any other employment" and that, therefore, the language requiring the posting of notices should be reworded to make it clear that it was limited to the plant of the employer involved in this case.

The court admitted in conclusion that although it had enforced similar orders in the past, recent appeals courts decisions had denied such broad orders, ${ }^{7}$ and that while the present appeal was pending, the Supreme Court had also ruled similarly on this question. ${ }^{8}$

Discrimination. A U.S. court of appeals held ${ }^{9}$ that an international union was not responsible for a local union's violations of sections 8(b) (1)(A) and (2) of the NLRA through conduct of local stewards in refusing to hire a dockworker who had initiated suit against the local union.

In the spring of 1957, a dockworker and others instituted a lawsuit to regain membership in Local 10. From that time, until January 1958, the dockworker was dispatched regularly by a union hiring hall (operated by a sister local) to various longshore jobs on the San Francisco waterfront. On three occasions, he was prevented from working by Local 10 job stewards, who either barred him from jobs to which he had been referred or told the gang bosses not to hire him.

The dockworker brought charges of unfair labor practices against the union before the National Labor Relations Board, which held that the local had violated sections 8 (b) (1) (A) and (2) of the NLRA as amended. The NLRB further held the international union responsible for the job stewards' conduct because the local had been given authority by the international to run hiring halls and to enforce other contract provisions. The Board also held both the international and the employer association responsible for the conduct of the gang bosses because the two had

[^31]agreed to work rules under which a joint committee named gang bosses having complete authority over the gangs.

In this case, the Board sought the enforcement of its order in the appellate court. In its decision, the court pointed out that the responsibility of Local 10, the international, and the employer association for the acts of the gang bosses, and the responsibility of Local 10 and the international for the acts of the union stewards must be determined by the general law of agency, i.e., employers are accountable for the acts of their agents done within the actual or apparent scope of the agents' authority.

In holding Local 10 guilty of unfair labor practices, the court noted that the local authorized its stewards to safeguard advantages secured by the union at the bargaining table, yet the stewards exercised their power to achieve advantages to which the union was not entitled. The court concluded that inasmuch as the local's constitution permits designation of stewards by the longshore gangs and authorizes them to perform certain duties, it created the stewards' power and must take the responsibility if it is wrongly used. The court further asserted that the principal in the agency relationship was the "entity providing the source of authority," and the fact that the recipient of the authority is named by someone other than its creator does not negate the agency's existence.

The court noted certain similarities between this and the Mallory case, but rejected that ruling as inapplicable since in that case a specific disclaimer of action taken by the stewards was demonstrated. ${ }^{10}$ In this case, the evidence of the absence of union policy supporting the stewards' actions against the dockworker was deemed inconclusive inasmuch as the stewards were held to have acted within the general scope of their authority as provided in Local 10's constitution.

The court also pointed out that the unfair labor practices charged against the international did not emanate from procedures at the hiring hall, but rather arose from the actions taken by the stewards after dispatching of the longshoreman had been completed. Despite the record which suggested that the hiring halls provided for in the agreement were run by the locals with the approval of the international, the court concluded that there was no evidence Local 10 stewards
were acting as agents of the international when they prevented the longshoreman from working.
In rejecting the Board's holding that both the international union and the employer association were responsible for the gang bosses' conduct, the court held that in this case the gang bosses were acting in the local's interests and not in those of the international or the association. Therefore, the court held that when an agent performed an act within the general scope of employment, but with no intention to further the interest of his principal, the principal was not responsible for the agent's conduct. ${ }^{11}$

The court decided that the broad cease-and-desist order against the local was not necessary since "only three isolated infractions of the act were proved, and no proclivity for unlawful behavior was indicated by the evidence." Therefore, the court held the Board's order should be modified in conformity with its decision.

## Unemployment Compensation

Resignation for Cause. The Pennsylvania Supreme Court held ${ }^{12}$ that an employee who refused to return to his job at a reduced wage because he claimed he was compelled to care for his sick wife and children was entitled to unemployment compensation, since his refusal was for a cause of "necessitous and compelling nature."

The employee had been working at a plant 60 miles from his home. When the plant shut down for a short period, he was told when to return to work but that his wages and hours would be reduced. Four days before he was scheduled to return, the employee notified his employer that because of his wife's disabling spinal injury, he was compelled to remain at home to take care of her and the children. He refused an offer of a leave of absence and filed a claim for unemployment compensation. The Bureau of Employment Security found him entitled to unemployment compensation benefits. Upon appeal by the company to the Unemployment Compensation Referee, the Bureau's ruling was reversed. However, the Unemployment Compensation Board of Review reversed the referee and the Pennsylvania Superior Court affirmed the reward.

In affirming the claimant's right to unemployment compensation, the Supreme Court had to
answer the question of whether the facts established that the claimant was, as a matter of law, ineligible to receive compensation benefits on the ground that he terminated his employment without cause of "a necessitous and compelling nature." In order to answer this question, the Court reviewed the legislative history of the Pennsylvania Unemployment Compensation Act.

It found that the legislature had revised an earlier provison-that no person would be eligible for unemployment compensation who left work voluntarily-to permit compensation if the voluntary quit was for "good cause." The court noted that in the Sturdevant unemployment compensation case ${ }^{13}$ it had been held that-
.... if a worker leaves his employment when he is compelled to do so by necessitous circumstances or because of legal or family obligations, his leaving is voluntary with good cause, and under the act he is entitled to benefits. The pressure of necessity, of legal duty, or family obligations, or other overpowering circumstances and his capitulation to them transforms what is ostensibly voluntary unemployment into involuntary unemployment.
In addition, in the Mooney unemployment compensation case, ${ }^{14}$ the superior court had affirmed unemployment compensation for a claimant because she had "good cause" for leaving her employment since she "was legally obligated to care for her three children. Family obligations cannot be considered as mere whim or fancy, but on the contrary are real and compelling reasons."
Furthermore, in 1955 the legislature amended the act to read:

An employee shall be ineligible for unemployment compensation for any week . . . (b) in which his unemployment is due to voluntarily leaving work without cause of a necessitous and compelling nature.

The Court reasoned that when the legislature in 1955 removed the specific exception of a 1953 amendment precluding marital, filial, and domestic circumstances and obligations from being good cause within the meaning of the act, it thereby intended those obligations again to be good cause, as had been held prior to the 1953 exception. The change of the term "good cause" as it appeared

[^32]in the 1942 act to "cause of a necessitous and compelling nature" in the 1955 amendment is simply a matter of phraseology which in no way adversely affects the conclusion reached by the superior court in its leading cases on this subject, such as the Sturdevant and Mooney cases. The Supreme Court agreed with the observation of the superior court in the Sturdevant case that "The unemployment compensation law is remedial humanitarian legislation of vast import. Its benefits sections must be liberally and broadly construed. It is primarily intended for the benefit of unemployed workers."

The Court pointed out that in determining whether the facts indicated that one was prevented from working for a necessitous and compelling reason, the test was not whether the claimant had taken himself out of the scope of the act, but whether the act specifically excludes him from its provisions. The Court felt that this
was the meaning of a liberal and broad construction.

The Court concluded that the claimant's reason for terminating his employment-his wife's spinal injury which necessitated his remaining at the family home to care for her and four small children rather than continue to work 60 miles awayconstituted a cause of necessitous and compelling nature for leaving work, and therefore claimant was not rendered ineligible for the claimed benefits.

The dissenting opinion pointed out that the majority decision violated both the letter and spirit of the unemployment act, inasmuch as the act was intended to provide compensation for workers who were willing to work but unable to through no fault of their own. "The act was never intended to be a relief act for persons who find it more pleasant and sometimes more profitable to become or remain unemployed."

## Chronology of Recent Labor Events

## December 3, 1960


#### Abstract

Secretary of Labor James P. Mitchell signed the first minimum wage determination under the Public Contracts (Walsh-Healey) Act for the electron tubes and related products industry. The prevailing minimum wage rates were found to be $\$ 1.42$ an hour for electron tubes (except television picture tubes) and $\$ 1.35$ for solid-state semiconductor devices.


## December 4

Members of the International Brotherhood of Electrical Workers ratified a 2 -year contract with Raytheon Co. providing a wage increase of 3 percent retroactive to September 5, 1960, an additional 3 -percent increase on September 4, 1961, and increased medical and life insurance benefits starting March 1, 1961. The agreement affects about 15,000 workers at plants in Massachusetts.

## December 7

A panel of three Federal judges in Detroit ruled against railroad unions in their suit to protect jobs of employees of the Delaware, Lackawanna and Western Railroad Co. and the Erie Railroad Co. who were scheduled for dismissal or transfer as a result of merger of the two lines (see Chron. item for Oct. 14, 1960, MLR, Dec. 1960). The panel held that employees whose jobs are eliminated by a merger cannot expect to retain employment indefinitely because the merger then could not effect desired economies. (See also p. 184 of this issue.)

Teamster President James R. Hoffa and two associates in a Florida land development firm, Sun Valley, Inc., were charged by a Federal grand jury in Orlando, Fla., with conspiracy to defraud four Detroit union organizations through the misuse of more than $\$ 500,000$ in union funds in violation of mail and wire fraud statutes. (See Chron. item for May 12, 1960, MLR, July 1960, and also p. 184 of this issue.)

## December 8

The presidents of the Brotherhood of Railroad Trainmen and the Order of Railway Conductors and Brakemen announced that their boards of directors had approved merger subject to membership approval. Total membership of the unions is about 225,000 . (See also p. 184 of this issue.)

Pay raises, effective on or before December 25, 1960, were approved by wage boards for blue-collar workers employed by 12 Federal agencies in Washington, D.C., and vicinity. Workers affected and their range of hourly increases were: 14,000 Army, Navy, and Air Force laborers, helpers, and mechanics- 4 to 9 cents; over 4,500 maintenance and service employees of General Services-3 to 13 cents; and over 1,500 food, service, and laundry employees of the Defense Department, the Health, Education, and Welfare Department, the Veterans Administration, and other agencies-4 to 36 cents.

## December 9

The Federal district court in New Jersey held that under section 504(a) of the Landrum-Griffin Act a paroled convict could not occupy union office for 5 years from the end of his parole. (The provision bars persons convicted of certain crimes from union office for 5 years following their "imprisonment.") The court held that the intent of Congress in setting this period was to assure that the ex-convict would demonstrate "his ability to conduct himself in obedience to the criminal laws free of custody and of custodial supervision," and that such supervision persists throughout the parole period. The case was Serio v. Liss.

## December 12

A Presidential factfinding board created to investigate a dispute between the New York Harbor Railway Council, a union group, and the New York Harbor Carriers' Conference Committee, representing 11 railroads (see Chron. item for Sept. 28, 1960, MLR, Nov. 1960), rejected union demands to freeze crew sizes and to consider their members as marine workers. The board stated that railroad marine workers were entitled only to wage increases and benefits agreed upon by the railroads and their unions last summer (see Chron. item for June 3, 1960, MLR. Aug. 1960), and should be subject to the moratorium on further wage increases until next November.

Members of Local 1463 of the Transport Workers Union Railroad Division ratified an agreement with seven railroads operating in the port of New York, which abolished the jobs of about 125 oilers on diesel tugboats, effective December 31. The oilers will receive severance allowances ranging from 6 weeks' pay for 6 years' service to 50 weeks' pay for 20 years' service; employees having 20 or more years of service with one carrier may elect to remain in the carrier's employ. (See also p. 187 of this issue.)

The Secretary of Labor issued-for the first timeuniform safety and health regulations for the protection of workers engaged under Government supply contracts in excess of $\$ 10,000$. The regulations, effective January 27,1961 , are to provide a uniform code designed to remedy the effects of differences between various State laws used in the past as criteria for the enforcement of the act's safety provisions. However, the regulations do not excuse contractors from observing State safety and sani-
tary laws, despite any differences between State and Federal standards.

## December 14

Pension increases for 20,000 retired New York City employees, including firemen and policemen, who receive less than $\$ 1,800$ a year and for 8,000 widows of firemen and policemen who receive $\$ 50$ a month were approved by the Board of Estimate. The increases will raise pensions to a maximum of $\$ 1,800$ by January 1, 1961, and $\$ 2,000$ by July 1, 1961. Widows will receive monthly allowances of $\$ 70$ by January 1 and $\$ 90$ by July 1 . (See also pp. $185-186$ of this issue.)

## December 15

An agreement between the Goodyear Tire and Rubber Co. and a local of the United Rubber Workers established new production rates based on a piecework system, which cleared the way for modernization of Plant 2 in Akron, Ohio, and averted the threatened closing of the plant which employs 1,450 workers. (See also p. 185 of this issue.)

The Tennessee Valley Authority announced wage increases averaging 4.31 percent for its 9,215 employees. The raises, reflecting area prevailing wage rates, were agreed upon by management and the Tennessee Valley Trades and Labor Council in a 1-year contract.

## December 16

The Oil, Chemical and Atomic Workers and the Sinclair Oil Corp. announced agreement on a 1-year contract providing an hourly wage increase of 14 cents across the board for 9,000 employees, effective December 19. At about the same time, Gulf Oil Corp., Tidewater Oil Co., and Continental Oil Co. announced 5-percent wage increases for their nonunion employees. (See also p. 186 of this issue.)

## December 19

The National Labor Relations Board ruled that an employer and a union which had assumed the contract of another union from which it had split violated the TaftHartley Act by enforcing the contract's membershipmaintenance clause. The Board held that the two unions were different entities and the former members of the superseded union could not be required, under the contract, to maintain membership in the new union. The case was

Hershey Chocolate Corp. and Powell; Local 464, American Bakery and Confectionery Workers and Same.

The Monsanto Chemical Co. and five unions signed improved 5 -year pension and group insurance contracts for about 9,500 hourly employees in 15 plants. The unions were the International Chemical Workers, the Oil, Chemical and Atomic Workers, the Operating Engineers, the International Union of Electrical Workers, and the Machinists. (See also pp. 186-187 of this issue.)

## December 21

About 40 trucking operators left negotiations between the Midwest trucking industry and the Teamsters and agreed with the union to new contracts, most of them effective on February 1, 1961, providing for an hourly wage increase of 28 cents an hour over 3 years and other benefits. Also provided for was a 1-year study of the effect of moving truck trailers by plane, ship, and rail on employee security. (See also p. 187 of this issue.)

Eight maritime unions, representing approximately 60,000 workers, formed the National Committee for Maritime Bargaining. The committee was created for mutual assistance in collective bargaining in anticipation of negotiations in 1961 on new contracts with ship operators of the majority of the Nation's passenger, cargo, and tanker ships. Earlier in the month, two unsuccessful attempts were made to bring together in the New York area all the maritime unions, the International Longshoremen's Association, the Teamsters, and the Office Employees Union.

## December 29

The NLRB declared illegal a contract clause providing that employees transferred out of a bargaining unit could continue to accumulate bargaining unit seniority if they applied for union withdrawal cards, issuable only to members in good standing. The clause, the Board held, amounted to encouragement of union membership in violation of the Taft-Hartley Act. The case was Local 1417, International Association of Machinists and Frazier.

## December 30

The United Mine Workers of America Welfare and Retirement Fund announced that pensions of about 65,000 retired bituminous coal miners will be reduced from $\$ 100$ to $\$ 75$ a month beginning with payments for February 1961. (See also p. 185 of this issue.)

## Developments in Industrial Relations*

## Union Developments

Railroads. A proposal to merge two of the Nation's oldest operating rail unions, the Brotherhood of Railroad Trainmen and the Order of Railway Conductors and Brakemen (Ind.), was approved by their boards of directors in early December. The BRT has about 200,000 members and the ORCB about 25,000 ; subject to membership ratification in early 1961, the united union will perpetuate the Trainmen name. William $P$. Kennedy, president of the Trainmen, is to be president of the organization, and James A. Paddock, president of the Conductors, is also to be an officer, with his post still to be determined. Resolutions favoring amalgamation had been endorsed at the unions' conventions in 1958, and a committee composed of top officers of the two unions had been meeting since September $1960^{1}$ to discuss terms.

A panel of three Federal judges dismissed on December 7 a suit by railroad unions to insure the protection of jobs in the merger of the Erie and Lackawanna Railroads. The Brotherhood of Maintenance of Way Employes and the Railway Labor Executives Association in October had obtained a temporary restraining order freezing jobs, following their claim that the merger would abolish almost 2,000 jobs. The unions based their case on a section of the Interstate Commerce Act which provides that a merger between carriers should not result in affected employees "being in a worse position with respect to their employment." The unions maintained that freezing of jobs could be offset by normal attrition. The railroads and the Interstate Commerce Commission said present protections under which salaries of employees whose jobs might be eliminated would be guaranteed for 4 years from the date of merger were sufficient. In ruling against the unions, the court interpreted the act to mean that although the
status of employees should not be worsened, it did not follow that workers should be continued indefinitely in jobs eliminated by a merger.

Late in December, the Railway Labor Executives Association announced plans to "oppose all pending proposals for rail mergers," and stated that it would appeal the Erie-Lackawanna decision to the U.S. Supreme Court. Mergers now contemplated, the RLEA asserted, could eliminate "at least 50,000 jobs." The association assailed the ICC for its policy on mergers and said that adequate safeguards to protect the public interest should be enacted before any more mergers are approved.

On December 22, 1960, President Eisenhower named outgoing Secretary of Labor James P. Mitchell to head the 15 -man commission to study the work rules dispute between the railroads and five operating brotherhoods. ${ }^{2}$ In announcing the members of the commission, the President hailed it as a "major and constructive innovation that will prove to be a significant achievement in the progress of labor-management relations toward greater maturity and stability." Other public members of the commission are John T. Dunlop, professor of economics at Harvard University; Charles A. Myers, professor of industrial relations at the Massachusetts Institute of Technology; Francis J. Robertson, a lawyer and arbitrator; and Russell A. Smith, an arbitrator and professor of law at the University of Michigan.

Other Unions. A Federal grand jury in Orlando, Fla., on December 7, 1960, indicted James R. Hoffa, president of the International Brotherhood of Teamsters, on charges of using the mails, telephone, and telegraph to defraud four union organizations by inducing them to buy land in Sun Valley, Inc., a Florida real estate development. The indictment also named as defendants Henry Lower, president of the development and former president of a Detroit Teamster local, and Robert E. McCarthy, Jr., a former branch manager of a Detroit bank. According to Attorney General William P. Rogers, the three men used more than $\$ 500,000$ of union funds to finance the project, which was advertised as a retirement

[^33]haven for union members. The project, the indictment said, was represented as being "all on high, dry, and rolling land, whereas, in fact, many of the lots offered and sold were so low and permeated with water as to make them unsuitable for construction of homes and dwellings." Accounts of the four local unions, the indictment said, showed disbursements for union purposes, whereas it was alleged the funds actually were spent by the defendants "to promote their scheme and artifice to defraud."

David J. McDonald, president of the United Steelworkers of America, was the only candidate nominated for a place on the union's referendum for president, it was announced in late December. At the union's last election in February 1957, Donald C. Rarick, a then relatively unknown rank-and-file mill worker, had polled 224,000 votes against McDonald's 404,000 on a plank protesting a $\$ 2$-a-month increase in dues to $\$ 5$. Since then Rarick has led an opposition group against the McDonald administration. In the latest nominations, however, union headquarters announced he had failed to secure the 40 local union endorsements the union constitution requires in order to be placed on the ballot. The referendum was scheduled for February 14, 1961.

In mid-December, members of the independent Tanker Officers Association voted to affiliate with the Marine Engineers Beneficial Association, within which it will function as an autonomous unit. Jesse M. Calhoon, secretary-treasurer of the 300 -member union, said the tanker group had joined the 11,000-member MEBA "to obtain better wages and working conditions, which they had been unable to negotiate as an independent union." The TOA's membership is composed of officers in three major West Coast tanker fleetsthe California Shipping Co., the General Petroleum Co., and the Pacific Coast Transport Co.

## Labor-Management Relations

The Goodyear Tire and Rubber Co. and a local of the United Rubber Workers at the firm's No. 2 plant in Akron, Ohio, agreed in mid-December on a plan to improve the tire plant's competitive position. The company's plan to spend between $\$ 8$ and $\$ 10$ million for new equipment was contingent upon the workers' willingness "to accept the responsibility of operating the equipment as
it would be operated in another location." (In October, the company had announced that unless productivity could be raised to a level comparable with factories in other areas, the Akron plant might have to close.)

The agreement provided for new piecework rates that will yield earnings at least equivalent to those presently in effect. It also required that workers whose jobs may be abolished through automation be reclassified; the work force was expected to remain at about 1,450 employees.

The National Labor Relations Board, in early December, ruled that where payroll information was too difficult to compile and thus put an undue burden on a company, an employer was not obligated to furnish such data to the union.

The issue arose when James B. Carey, president of the International Union of Electrical, Radio and Machine Workers, charged the Westinghouse Electric Corp. with unfair labor practices during 1958 collective bargaining. Before negotiations, the union had requested payroll data on employees in 27 plants over a period of $2 \frac{1}{2}$ years, and Westinghouse had refused to supply the information on the ground that its records would not yield the desired information without a great deal of extra effort; the company estimated that it would take 200 man-hours for a clerk to prepare data for only one of the bargaining unitsinvolved.

## Retirement Programs

Trustees of the United Mine Workers Welfare and Retirement Fund announced on December 30, 1960 , a reduction of $\$ 25$ a month, to $\$ 75$, in the pensions of some 65,000 retired soft coal miners. The reductions, to begin with the February 1961 payments, were attributed to economic conditions that have "severely affected the coal industry and have caused a large decline in the revenues of the Trust Fund," according to the fund's director. Other benefits paid from the fund, including hospital and medical care and widows' and survivors' payments, were to remain unchanged. In July 1960, eligibility requirements for medical care were tightened. Pensions to anthracite miners, which come from a separate fund, have been $\$ 50$ a month since September 1958.

The New York City Board of Estimate approved on December 14, 1960, an increase in pensions for about 20,000 retired city employees as
well as for about 8,000 widows of firemen and policemen. Pensioners receiving less than $\$ 1,800$ a year will have their allowances increased up to $\$ 600$ on January 1, 1961. A maximum of $\$ 200$ more will become effective on July 1, 1961, but in no event may the total allowance exceed $\$ 1,800$ on an annual basis on January 1 and $\$ 2,000$ on July 1. Pensions for widows of policemen and firemen will be raised $\$ 20$ a month in both January and July 1961, raising their allotment to $\$ 90$ in July.

## Wages and Collective Bargaining

Petroleum. One of the first major wage agreements in the current negotiations in the petroleum industry was reached when, on December 16, the Oil, Chemical and Atomic Workers International Union announced it had agreed to a 1-year contract with the Sinclair Oil Corp. It provided a 14-cent-an-hour across-the-board wage increase effective December 19 for about 9,000 employees. The three previous general wage increases negotiated in the industry were on a percentage basis, with the latest, in early 1959, amounting to 5 percent. ${ }^{3}$ The OCAW, bargaining agent for most of the organized workers in the industry, had been seeking a flat 18 -cent-an-hour wage increase, since lower paid workers had expressed dissatisfaction with percentage raises.
Earlier in December, the independent Refining Workers Union agreed with the Sun Oil Co. to a 5 -percent pay raise for 3,000 workers. The settlement covered hourly paid operating and maintenance employees at the firm's Marcus Hook, Pa., plant. According to a company spokesman, the wage increase was not part of the working conditions contract, which is negotiated separately.

At about the same time as the Sinclair settlement, Gulf Oil Corp., Tidewater Oil Co., and Continental Oil Co. announced 5-percent pay raises for their nonunion employees, the same amount as announced in November ${ }^{4}$ by a number of oil companies.

Other Manufacturing. A 2-year contract agreed to in early December between the Raytheon Co. and the International Brotherhood of Electrical Workers provided a 3 -percent pay increase retroactive to September 5, 1960. In addition, the settlement called for a 3-percent wage increase effec-
tive September 4, 1961, and beginning March 1, 1961, increased medical and life insurance benefits. The contract affected about 15,000 workers at the electronic firm's plants in Massachusetts.

On December 8, 1960, the Publishers Association of New York City, representing nine newspapers, and the independent Newspaper and Mail Deliverers Union reached agreement on a 2 -year contract providing a $\$ 7$-a-week package increase for about 3,075 drivers and platform workers. The settlement included weekly wage increases of $\$ 3.50$ the first year, an additional $\$ 2.50$ in 1961, and 50 cents a week more each year in employer welfare contributions. An additional day of sick leave, bringing the total to four, will become effective in the second contract year.

Commercial printers in Chicago and the Typographical Union, representing about 3,000 workers, agreed in early December to a contract providing a $\$ 4$-a-week wage increase retroactive to June 7, 1960. The agreement, to run until June 6, 1962, also called for a $\$ 1$-a-week pay increase effective December 11, 1960, and $\$ 3.50$ a week more in June 1961. Other changes included a half holiday on New Year's Eve if it falls on a regular workday and some improvement in health and welfare coverage.

The International Ladies' Garment Workers' Union negotiated a 3 -year contract with Talon, Inc., in December that set a limit to earnings of chain machine operators with high seniority at plants in Meadville, Pa. Beginning January 1, 1961, the agreement provided that long-service employees will work until they have earned $\$ 5,000$ during the year, and then they will be laid off. Employees who have already been furloughed will be returned to their jobs for the remainder of the year. At the beginning of the next year, the older service employees will be called back to work until they have again earned $\$ 5,000$. The company, manufacturer of slide fasteners, said the agreement enables employees to retain rights to pension and other benefits which would have been lost under previous contracts when layoffs extended over a 2 -year period.
The Monsanto Chemical Co. and five unions representing about 9,500 hourly employees in 15 plants signed on December 19, 1960, an improved

[^34]5 -year pension and group insurance contract. The settlement was negotiated with the International Chemical Workers, the Oil, Chemical and Atomic Workers, the Operating Engineers, the International Union of Electrical Workers (AFL-CIO), and the Machinists. Maximum monthly pension credits effective December 1, 1960, were raised from $\$ 2.25$ to $\$ 2.85$ for each year of service, exclusive of social security benefits; vesting rights and disability pension provisions were also improved. The improved insurance plan, effective January 1, 1961, included liberalized hospitalization and medical care at home. Wages, which are bargained on a local plant basis, were not an issue in the negotiations.

Transportation and Mining. A 5-cent-an-hour pay increase retroactive to July 1, 1960, for 15,000 maintenance employees of the Pennsylvania Railroad represented by the Transport Workers Union was provided in a wage contract announced on December 13, 1960. The agreement also incorporated the existing cost-of-living allowance into base rates and discontinued future escalation. An additional 6-cent-an-hour increase is scheduled for March 1, 1961, and the union has the option to use this increase as part payment for the purchase of group hospitalization, medical, surgical, and life insurance. The agreement was separate from the work rules settlement that followed a 12 -day strike in September. ${ }^{5}$

Oilers employed on diesel-powered tugboats operated by seven railroads in the port of New York on December 12 voted 74 to 23 to accept a plan to eliminate their jobs. It provided severance pay ranging from 6 weeks' pay for 6 years' service to 50 weeks' pay for 20-year service employees. (However, oilers with 20 or more years of employment with one railroad have the option of remaining with the company in another capacity until retirement.) The agreement, affecting about 125 workers, was negotiated by Local 1463 of the Transport Workers Union and the New York Harbor Carriers' Conference under the pressure of technological developments making the oiler job no longer necessary.

Against recommendations of its leaders, members of the United Mine Workers ratified on December 23, a similar severance pay agreement

[^35]with an eighth railroad, the Erie-Lackawannas An agreement was also approved by a Teamster local representing oilers employed by the Lackawanna Railroad before its merger with the Erie Railroad in the fall of 1960 .
A break in the negotiations between the Teamsters union and midwestern trucking companies, involving about 170,000 workers in 13 States, developed when, on December 21, 1960, a few of the many companies concerned reached agreement with the union. The settlement, which was negotiated by James R. Hoffa, the union president, on the part of the union, provided for a 28 -cent-an-hour pay increase over 3 years plus fringe benefits (including improved vacations and increased employer contributions to pensions and welfare) worth an estimated 14 cents an hour. The question of transporting truck trailers by rail, ship, or aircraft, which the union alleged has had an adverse effect on earnings, was temporarily resolved by agreement to make a yearlong study of the problem. If no agreement is reached by February 1, 1962, the employers are to pay a maximum of $\$ 5$ to the union pension fund for each trailer so hauled.

On December 23, 1960, workers at the Bunker Hill Co. at Kellogg, Idaho, returned to work after ratifying a 5 -year contract that ended a strike of more than 7 months. The settlement was preceded by a representation election on December 10 which had ousted the independent Union of Mine, Mill and Smelter Workers in favor of the newly formed Northwest Metal Workers Union (also independent). ${ }^{6}$ The National Labor Relations Board held up the new union's certification pending investigation of a charge of irregular election procedures by the MMSW. According to the new union, the agreement was worth about 39 cents an hour in wage and fringe benefit improvements, including yearly wage-rate increases of 7 cents an hour the first year, 6 cents in both the second and third years, and 5 cents in each of the remaining years. The company had a prestrike employment of about 1,875 workers.

Other Nonmanufacturing. The Tennessee Valley Authority and the Tennessee Valley Trades and Labor Council, representing about 9,200 construction, maintenance and operating employees, announced on December 15, pay raises averaging 4.31 percent in a 1 -year contract. According to
the TVA general manager, the agreement was based upon "pay increases negotiated during the past 12 months between private employers and unions in the region."

An 18 -week strike of elevator installers and maintenance men in the New York City area ended on December 3, 1960, when members of the International Union of Elevator Constructors ratified a 30 -month contract with the Elevator Manufacturers Association. The contract, affecting about 1,900 workers, provided a 75 -cent-anhour general wage increase in four steps, bringing
the installers rate to $\$ 5.21$ an hour on December 31, 1962. Temporary elevator operators received an additional 11 cents an hour to eliminate their differential with the installers. The question of the employers' demand to have a freer hand in the use of prefabricated materials-one of the major issues in the dispute-was postponed until January 1, 1962, when national negotiations with the industry will take place. The strike had seriously hampered construction projects in the area and had prevented tenants from moving into completed buildings.

## 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 Lean Years: A History of the American Worker, 1920-1933. By Irving Bernstein. Boston, Houghton Mifflin Co., 1960. 577 pp. $\$ 7$.
About half of this very readable history of the American worker deals with the decade of the twenties; the remainder, with the depression years of 1929-33. The theme of the twenties is suggested by a prolog which describes a series of spontaneous revolts by groups of southern textile workers in the late twenties and the failure of the labor movement to capitalize on these revolts with a successful organizing campaign. Indeed, one of the highlights of the entire decade was the gradual decline in the power of the labor movement. Despite the efforts of the American Federation of Labor to create an image of respectability and cooperation, management's attitude toward trade unionism remained fundamentally hostile.

The devastating effects of the collapse of our economy at the end of the decade on the standard of living of the work force are vividly described by Bernstein in the second half of the volume. Alongside this story, he describes the decline in the membership and effectiveness of the trade union movement, illustrated by the virtual collapse of the United Mine Workers, the country's most powerful trade union. The volume ends with the assumption of the presidency by Franklin Delano Roosevelt in March 1933. A future volume will pick up the story at this point.

The author is of the opinion that his volume breaks with the labor history tradition of John R. Commons in covering a wider field than the trade union as an institution and its place in the labor market. He feels that his book deals broadly with
the worker rather than focusing on the trade union movement. While this claim may be true if the volume is compared with some recent histories of the labor movement, it certainly is not true if the comparison is made with the four-volume History of Labor in the United States produced by John R. Commons and his associates. Reference to those volumes will demonstrate that their scope extends considerably beyond the trade union movement and that they deal broadly with the economic history of labor.

The real distinction between Bernstein's work and that of the Commons' school is that Bernstein has largely been content to tell a story, whereas Commons and his associates were equally concerned with the fundamental circumstances underlying their story. Thus their volumes were more analytical than this volume by Bernstein. This comment is not intended to detract in any way from the value of Bernstein's book. He covers the history of the period very well indeed, but he does not devote much effort to analyzing the underlying factors which might serve to explain what happened. Perhaps this is the reason for the domination of the field of labor history by economists rather than by historians, a fact which Bernstein seems to decry.
$-\mathrm{H}_{\text {arry }} \mathrm{Weiss}$
Executive Director, Office of Manpower Administration U.S. Department of Labor

The Growth of British Industrial Relations: A Study From the Standpoint of 1906-14. By E. H. Phelps Brown. London, Macmillan \& Co., Ltd., 1959. xxxvii, 414 pp. $\$ 9.50$, St. Martin's Press, New York.
Professor Phelps Brown believes that in the few and turbulent years between 1906 and 1914, the system of industrial relations in Great Britain assumed essentially its present form. But the bulk of this volume is not concerned explicitly with this narrow period; it provides, rather, a brilliant interpretation of the economic, social, and political developments of the preceding 100 years as they affected, and were affected by, the changing status of the British working class.

The emphasis throughout is on the basic factors that produced the present-day system of industria] relations. The discussion of the significance of the rise of elementary education is typical; nowhere have I read a more vivid description of what
illiteracy means in an industrial society than in a single paragraph (pp. 45-46) of this book. The paragraph opens with the statement that in such a society, "illiteracy is not a deprivation merely, but a deformity." However, the "permissive condition" for the great changes that have occurred in the structure of British society and in the character of industrial relations is seen in the rise of real wages which enabled masses of men to escape from the bitter grip of poverty. A long passage suggests some of the consequences:
. . . Despite grievous fluctuations, the labor market has been dominated by the extension of demand, so that ever increasing numbers have found jobs at a real remuneration that has risen not less than the national product per head. This has brought to many not conveniences and comforts merely but a fuller life. Especially has it pushed back to a narrow pale the daily pain that poverty inflicts: a rise in standards of living that affects many ranks of life in much the same proportion none the less promotes equality when it lifts the poorest across the line between wretchedness and sufficiency. As men become less contrasted in substance they find it easier to give up inequalities in the form and spirit of their relations with one another. Political democracy in turn has used the power of government to minister to the needs of the majority, who are also the most needy, and especially to help their children. The walls of segregation into largely hereditary ranks and calling have been sapped by greater opportunity and mobility. The social distance between one man and another has been reduced. There has been less contrariety within society, and more interpenetration. In the event, the industrialized countries that seemed to be heading for class warfare have achieved a greater degree of equality, measurable and imponderable, perhaps than any other societies we know of save the primitive.
Many tendencies seemed to converge during the years 1906-14 to produce a framework for industrial relations that has now persisted for half a century. Parliament, overthrowing the Taff Vale decision, gave the unions immunity from suit for damages. Large disputes in essential industries produced Government intervention that tended to extend collective bargaining to an industry basis. And Parliament laid the foundations of the welfare state by the enactment of a series of social security measures. Not all of the consequences of these developments were fortunate. Professor Phelps Brown notes, for example, that the rise of industry bargaining left a gap at the level of the firm that has not been adequately filled. He wonders also if the almost purely voluntary pattern of labormanagement relations that has evolved should not have been abridged by "a code of positive law,
to define the rights of employer and employed in their mutual relations and prevent them from denying those rights to one another; to protect the individual in his relations with his trade union or employers' association; to define and proscribe practices by employers and employed which are contrary to public policy; and to protect the interests of the public during trade disputes."
-H. M. Douty
Chief, Division of Wages and Industrial Relations Bureau of Labor Statistics

## American Communism and Soviet Russia-The Formative Years. By Theodore Draper. New York, The Viking Press, 1960. 558 pp. $\$ 8.50$.

This is the second volume by Theodore Draper in the Fund for the Republic's series on Communism in American Life. The period from 1923 to 1929 is treated in this volume, continuing from his study of The Roots of American Communism. The documentation reflects a task of herculean magnitude, aided by the fortunate availability of the minutes of the top committees of the American Communist movement of the twenties. The twists and turns of factional fights are made meaningful by analytical insights into the leading personalities involved, in both the United States and Soviet Russia, by placing the events in the United States in juxtaposition to both domestic developments and Soviet demands, and by brief postludes to subsequent periods which suggest the ironies involved in the devotion of some of the principals to the cause of Soviet communism.

In a particularly interesting analysis of "Party Life," Draper provides a composite picture of the main features of the American Communist leadership of the time. Nearly half of a group of about 40 were native Americans; the other half were European born, with half of these coming from Eastern Europe. The ratio was 2 to 1 in favor of white-collar workers. Most were white, male, and in their thirties or forties. Educationally, the distribution showed concentrations for those having elementary school educations and, though somewhat less, for those having some college training. Personality and ideological differences were fueled by varying views of the prospects for communism in the United States in the face of the reality of nonacceptance of communism in the

United States and the ephemeral requirements of Soviet regularity, and by the growing queasiness over internal Soviet developments. Use of the same weapons by the antagonists in factional battles and the Soviet insistence on adherence, however, made those who "stayed in the Communist movement . . . interchangeable parts of the same machine."

This is the molding process which Mr. Draper has in mind in characterizing 1923-29 as "The Formative Period" of the Communist Party of the United States. This was the period when it became clear that the American Communists had to be "Bolshevized" to survive, with the Comintern determining the party policies without particular attention to the views of the American Communist leaders or the realities of U.S. conditions.

Several events reflected the growing Soviet control of the American Communists. In 1921, the Comintern line turned toward the establishment of united fronts through labor parties; however, the American Communists who had gone underground went through over a year of passive resistance before altering their positions and supporting the Farmer-Labor movement. In 1924, however, when adhering to the "third party alliance" policy of support for the LaFollette candidacy, the Communists were caught by surprise in the midst of preparations for a FarmerLabor convention. Comintern policy directed national affiliates to end their united front policies.

William Z. Foster's efforts to "Save the Union" through "boring from within" the old-line AFL unions met with reversal from his presumed protector and mentor in Moscow, Lozovsky, the head of the Profintern (Red International of Labor Unions). Within a month after he had warned the Pittsburgh "National Save the Miners Union Conference" against dual unionism, Foster was to introduce a resolution committing the Communists to rival unionism. On the Negro question, the Comintern, largely as a result of Stalin's overt influence, according to Draper, proposed solution through national self-determination by Negroes within the Southern Black Belt, in complete disregard of the views of the American Communist Party leaders that this failed to consider the increased Negro urbanization in the North which had occurred since prior to the First World War.

The final act in the assertion of Soviet dominance is presented in the account of the battle by Jay Lovestone, general secretary of the American party, to maintain his majority at home and to utilize this to maintain his position in the face of Stalin's opposition in Moscow in 1929. His refusal to capitulate, and the direct assertion of Soviet authority over the internal affairs of the American party, ended any subsequent illusion of independence. The supine nature of Communist Party leadership was reflected in the subsequent choice of Browder as secretary, a man with whom Stalin would not deal directly after their first meeting.
-Joseph P. Goldberg
Special Assistant to the Commissioner
Bureau of Labor Statistics

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## Current Labor Statistics

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[^36]
## A.-Employment

Table A-1. Estimated total labor force classified by employment status, hours worked, and sex [In thousands]

| Employment status | Estimated number of persons 14 years of age and over ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1960 |  |  |  |  |  |  |  |  |  |  |  | 1959 | Annual average |  |
|  | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | May | Apr. | Mar. | Feb. | Jan. ${ }^{2}$ | Dec. | 1959 | 1958 |
|  | Total, both sexes |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 73,079 | 73,746 | 73, 592 | 73, 672 | 74,551 | 75,215 | 75, 499 | 73,171 | 72,331 | 70,993 | 70,970 | 70,689 | 71, 808 | 71,946 | 71,284 |
| Oivilian labor force | 70,549 | 71, 213 | 71, 069 | 71, 155 | 72, 070 | 72,706 | 73, 002 | 70,667 | 69,819 | 68, 473 | 68, 449 | 68, 168 | 69,276 | 69, 394 | 68, 647 |
|  | 4,540 | 4,031 | 3,579 | 3,388 | 3,788 | 4,017 | 4,423 | 3,459 | 3,660 | 4,206 | 3,931 | 4,149 | 3,577 | 3,813 | 4,681 |
| sonally adjusted ${ }^{3}$ | 6.8 | 6.3 | 6.4 | 5. 7 | 5.9 | 5.4 | 5.5 | 4.9 | 5. 0 | 5.4 | 4.8 | 5.2 | 5.2 | 5.5 | 6.8 |
| Unemployed 4 weeks or less | 2, 107 | 1,840 | 1,637 | 1,655 | 1, 697 | 1,871 | 2,654 | 1,638 | 1, 580 | 1,516 | 1,476 | 1,909 | 1,683 | 1,658 | 1,833 |
| Unemployed 5-10 weeks .-....-- | 994 | 847 357 | 689 | 603 | -924 | 1,033 | -695 | -644 | 1, 567 | -855 | 1,095 | 1,9030 | 1,883 | 1,778 | $\begin{array}{r}1,853 \\ \hline 959\end{array}$ |
| Unemployed 11-14 weeks | 424 | 357 488 | 260 | 325 | 351 | 278 418 | 259 | 256 | 309 | 619 | 1, 396 | 400 | 250 | 335 | 438 |
| Unemployed over 26 week | 516 499 | 488 499 | 492 | 388 | 402 | 418 | 420 | 509 | 705 | 715 | 533 | 441 | 381 | 469 | 785 |
|  | 66, 4909 | 67, 182 | 67, 490 | 67, 767 | 68,282 | 416 68,689 | 396 68,579 | 67, 411 | $\begin{array}{r}499 \\ 66 \\ \hline 159\end{array}$ | $\begin{array}{r}502 \\ 64 \\ \hline\end{array}$ | 64 431 | 469 | 65 430 | 571 | 667 |
| Nonagricultural | 61, 059 | 61, 516 | 61, 244 | 61, 179 | 61, 828 | 61, 805 | 61,722 | 67, 208 | 66, 159 | 64, 267 | 64, 520 | 64, 020 | 65, 699 | 65, 581 | 63, 966 |
| Worked 35 hours or | 47, 675 | 41, 598 | 47, 545 | 48.284 | 616,247 | 41, 480 | 61,722 47,879 | 61,371 48,594 | 60,765 44,829 | 59,702 46,151 | 59,901 45,357 | 59,409 47,115 | 60,888 48,455 | 59,745 45,068 | 58,122 |
| Worked 15-34 hours | 8, 044 | 14, 484 | 8,371 | 7,247 | 6, 308 | 6,586 | 7,231 | 7, 203 | 10, 455 | 7,585 | 8,605 | 6,867 | 7,227 | 8, 531 | 4,873 7,324 |
| Worked 1-14 hours...-.----- | 3, 589 | 3,687 | 3, 369 | 3, 142 | 2,535 | 2,702 | 2,921 | 3, 578 | 3,345 | 3,575 | 3,553 | 3,356 | 3,496 | 8, 3 | 3,047 |
| With a job but not at work ${ }^{\text {d }}$ | 1,752 | 1,746 | 1,957 | 2, 508 | 6,737 | 7, 136 | 3,691 | 1,997 | 2, 138 | 2, 391 | 2,386 | 2,070 | 1,707 | 2,974 | 2,876 |
| Agricultural | 4,950 | 5,666 | 6,247 | 6,588 | 6, 454 | 6,885 | 6, 856 | 5, 837 | 5,393 | 4,565 | 4.619 | 4, 611 | 4,811 | 5, 836 | 5, 844 |
| Worked 35 hours or more.-- | 3,015 | 3,666 | 4, 296 | 4,789 | 4, 536 | 4,957 | 4, 874 | 4,129 | 3,788 | 2,465 | 2,597 | 2, 622 | 2,978 | 3, 852 | 3,827 |
| Worked 1-14 hours | 1, 163 | 1, 341 | 1, 447 | 1,314 362 | 1, 363 | 1, 371 | 1, 492 | 1, 254 | 1, 189 | 1,117 | 1,121 | 1, 178 | 1,175 | 1,356 | 1,361 |
| With a job but notat work | 237 | 167 | 106 | 123 | 368 187 | 403 155 | $\begin{array}{r} 408 \\ 82 \end{array}$ | 366 89 | $\begin{aligned} & 312 \\ & 105 \end{aligned}$ | $\begin{aligned} & 586 \\ & 400 \end{aligned}$ | $\begin{aligned} & 557 \\ & 344 \end{aligned}$ | 536 273 | 474 186 | 442 186 | $\begin{aligned} & 457 \\ & 199 \end{aligned}$ |
|  | Males |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 49, 186 | 49, 506 | 49,455 | 49, 570 | 50,678 | 50,998 | 50,949 | 49,337 | 49,060 | 48, 445 | 48,487 | 48, 412 | 48,778 | 49,081 | 48,802 |
| Oivilian labor force | 46, 688 | 47,005 | 46, 964 | 47,085 | 48, 229 | 48, 521 | 48, 484 | 46, 865 | 46,580 | 45, 958 | 45,999 | 45, 923 | 46,278 | 46, 562 | 46,197 |
| Unemployment | 3, 092 | 2, 496 | 2,200 | 2,082 | 2,400 | 2, 504 | 2,696 | 2, 184 | 2, 431 | 2,910 | 2,672 | 2,821 | 2,405 | 2,473 | 4,155 |
| Employment | 43, 596 | 44,509 | 44,764 | 45,003 | 45, 829 | 46, 017 | 45, 788 | 44, 681 | 44, 149 | 43, 048 | 43, 328 | 43, 103 | 43, 873 | 44,089 | 43, 042 |
| Nonagricultural | 39,337 | 39,881 | 39, 909 | 39,900 | 40, 603 | 40, 617 | 40, 462 | 39, 932 | 39, 574 | 39, 038 | 39,319 | 39, 108 | 39,744 | 39, 340 | 38, 240 |
| Worked 35 hours or more -- | 32, 888 | 29,346 | 33, 196 | 33, 559 | 32, 558 | 32, 201 | 33, 718 | 33, 808 | 31, 761 | 32, 273 | 31, 851 | 32, 973 | 33, 645 | 31,715 | 31, 390 |
| Worked 15-34 hours | 3,806 | 7,993 | 4, 098 | 3,440 | 3, 203 | 3,300 | 3,551 | 3,384 | 5, 170 | 3, 554 | 4, 361 | 3, 341 | 3, 3 3, 46 | 4,405 | 3,736 |
| Worked 1-14 hours.....----- | 1,472 | 1,424 | 1,322 | 1,291 | 1, 044 | 1, 091 | 1,193 | 1,502 | 1,433 | 1,559 | 1,547 | 1,440 | 1, 468 | 1,378 | 1,329 |
| With a job but not at work ${ }^{\text {W }}$ - | 1,173 | 1,120 | 1,292 | 1, 611 | 3, 799 | 4,026 | 1,999 | 1,237 | 1,210 | 1,653 | 1,557 | 1,354 | 1,180 | 1,840 | 1,784 |
| Agricultural $\qquad$ <br> Worked 35 hours or more. | 4, 259 | 4,629 | 4, 855 | 5, 103 | 5,226 | 5,399 | 5,325 | 4,749 | 4,575 | 4,010 | 4, 009 | 3,995 | 4,128 | 4,749 | 4,802 |
| Worked 35 hours or more.Worked 15-34 hours | 2,747 | 3,260 843 | 3,675 | 4,016 | 3,936 | 4,247 | 4, 232 | 3,705 | 3, 503 | 2,257 | 2, 397 | 2, 409 | 2,729 | 3,421 | 4,802 |
| Worked 15-34 hours | 839 455 | 843 369 | 786 294 | 725 257 | 857 265 | 745 278 | 724 | 695 273 | 749 208 | 2, 859 | 2, 818 | 2, 870 | 2,845 | 8,823 | - 857 |
| With a job but not at work ${ }^{\text {W }}$ | $\begin{aligned} & 455 \\ & 917 \end{aligned}$ | $\begin{aligned} & 369 \\ & 156 \end{aligned}$ | 294 | 257 | 265 | 278 | 296 | 273 | 228 | 514 | 482 | 462 | 380 | 336 | 353 |
| With a job but not at work ${ }^{\text {- }}$ | 217 | 156 | 99 | 106 | 167 | 129 | 73 | 75 | 95 | 380 | 315 | 253 | 177 | 170 | 179 |
|  | Females |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 23, 893 | 24,240 | 24, 138 | 24, 102 | 23, 872 | 24, 217 | 24, 550 | 23, 835 | 23, 271 | 22, 548 | 22, 482 | 22, 277 | 23, 030 | 22,865 | 22, 482 |
| Civilian labor force | 23,861 | 24, 208 | 24, 106 | 24, 070 | 23, 841 | 24, 185 | 24, 518 | 23, 803 | 23, 239 | 22, 516 |  |  |  |  |  |
|  | 1,448 | 1, 536 | 1,379 | 1,307 | 1,388 | 24,185 | 24, 1,727 | 23, 1,276 | 23,239 | 22,516 | 22, 1,258 | 22,245 | 22,998 1,172 | $\begin{array}{r} 22,832 \\ 1,340 \end{array}$ | $\begin{array}{r} 22,451 \\ 1,526 \end{array}$ |
| Employment $\qquad$ <br> Nonagricultural | 22, 413 | 22, 672 | 22, 726 | 22,764 | 22, 453 | 22, 672 | 22,791 | 22, 527 | 22, 010 | 21, 219 | 21, 192 | 20,917 | 21, 826 | 21, 492 | 20,924 |
| Nonagricultural | 21,722 | 21, 636 | 21,333 | 21, 279 | 21, 224 | 21, 187 | 21,260 | 21, 439 | 21, 191 | 20,664 | 20,582 | 20,301 | 21, 144 | 20,405 | 19,882 |
| Worked 35 hours or m Worked $15-34$ hours | 14,788 | 12,255 | 14, 347 | 14,724 | 13,690 | 13, 178 | 14, 160 | 14, 786 | 13, 066 | 13, 878 | 13, 505 | 14, 144 | 14, 809 | 13, 352 | 13, 483 |
| Worked 15-34 hours...--.-- | 4, 238 | 6,490 | 4,272 | 3,807 | 3, 105 | 3,287 | 3,680 | 3, 819 | 5,285 | 4,032 | 4,244 | 3,525 | 3,781 | 4,126 | 3,589 |
| Worked 1-14 hours.-.------ | 2, 117 | 2,264 | 2,047 | 1,851 | 1,491 | 1, 611 | 1,728 | 2, 075 | 1,912 | 2,016 | 2,006 | 1,916 | 2, 028 | 1,794 | 1,718 |
| With a job but not at work ${ }^{4}$ - <br> Agricultural | 579 692 | -626 | +665 | 1.897 | 2,939 | 3, 110 | 1,691 | 2, 759 | -928 | 2, 738 | - 829 | 716 | 2, 527 | 1,134 | 1,718 1,093 |
|  | 692 268 | 1,037 406 | 1,392 | 1,485 773 | 1,229 | 1,485 | 1, 531 | 1,088 | 819 283 | 555 | 610 | 615 | 683 | 1,087 | 1,042 |
| Worked 35 hours or more -- | 268 | 406 497 | 620 | 773 590 | 599 506 | 707 | 643 | 424 <br> 558 | 283 | 209 | 198 | 213 | 249 | 431 | 414 |
| Worked 1-14 hours. | - 80 | 123 | 104 | 105 | 506 | 125 | 112 | 558 93 | 439 84 | 257 | 305 | 308 | 330 | 533 | 504 |
| With a job but not at work | 20 | 11 | $\begin{array}{r}104 \\ \\ \hline\end{array}$ | 16 | 103 | 125 26 | 112 | 14 | 84 11 | 71 20 | 75 29 | 74 20 | 94 9 | 106 17 | 104 20 |

${ }^{1}$ Estimates are based on information obtained from a sample of households and are subject to sampling variability. Data relate to the calendar week ending nearest the 15th day of the month. The employed total includes all wage and salary workers, self-employed persons, and unpaid workers in family-operated enterprises. Persons in institutions are not included.
Because of rounding, sums of individual items do not necessarily equal totals.
${ }^{2}$ Data for 1960 include Alaska and Hawall and are therefore not directly comparable with earlier data. The levels of the civilian labor force, the employed, and nonagricultural employment were each increased by more than 200,000 . The estimates for agricultural employment and unemployment were affected so slightly that these series can be regarded as entirely comparable with pre-1960 data.

[^37]TABLE A-2. Employees in nonagricultural establishments, by industry ${ }^{1}$
[In thousands


[^38]TABLE A-2. Employees in nonagricultural establishments, by industry ${ }^{1}$-Continued
[In thousands]

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Industry} \& \multicolumn{12}{|c|}{1960} \& \multirow[t]{2}{*}{\begin{tabular}{l}
1959 \\
Dec.
\end{tabular}} \& \multicolumn{2}{|l|}{Annual average} \\
\hline \& Dec. \({ }^{2}\) \& Nov. \({ }^{2}\) \& Oct. \& Sept. \& Aug. \& July \& June \& May \& Apr. \& Mar. \& Feb. \& Jan. \& \& 1959 \& 1958 \\
\hline \multicolumn{16}{|l|}{Manufacturing-Continued} \\
\hline Durable goods-Continued \& \& \& \& \& \& \& \& \& \& \& \& \& \& \& \\
\hline \multicolumn{16}{|l|}{} \\
\hline Tin cans and other tinware \& \& 55. 6 \& 57.8 \& 61.3 \& 63.9 \& 63.5 \& 63.6 \& 62.2 \& 59.5 \& 59.1 \& 1, 58.2 \& 58.5 \& 56.8 \& 59.6 \& \[
\begin{array}{r}
1,029.9 \\
58.2
\end{array}
\] \\
\hline Cutlery, handtools, and hardware \& \& 132.4 \& 132.6 \& 131.2 \& 128.7 \& 126.9 \& 132.2 \& 133.0 \& 134.0 \& 137.5 \& 139.7 \& 139.8 \& 138.1 \& 134.2 \& 128.3 \\
\hline Heating apparatus (except electric) and plumbers' supplies \& \& 109.6 \& 112.9 \& 113.6 \& 113.8 \& 114.6 \& 115.9 \& 116.0 \& 116. 1 \& 116.4 \& 117.4 \& 116.9 \& 114.2 \& 116.6 \& 109.3 \\
\hline Fabricated structural metal products. \& \& 289.5 \& 294.6 \& 295.8 \& 298.1 \& 294.8 \& 293.1 \& 287.7 \& 282.0 \& 282. 5 \& 282.3 \& 281.8 \& 282.1 \& 285. 3 \& 109.3
303.0 \\
\hline Metal stamping, coating, and engrav- \& \& 237.3 \& 240.9 \& 238.2 \& 223.2 \& 225.8 \& 236.3 \& 236.5 \& 237.2 \& 246.0 \& 251.2 \& 246.1 \& 239.3 \& 230.1 \& 308.0
210.7 \\
\hline Lighting fixtures \& \& 49.4 \& 49.9 \& 49.7 \& 47.6 \& 47.1 \& 49.1 \& 48.1 \& 49.8 \& 50.9 \& 51.1 \& 50.8 \& 49.9 \& 49.2 \& 214.7 \\
\hline Fabricated wire products \& \& 53.9 \& 55.0 \& 55.6 \& 54.8 \& 54.6 \& 56.6 \& 57.4 \& 58.1 \& 59.6 \& 60.5 \& 60.0 \& 59.2 \& 56.5 \& 52.4 \\
\hline ucts \& \& 133.5 \& 135.2 \& 135.6 \& 134.8 \& 135.9 \& 139.5 \& 139.9 \& 143.1 \& 145.3 \& 145.8 \& 145.3 \& 142.4 \& 137.5 \& 123.3 \\
\hline Machinery (except elect \& 1,570.7 \& 1,583.4 \& 1,585.4 \& 1,605.1 \& 1,615. 2 \& 1,635.3 \& 1,658.6 \& 1,660.9 \& 1,677.8 \& 1,687. 7 \& 1,691. 1 \& 1,675. 0 \& 1,660. 3 \& 1,611.7 \& 1, 501. 2 \\
\hline Engines and turbines. \& \& 98.2 \& 96. 0 \& 99.3 \& 99.8 \& 1,600.2 \& 101.3 \& 103.2 \& 104.3 \& 107.1 \& 107.4 \& 108.5 \& 107.3 \& 103.1 \& 93.1 \\
\hline Agricultural machinery and tractors \& \& 138.7 \& 139.1 \& 139. 6 \& 144.0 \& 145.5 \& 148.8 \& 149.3 \& 153.4 \& 159.1 \& 160.5 \& 157.8 \& 154.1 \& 157.9 \& 136.9 \\
\hline Construction and mining machinery \& \& 113.1 \& 116. 6 \& 119.2 \& 121.6 \& 125. 6 \& 127.6 \& 130.3 \& 132. 5 \& 133.0 \& 132.6 \& 131.2 \& 129.2 \& 129.9 \& 122.0 \\
\hline Metalworking machinery---.---.-.--- \& \& 246.7 \& 247.9 \& 249.7 \& 250.8 \& 258.4 \& 264.8 \& 263.5 \& 264.7 \& 263.1 \& 259.9 \& 257.3 \& 255.4 \& 238.7 \& 223.7 \\
\hline Special-industry machinery (except metalworking machinery) \& \& 175.3 \& 176.0 \& 176.3 \& 176.4 \& 176.2 \& 178.0 \& 176.5 \& 176.1 \& 175.4 \& 174.6 \& 173.3 \& 172.3 \& 165.5 \& 159.6 \\
\hline General industrial machinery \& \& 220.8 \& 222.9 \& 226.7 \& 228.0 \& 228.5 \& 230.8 \& 230.1 \& 231.0 \& 232.7 \& 233.0 \& 229.4 \& 229.3 \& 223.5 \& 220.1 \\
\hline Office and store machines and devices.- \& \& 142.7 \& 142.3 \& 142.0 \& 140.8 \& 140.6 \& 140.4 \& 138.9 \& 139.0 \& 138.3 \& 137.6 \& 137.6 \& 138.1 \& 132. 7 \& 124.9 \\
\hline Service-industry and household machines \& \& 180.6 \& 173.5 \& 180.0 \& 179.7 \& 186.6 \& 192.6 \& 196.5 \& 197.7 \& 195.3 \& 198.5 \& 194.4 \& 89.6 \& \& 168.9 \\
\hline Miscellaneous machinery parts.....-- \& \& 267.3 \& 271.1 \& 272.3 \& 274.1 \& 273.7 \& 274.3 \& 272.6 \& 279.1 \& 283.7 \& 287.0 \& 285.5 \& 285.0 \& 275.5 \& 252.0 \\
\hline \multicolumn{16}{|l|}{\multirow[t]{2}{*}{Electrical machinery-------------------1,
Electrical generating, transmission, dis-}} \\
\hline \& \& \& \& \& \& \& \& \& \& \& \& \& \& \& \\
\hline  \& \& 41.7 \& 40.1 \& 40.2 \& 38.4 \& 38.7 \& 39.3 \& 38.9 \& 39.3 \& 40.3 \& 40.0 \& 39.6 \& 39.5 \& 37.7 \& 34.6 \\
\hline Insulated wire and cah \& \& 29.3 \& 29.0 \& 28.3 \& 27.8 \& 27.0 \& 28.5 \& 28.6 \& 28.3 \& 28.9 \& 29.1 \& 29.5 \& 29.3 \& 28.1 \& 25.4 \\
\hline Electrical equipment for \& \& 72.9 \& 72.9 \& 72.5 \& 67.9 \& 69.7 \& 71.3 \& 70.9 \& 72.6 \& 75. 4 \& 77.0 \& 76.4 \& 74.4 \& 69.8 \& 61.8 \\
\hline Electric lamps.....-.-... \& \& 28.4 \& 23.6 \& 28.1 \& 28.7 \& 28.2 \& 29.1 \& 29.5 \& 29.8 \& 29.7 \& 29.8 \& 29.6 \& 29.5 \& 27.6 \& 26.4 \\
\hline Communication equipment \& \& 690.7 \& 684.1 \& 690.9 \& 680.2 \& 664.9 \& 665.7 \& 658.0 \& 657.5 \& 666.1 \& 671.3 \& 674.2 \& 674.7 \& 627.2 \& 551.4 \\
\hline Miscellaneous electrical produ \& \& 49.3 \& 47.9 \& 49.8 \& 49.2 \& 49.6 \& 49.5 \& 48.9 \& 48.3 \& 48.2 \& 48.7 \& 48.8 \& 50.1 \& 49.1 \& 45.7 \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{}} \& 1,634.5 \& 1,629.8 \& 1, 620.0 \& 1,524. 8 \& 1,590. 7 \& 1,607.9 \& 1,652.8 \& 1,665. 1 \& 1,700.9 \& 1,721.4 \& 1, 722.3 \& 1,655.9 \& 1,670.8 \& 1,592.8 \\
\hline \& \& \multicolumn{14}{|l|}{Motor vehicles and equipment--.----------} \\
\hline Aircraft and parts. \& \& 643.0 \& 634.7 \& 640.0 \& 638.8 \& 630.4 \& 618.1 \& 658.3 \& 668.7 \& 680.3 \& 687.0 \& 693.7 \& 700.9 \& 734.9 \& 757.6 \\
\hline \multicolumn{16}{|l|}{} \\
\hline Aircraft engines and parts \& \& 135.5 \& 127.5 \& 133.2 \& 132.1 \& 125.3 \& 114.9 \& 138.7 \& 139.8 \& 140.7 \& 140.6 \& 142.0 \& 144.2 \& 146.3 \& 152.6 \\
\hline Aircraft propellers and parts \& \& 11.2 \& 11.8 \& 12.0 \& 12.7 \& 11.1 \& 8.3 \& 14.1 \& 13.9 \& 14.0 \& 13.8 \& 13.8 \& 13.6 \& 14.4 \& 18.3 \\
\hline Other aircraft parts and equipment- \& \& 126.3 \& 125.2 \& 123.7 \& 122.6 \& 122.9 \& 123.7 \& 124.1 \& 128.0 \& 132.6 \& 135.4 \& 137.3 \& 138.9 \& 139.2 \& 129.5 \\
\hline Ship and boat building and repairing. \& \& 144.0 \& 143.4 \& 143.4 \& 143.0 \& 144.2 \& 134.0 \& 137.4 \& 135.6 \& 132.4 \& 131.0 \& 145.6 \& 140.7 \& 142.8 \& 144.5 \\
\hline Shipbuilding and repairing-.-.-.....-- \& \& 123.4 \& 124.3 \& 124.3 \& 124.3 \& 124. 6 \& 110.9 \& 112.3 \& 110.1 \& 107.4 \& 106.4 \& 121.7 \& 117.5 \& 120.9 \& 125.3 \\
\hline Boatbuilding and repairing \& \& 20.6 \& 19.1 \& 19.1 \& 18.7 \& 19.6 \& 23.1 \& 25.1 \& 25.5 \& 25.0 \& 24.6 \& 23.9 \& 23.2 \& 21.9 \& 19.2 \\
\hline Rallroad equipment-- \& \& 54.6 \& 57.7 \& 58.6 \& 51.9 \& 60.0 \& 60.8 \& 61.6 \& 59.6 \& 58.7 \& 56.0 \& 51.4 \& 47.7 \& 51.4 \& 50.9 \\
\hline Other transportation e \& \& 9.2 \& 10.5 \& 10.8 \& 10.8 \& 10.5 \& 10.3 \& 10.5 \& 10.4 \& 10.5 \& 9.7 \& 9.0 \& 9.7 \& 10.1 \& 9.0 \\
\hline Instruments and related product \& 343.9 \& 347.4 \& 348.1 \& 350.8 \& 351.9 \& 348.5 \& 352.8 \& 351.3 \& 353.1 \& 353.7 \& 353.6 \& 352.1 \& 354.0 \& \& \\
\hline \multicolumn{16}{|l|}{Laboratory, scientific, and engineering instruments.} \\
\hline \multicolumn{16}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l}
Mechanical measuring and controling instruments \\
\begin{tabular}{ll|l|l}
97.3 \& 97.9 \& 98.7 \& 99.3
\end{tabular} \\
95.8 \\
\begin{tabular}{r|r|r}
65.9 \& 66.0 \\
101.0 \& 100.2
\end{tabular} \\
\begin{tabular}{r|r|r|r|r|r}
60.3 \& 66.6 \& 60.8 \& 60.9 \& 68.2 \& 64.2 \\
100.3 \& 100.2 \& 99.9 \& 97.9 \& 97.3 \& 03.0
\end{tabular}
\end{tabular}}} \\
\hline \& \& \& \& \& \& \& \& \& \& \& 99.9 \& 97.9 \& 97.3 \& 93.0 \& 83.9 \\
\hline \multicolumn{16}{|l|}{\multirow[t]{2}{*}{}} \\
\hline \& \& \& \& \& \& \& \& \& \& \& \& \& \& \& \\
\hline Ophthalmic good \& \& 26.2 \& . 1 \& 5. 7 \& 40.4 \& \& 45.8 \& 45.1 \& 45.3 \& 45. \& 44.9 \& 44. \& 44.7 \& 43.1 \& 41.5 \\
\hline Photographic appar \& \& 67.3 \& 67.5 \& 67.5 \& 67.6 \& 66.8 \& 65.9 \& 65.5 \& 65.6 \& 65.6 \& 27.8
65.8 \& 65.4 \& 67.1 \& 26.1 \& 23.7 \\
\hline \multicolumn{16}{|l|}{} \\
\hline Miscellaneous manufacturing industries .- \& 486.8 \& 509.2 \& 522.2 \& 522.3 \& 514.9 \& 492.9 \& 508.9 \& 498.7 \& 496.5 \& 493.9 \& 489.0 \& 480.0 \& 494.1 \& 486.5 \& 459.9 \\
\hline Jewelry, silverware, and plated ware-- \& \& 46.6 \& 47.5 \& 46.9 \& 46.7 \& 44.5 \& 45.8 \& 45.7 \& 46.0 \& 46.7 \& 46.3 \& 46.4 \& 47.7 \& 45.9 \& 44.4 \\
\hline Musical instruments and parts \& \& 19.1 \& 19.1 \& 19.2 \& 19.2 \& 18.0 \& 18.6 \& 18.6 \& 19.1 \& 19.5 \& 19.6 \& 19.7 \& 19.9 \& 18.0 \& 16. 4 \\
\hline Toys and sporting goods \& \& 96.7 \& 104.5 \& 104.7 \& 101.0 \& 95.1 \& 98.6 \& 93.2 \& 88.1 \& 81.8 \& 77.2 \& 73.3 \& 79.4 \& 84.5 \& 81.7 \\
\hline Pens, pencils, other office supplie \& \& 32.4 \& 33.2 \& 32.8 \& 32.8 \& 32.2 \& 31.8 \& 31.6 \& 31.5 \& 31.3 \& 31.2 \& 30.4 \& 31.0 \& 30.8 \& 30.7 \\
\hline Costume jewelry, buttons, notions \& \& 58.3 \& 60.6 \& 60.6 \& 61.1 \& 57.4 \& 59.7 \& 58.1 \& 59.1 \& 61.5 \& 61.9 \& 60.6 \& 61.3 \& 60.6 \& 58.2 \\
\hline Fabricated plastics products.. \& \& 95.9 \& 95.4 \& 96.2 \& 95.3 \& 92.7 \& 95.6 \& 94.8 \& 95.4 \& 95.5 \& 96.6 \& 96.0 \& 96.2 \& 92.6 \& 84.0 \\
\hline Other manufacturing industries \& \& 160.2 \& 161.9 \& 161.9 \& 158.8 \& 153.0 \& 158.8 \& 156.7 \& 157.3 \& 157.6 \& 156.2 \& 153.6 \& 158.6 \& 154.1 \& 144.5 \\
\hline \multicolumn{16}{|l|}{Nondurable goods} \\
\hline Food and kindred product \& 1,424.1 1 \& 1,484.6 \& , 567.01 \& 1,628.9 \& 1, 601. 71 \& 1,521.4 \& 1,469.2 \& 1,414.9 1 \& 1,404. 1 \& 1,376.8 1 \& 1,380.2 1 \& 1,396.6 1 \& 1, 434.5 \& \& \\
\hline Meat products. \& \& 309.4 \& 310.7 \& 310.9 \& 308.2 \& 305. 7 \& 303. 4 \& 297.2 \& 292.6 \& 294.8 \& 298.2 \& 302.0 \& 305.7 \& 302.1 \& 476.4
307.0 \\
\hline Dairy products. \& \& 91.4 \& 94.0 \& 97.4 \& 101. 4 \& 102. 4 \& 102.0 \& 97.8 \& 94.6 \& 91.0 \& 90.2 \& 89.8

3 \& 90.5 \& 362.8
96 \& 307.0
99.8 <br>
\hline Canning and preserv \& \& 224.2 \& 291.1 \& 362.5 \& 333.8 \& 254.6 \& 207.7 \& 184.7 \& 185.9 \& 167.3 \& 166.7 \& 169.5 \& 182.9 \& 223.0 \& 220.4 <br>
\hline Grain-mill product \& \& 107.9 \& 110.5 \& 110.4 \& 112.1 \& 112.3 \& 110.2 \& 108.9 \& 108.8 \& 108. 4 \& 109.3 \& 109.4 \& 109.9 \& 113.3 \& 113.8 <br>
\hline Bakery products \& \& 289.2 \& 292.0 \& 290.8 \& 289.9 \& 292.0 \& 290.8 \& 286.1 \& 287.0 \& 286.1 \& 286.8 \& 285. 9 \& 287.9 \& 285.2 \& 284.3 <br>
\hline  \& \& 42.9 \& 39.4 \& 27.6 \& 25.7 \& 26.3 \& 25.8 \& 25.1 \& 26.1 \& 24.5 \& 25. 7 \& 34.8 \& 41.3 \& 31.0 \& 31.4 <br>
\hline Confectionery and related produc \& \& 78.2 \& 79.3 \& 77.0 \& 73.2 \& 66.9 \& 70.0 \& 69.5 \& 70.2 \& 71.8 \& 72.3 \& 72.7 \& 78.0 \& 73.5 \& 75.4 <br>
\hline Beverages....--------1-- \& \& 209.0 \& 214.9 \& 216.3 \& 219.1 \& 221.7 \& 220.2 \& 211.1 \& 206. 3 \& 201.5 \& 198.1 \& 200.4 \& 205. 5 \& 209.1 \& 207.0 <br>
\hline Miscellaneous food product \& \& 132.4 \& 135.1 \& 136.0 \& 138.3 \& 139.5 \& 139.1 \& 134.5 \& 132.6 \& 131. 4 \& 132.9 \& 132.1 \& 132.8 \& 136.2 \& 137.3 <br>
\hline
\end{tabular}

TABLE A-2. Employees in nonagricultural establishments, by industry ${ }^{1}$-Continued
[In thousands]


TABLE A-2. Employees in nonagricultural establishments, by industry ${ }^{1}$-Continued
[In thousands]


[^39][^40]TABLE A-3. Production or nonsupervisory workers in nonagricultural establishments, by industry ${ }^{1}$
[In thousands]

| Industry | 1960 |  |  |  |  |  |  |  |  |  |  |  | 1959 | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dec. ${ }^{2}$ | Nov. ${ }^{2}$ | Oct. | Sept. | Aug. | July | June | May | Apr. | Mar. | Feb. | Jan. | Dec. | 1959 | 1958 |
| Mining |  | 504 | 512 | 516 | 525 | 507 | 534 | 532 | 533 | 524 | 527 | 518 | 527 | 532 | 572 |
| Metal |  | 73.9 | 76.4 | 77.3 | 78.4 | 78.4 | 80.4 | 80.0 | 79.3 | 77.6 | 73.4 | 60. 5 | 57.2 | 65.1 | 76.5 |
| Iron |  | 24.7 | 27.7 | 28.2 | 29.6 | 29.4 | 30.5 | 30.5 | 29.5 | 28.8 | 28.6 | 28.4 | 28.2 | 22.7 | 26.1 |
| Copp |  | 26.5 | 26.4 | 26.3 | 25.8 | 25.3 | 26.0 | 25.6 | 25.7 | 24.8 | 21.1 | 8.5 | 5. 6 | 18.0 | 23.4 |
| Lead and zinc |  | 7.9 | 7.6 | 8.1 | 8.2 | 8.9 | 9.1 | 9.7 | 10.1 | 10.2 | 10.1 | 10.1 | 9.9 | 10.0 | 10.5 |
| Anthracite |  | 9.8 | 10.4 | 10.2 | 9.7 | 9.0 | 10.0 | 10.5 | 11.5 | 12.4 | 13.9 | 13.9 | 14.1 | 14.6 | 18.5 |
| Bituminous co |  | 128.9 | 131.0 | 130.6 | 136.0 | 119.1 | 144.3 | 147.7 | 149.5 | 152.0 | 154.1 | 154.4 | 155.1 | 149.2 | 173.8 |
| Crude-petroleum and natural-gas prok duction. |  | 196.6 | 196.7 | 200.0 | 202.6 | 202.3 | 202.9 | 198.3 | 199.5 | 197.7 | 199.8 | 202.7 | 208.3 | 210.2 | 211.1 |
| Petroleum and natural-gas production (except contract services) |  | 98.8 | 99.0 | 101.9 | 103.1 | 103.9 | 103.2 | 101.2 | 101.8 | 102.5 | 103.3 | 103.9 | 104.6 | 108.1 | 112.9 |
| Nonmetallic mining and quarryi |  | 94.6 | 97.5 | 97.6 | 98.3 | 97, 8 | 96.4 | 95.9 | 93.1 | 83.9 | 85.3 | 86.1 | 92.6 | 92.5 | 91.9 |
| Contract constructio |  | 2,440 | 2,585 | 2,545 | 2,705 | ${ }_{2}^{2,669}$ | 2,558 | 2, 420 | 2,190 | 1,914 340 | 1,989 353 | 2,047 360 | 2,289 | 2,372 | 2,278 |
| Nonbuilding construction-....-- |  |  |  |  | ${ }_{296}^{576}$ | ${ }_{292}^{598}$ | ${ }_{286}^{588}$ | ${ }_{256.6} 5$ | 196.2 | ${ }_{136.3}$ | ${ }^{353} 142.9$ | 360 145.2 | 439 195.2 | 506 245.4 | ${ }^{497}$ |
| Highway and street constructio Other nonbuilding construction |  | 247.0 | 258.1 | 2867.4 267.2 | 296.1 | 292.6 280.1 | 286.7 271.0 | 256. 25 | 196.2 227.4 | 1303.3 203 | 142.9 210.4 | 1414.9 214 | 1943. 8 | 245.4 260.5 | 231.8 265.1 |
| Building construction..----.- |  | 1,949 | 2,046 | 2,091 | 2, 129 | 2, 096 | 2,000 ${ }^{1}$ | 1,907 ${ }^{1}$ | 1,766 | 1, 574 | 1,636 ${ }^{1}$ | 1,687 | 1,850 | 1,868 | 1,781 |
| General contractors. |  | 672.0 | 706.0 | 732.9 | 751.9 | 752.4 | 714.7 | 675.1 | 609.5 | 513.4 | 542.2 | 564.0 | 629.0 | 662.4 | 658.1 |
| Special-trade contrac |  | 1,277.1 | 1,340.4 | 1,358.3 | 1,377.0 ${ }^{1}$ | $1,343.91$ | 1, 285.4 | 1,232.0 | 1,156.3 | 1,060.3 | 1,093. 61 | 1,123.2 | $1,220.91$ | 1, 203.21 | 1, 122.6 |
| Plumbing and heat |  | 255.6 | 262.0 | 268.7 | 262.5 | 256.2 | 253.4 | 246.7 | 235.4 | 224.1 | 230.3 | 239.3 | 251.5 | 252.8 | 247.0 |
| Painting and decorat |  | 199.0 | 212.5 | 222.6 | 233.6 | 229.5 | ${ }_{149}^{212 .} 7$ | 201.3 | 176.3 | 160.3 | 159.3 | 163.1 134 | 184.6 | 181.7 | 153.3 |
| Electrical work Other special-tr |  | $\begin{aligned} & 155.3 \\ & 667.2 \end{aligned}$ | $\begin{aligned} & 158.6 \\ & 707.3 \end{aligned}$ | $\begin{aligned} & 161.9 \\ & 705.1 \end{aligned}$ | $\begin{aligned} & 166.0 \\ & 714.9 \end{aligned}$ | 159.9 <br> 698.3 | 149.6 <br> 669.7 | 139.4 644.6 | 133.3 <br> 611.3 | 128.6 | 132.0 572.0 | 134.4 586.4 | 138.8 646.0 | 138.3 630.4 | 138.2 584.1 |
| nufacturin | 11,777 | 12,052 | 12,226 | 12,399 | 12, 265 | 12,145 | 12,332 | 12, 292 | 12,334 | 12,435 | 12, 494 | 12, 449 | 12,466 | 12,237 | 11,658 |
| Durable good | 6,649 | 6,797 | 6, 863 | 6,949 | 6,833 | 6,888 | 7,056 7 | 7,084 | 7,123 | 7,205 | 7, 268 | 7,230 | 7,173 | 6,955 | 6, 507 |
| Nondurable go | 5,128 | 5,255 | 5,363 | 5,450 | 5, 432 | 5,257 | 5,276 | 5, 208 | 5,211 | 5,230 | 5,226 | 5,219 | 5, 293 | 5,282 | 5,151 |
| Durable goods |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ordnance and accessorie | 73.7 | 74.0 | 72.2 | 73.5 | 72.0 | 72.3 | 72.4 | 73.0 | 73.8 | 74.9 | 74.7 | 74.3 | 74.0 | 72.9 | 68.4 |
| Lumber and wood products (except furniture) | 521.0 | 550.4 | 580.6 | 598.4 | 606.9 | 606.1 | 617.4 | 592.5 | 586.6 | 555.7 | 580.6 | 561.4 | 583.6 | 591.1 | 556.8 |
| Logging camps and contractors.-.------ |  | 95.8 | 110.6 | 114.8 | 110.9 | 114.6 | 118.6 | 101.8 | 86.1 | 83.9 | 85.5 | 86.5 | 95. 4 | 92.3 | 80.1 |
| Sawmills and planing mills.- |  | 266.5 | 276.4 | 285.0 | 293.1 | 291.4 | 296.0 | 288.8 | 281.6 | 275.1 | 276.7 | 277.0 | 286.3 | 291.5 | 283.6 |
| Millwork, plywood, and prefabricated structural wood products. |  | 103.8 | 107.2 | 110.5 | 112.8 | 110.9 | 112.0 | 111.7 | 110.9 | 109.0 | 110.5 | 110.3 | 113.6 | 117.7 | 106.5 |
| Wooden containers.-...-. - |  | 36.8 | 37.8 | 38.5 | 39.7 | 39.9 | 40.8 | 40.8 | 39.7 | 38.2 | 38.3 | 38.3 | 39.1 | 40.2 | 40.6 |
| Miscellaneous wood produc |  | 47.5 | 48.6 | 49.6 | 50.4 | 49.3 | 50.0 | 49.4 | 50.3 | 49.5 | 49.6 | 49.3 | 49.2 | 49.4 | 46.0 |
| Furniture and fixtures. | 310.5 | 320.2 | 327.0 | 328.2 | 327.2 | 320.9 | 326.7 | 324.3 | 327.2 | 326.9 | 327.6 | 327.4 | 327.8 | 321.2 | 297.3 |
| Household furniture. |  | 237.4 | 241.9 | 241.5 | 241.2 | 235.6 | 240.4 | 240.3 | 242.7 | 242.9 | 244.0 | 244.0 | 245.9 | 240.8 | 220.1 |
| Office, public building, and professional furniture |  | . 4 | 38.8 | 39.6 | 39.0 | 38.4 | 38.8 | 37.6 | 38.0 | 37.7 | 37.2 | 36.8 | 36.7 | 35. | 34.2 |
| Partitions, shelving, lockers, and fixtures |  | 26.3 | 7.4 | 28.0 | 28.3 | . 1 | 28.1 | 26.8 | 27.2 | 26.7 | 27.0 | 27.4 | 27.1 | 25.6 | 25.6 |
| Screens, blinds, and miscellaneous furniture and firtures |  | 19.1 | 18.9 | 19.1 | 18.7 | 18.8 | 19. | 19. | 19 | 19.6 | 19.4 | 19.2 | 18.1 | 18.9 | 17.4 |
| Stone, clay, and glass pr | 416.4 | 431.4 | 441.7 | 449.2 | 451.5 | 449.9 | 456.1 | 451.6 | 448.2 | 443.0 | 445.2 | 442.6 | 452.4 | 449.1 | 417.8 |
| Flat glass...-....... |  | 25.4 | 26.4 | 26.1 | 25.5 | 25.8 | 26. 2 | 26.6 | 27.5 | 30.2 | 32.0 | 32.2 | 32.3 | 28.7 | 23.5 |
| Glass and glassware, pressed or blown. |  | 87.7 | 89.6 | 92.4 | 90.8 | 90.0 | 93.2 | 90.5 | 89.3 | 88.9 | 87.5 | 84.7 | 85.9 | 84.7 | 80.5 |
| Glass products made of purchased glass |  | 14.3 315 | 14.2 | 14.0 | 13.8 | ${ }_{35}^{13.4}$ | ${ }^{13.6}$ | 13.7 <br> 34.5 | 13.7 | 14.1 31.6 | 14.5 31.0 | 14.5 32.5 | 14.8 33.9 | 15.0 | 13.3 |
| Cement, hydraulic |  | 31.5 | 33.1 | 34, 2 | 35. ${ }^{2}$ | 35.3 | ${ }_{65} 35$ | 34.5 | 33.7 <br> 64 | 31.6 | 31.0 62 | 32.5 | 33.9 66.0 | 34.4 | 34.6 |
| Structural clay products |  | 60.8 | 62.3 | 64.0 | 65.7 | 66.1 40 | 65.8 | 65.9 41 | 64.5 42.3 | 62.2 42.5 | 62.6 42.4 | 63.1 41.9 | 66.0 | 65.5 | 63.4 |
| Pottery and related products |  | 39.2 | 39.9 92.5 | 40.3 93.1 | 40.4 95.8 | 40.9 94.8 | 42.2 95.0 | 41.7 93.2 | 42.3 91.0 | 86.8 | 427.7 | 41.9 87.8 | 42.0 91.7 | 41.3 94.3 | 37.6 |
| Concrete, gypsum, and plaster products Cut-stone and stone products. |  | 90.2 15.7 | 92.5 16.0 | 16.2 | 95.8 16.0 | 15.2 | 15.8 | 15.6 | 15.4 | 14.9 | 15.0 | 14.8 | 15.3 | ${ }_{15.6}$ | 86.9 15.7 |
| Miscellaneous nonmetallic mineral products. |  | 66.6 | 67.7 | 68.9 | 68.3 | 68.4 | 69.0 | 69.9 | 70.8 | 71.8 | 72.5 | 71.0 | 70.5 | 69.6 | 62.3 |
| Primary metal industries | 854.8 | 870.9 | 891.4 | 905.0 | 909.8 | 923.8 | 970.3 | 992.6 | 1019.8 | 1,042.6 | 1,051.5 | 1,048.3 | 1,038.8 | 916.4 | 891.0 |
| Blast furnaces, steel works, and rolling mills $\qquad$ |  | 394.2 | 409.2 |  | 430.8 | 438.7 | 468.9 | 495.3 | 510.6 | 526.4 | 531.6 |  | 527.7 | 416.6 |  |
|  |  | 181.1 | 182.8 | 185.7 | 179.5 | 187.1 | 193.1 | 188.8 | 194.0 | 194.7 | 198.8 | 197.7 | 197.6 | 192.2 | 167.4 |
| Primary smelting and refining of nonferrous metals. |  | 43.7 | . 2 | 44.8 | 45.8 | 46.3 | 46. | 46.1 | 47.2 | 45.4 | 42.5 | 40.7 | 37.4 | 40. | 43.2 |
| Secondary smelting and refining of nonferrous metals. |  | 8.7 | 8. 9 | 9.1 | 9.0 | 8.6 | 8.6 | 8.9 | 9.1 | 9.3 | 9.3 | 9.4 | 9.2 | 9.1 | 8.2 |
| Rolling, drawing, and alloying of nonferrous metals. |  | 82.9 | 83.9 | 84.0 | 83.7 | 82.7 | 85.2 | 84.2 | 85.6 | 87.0 | 87.4 | 88.1 | 89.1 | 89.2 | 80.6 |
| Nonferrous foundries.- |  | 47.7 | 49.3 | 49.3 | 48.6 | 47.6 | 50.3 | 49.6 | 51.2 | 53.7 | 55. 2 | 55.4 | 55. 2 | 53.3 | 46.4 |
| Miscellaneous primary metal industries |  | 112.6 | 113.1 | 114.5 | 112.4 | 112.8 | 117.6 | 119.7 | 122.1 | 126.1 | 126.7 | 125.4 | 122.6 | 116.0 | 108.4 |
| Fabricated metal products (except ordnance, machinery, and transportation equipment) | 801.0 | 816.4 | 833.8 | 835.0 | 819.4 | 817.3 | 840.1 | 836.5 | 836.8 | 853.8 | 863.3 | 856.6 | 840.9 | 831.6 | 795.8 |
|  |  | 47.4 | 49.8 | 53.3 | 55.8 | 55.4 | 55.6 | 54.3 | 51.7 | 51.3 | 50.3 | 50.8 | 49.1 | 51.9 | 50.8 |
| Cutlery, handtools, and hardware |  | 104.0 | 103.9 | 102.5 | 100.1 | 98.6 | 103.8 | 104.4 | 105.4 | 109.1 | 111.7 | 111.9 | 110.2 | 106.2 | 100.1 |
| Heating apparatus (except electric) and plumbers' supplies |  | 81.7 | 85.1 | 86.0 | 85.9 | 86.4 | 87.8 | 88.1 | 88.5 | 88.5 | 89.5 | 89.0 | 86.8 | 89.5 | 83.3 |
| Fabricated structural metal products.- |  | 205.7 | 210.8 | 211.7 | 213.4 | 210.1 | 208.1 | 204.4 | 199. 7 | 200.6 | 200.7 | 199.5 | 199.3 | 203.4 | 220.0 |
| Metal stamping, coating, and engraving. |  | 193.1 | 196.6 | 193.7 | 180.2 | 182.4 | 192.8 | 192.9 | 193. 7 | 201.9 | 207.1 | 202.4 | 196.2 | 187.8 | 169.4 |
| Lighting fixtures |  | 38.3 | 38.7 | 38.6 | 36.4 | 36.0 | 37.9 | 37.0 | ${ }_{46} 38$ |  | 39.8 | 39.4 | 39.0 | 38.5 | 34.2 |
| Fabricated wire products- |  | 42.6 | 43.9 | 44.2 | 43.4 | 43.1 | 45.2 | 45.9 | 46.6 | 48 | 49.2 | 48.7 | 47.7 | 45. | 41.7 |
| Miscellaneous tabricated metal prod- |  | 103.6 | 105.0 | 105.0 | 104.2 | 105.3 | 108.9 | 109.5 | 112.6 | 114.5 | 115.0 | 114.9 | 112.6 | 108.9 | 96.5 |

See footnotes at end of table.

## Table A-3. Production or nonsupervisory workers in nonagricultural establishments, by industry ${ }^{1}$-Continued

[In thousands]


TABLE A-3. Production or nonsupervisory workers in nonagricultural establishments, by industry ${ }^{1}$-Continued
[In thousands]

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow{2}{*}{Industry} \& \multicolumn{12}{|c|}{1960} \& 1959 \& \multicolumn{2}{|l|}{Annual average} <br>
\hline \& Dec. ${ }^{2}$ \& Nov. ${ }^{2}$ \& Oct. \& Sept. \& Aug. \& July \& June \& May \& Apr. \& Mar. \& Feb. \& Jan. \& Dec. \& 1959 \& 1958 <br>
\hline \multicolumn{16}{|l|}{Manufacturing-Continued} <br>
\hline Nondurable goods-Continued \& \& \& \& \& \& \& \& \& \& \& \& \& \& \& <br>
\hline Textile-mill products \& 822.1 \& 831.5 \& 839.9 \& 849.5 \& 858. 6 \& 847.8 \& 866.7 \& 862.9 \& 861. 4 \& 863.0 \& 859.5 \& 859.7 \& 867.4
4.9 \& 873.9
5.

r \& 850.8
4.7 <br>
\hline Scouring and combing \& \& 4.4 \& 4.5 \& 4.7 \& 4.9 \& 4. 9 \& 5. 0 \& 4.9 \& 4.8 \& 4.8 \& 5.1
98.3 \& 5.1
99.0 \& 4.9
99.8 \& 5.0
101.5 \& 4.7
99.7 <br>
\hline Yarn and thread mills \& \& 91.9 \& 92.9 \& 94.3 \& 96. 0 \& 94.9 \& 97.7
364.7 \& 97.6
364.7 \& 97.7 \& 388. 5 \& 98.3 \& 368.0 \& 369.8 \& 370.5 \& 372.4 <br>
\hline Broad-woven fabric mills \& \& 348.9 \& 351.4 \& 355.8 \& 359.7 \& 360. ${ }^{2}$ \& 364.7
25.9 \& 364.7
25.6 \& $\begin{array}{r}366.9 \\ 25.8 \\ \hline\end{array}$ \& 368.5
26.1 \& 366.8
26.0 \& 368.1
26.1 \& 369.8
25.8 \& 370.5
25.9 \& 372.4
23.9 <br>
\hline Narrow fabrics and smallware \& \& 24.6 \& 24.7
201.4 \& 25.5 \& 205.7 \& 196.6 \& 204.6 \& 200.7 \& 196.7 \& 195.0 \& 191.2 \& 189.7 \& 195.7 \& 199.7 \& 186.8 <br>
\hline Knitting mills \& \& 197.3 ${ }^{75} 1$ \& 201.4
75.4 \& 75.4 \& 205. 7 \& 196. 7 \& 77.7 \& 77.7 \& 77.8 \& 76.6 \& 77.3 \& 77.4 \& 77.1 \& 76.6 \& 73.7 <br>
\hline Carpets, rugs, other floor covering \& \& 36.0 \& 35.9 \& 36.5 \& 36.3 \& 35.9 \& 36.4 \& 37.2 \& 38.0 \& 38.4 \& 39.0 \& 38.8 \& 38.6 \& 38.9 \& 36.7 <br>
\hline Hats (except cloth and millinery) \& \& 7.9 \& 7.8 \& 8. 2 \& 8. 5 \& 8. 6 \& 8.9 \& 8.9 \& 8.3 \& 8.9 \& 8. 6 \& 98.1
46.5 \& 9.2
46.4 \& 8.9
46.9 \& 9.0
43.9 <br>
\hline Miscellaneous textile goods .- \& \& 45.4 \& 45.9 \& 46.0 \& 45.0 \& 44. 7 \& 45.8 \& 45.6 \& 45.4 \& 46.7 \& 47.2 \& 46.5 \& 46.4 \& 46.8 \& 43.8 <br>
\hline Apparel and other finished textile prod- \& \& ,079.8 \& \& \& 3 \& 9.7 \& 085.3 \& 1,079.1 \& 1,082. 4 \& 1, 118.2 \& 1,111. 1 \& 1,090.8 \& 1,102. 5 \& 1,080.0 \& 1,027.0 <br>
\hline \& \& 101.0 \& 102.9 \& 103.5 \& 1,04.7 \& 97.8 \& 104.7 \& 103.5 \& 102.3 \& 103.1 \& 102.5 \& 102.2 \& 102.4 \& 99.5 \& 95.0 <br>
\hline \multicolumn{16}{|l|}{Men's and boys' suits and coats-w--------- 101.0} <br>
\hline Women's outer \& \& 312.9 \& 317.4
291.8 \& 325.3
299 \& 327.6 \& 394.3 \& 293.9 \& 293.0 \& 300.9 \& 322.6 \& 319.8 \& 311.1 \& 313.8 \& 308.0 \& 302.7 <br>
\hline Women's, children's \& \& 106.0 \& 106.1 \& 105.6 \& 105. 6 \& 100.5 \& 105.2 \& 105.5 \& 107.5 \& 108.9 \& 108. 6 \& 106.8 \& 108.7 \& 106.2 \& 101.9 <br>
\hline Millinery \& \& 14.4 \& 16.7 \& 16.8 \& 17.5 \& 14.7 \& 11.3 \& 13.0 \& 15.9 \& 20.7 \& 20.1 \& 17. 1 \& 16.2 \& 16.3 \& 15.7 <br>
\hline Children's outerwea \& \& 63.5 \& 63.9 \& 64.3 \& 66.2 \& 67. 1 \& 67.9
5.6 \& 65.5
5.2 \& 61.9
4.9 \& 66.1
4.8 \& 5.0 \& 5.0 \& 64.
6.8 \& 7.1 \& 6.1
8.2 <br>
\hline Fur goods.. \& \& 6.8
54 \& 6.6 \& 6.4
55.3 \& 6.0
55.3 \& 51. 5 \& 5.6
55.7 \& 53.8 \& 54.4 \& 54.1 \& 53.3 \& 51.9 \& 54.8 \& 54, 4 \& 50.9 <br>
\hline Miscellaneous apparel and accessorios.- \& \& 54.9
117.9 \& 55.
118.4 \& 55.3
118.0 \& 55.3
115.3 \& 51.2
110.4 \& 115.0 \& 116.7 \& 115.8 \& 117.0 \& 116.4 \& 114.8 \& 116.9 \& 113.7 \& 103.6 <br>
\hline Other fabricated textlle products.------ \& \& 117.2 \& 118.4 \& 118 \& 115.3 \& 110.4 \& 110. \& 116.7 \& 115.8 \& 117.0 \& \& \& \& \& <br>
\hline Paper and allied products \& 438.5 \& 445.1 \& 448.8 \& 452.1 \& 451.3 \& 444.5 \& 451.8 \& 449.2 \& 448.3 \& 446.4 \& 445.8 \& 447.2 \& 450.5 \& 448.6 \& 439.3 <br>
\hline Pulp, paper, and paperboard mills.---- \& \& 221.6 \& 223.1 \& 225.4 \& 226.4 \& 222.2 \& 225.7 \& 222.8 \& 222.5 \& 221.5 \& 221.6 \& 223.3 \& 222.2 \& 223.1 \& 220.7 <br>
\hline Paperboard containers and boxes .....- \& \& 122.9 \& 124. 0 \& 123.8 \& 122.1 \& 119.8 \& 122.0 \& 121.5 \& 121.3 \& 121.8 \& 121. 7 \& 121. 4 \& 125. 2 \& 122.9 \& 119.6 <br>
\hline Other paper and allied products \& \& 100.6 \& 101.7 \& 102.9 \& 102.8 \& 102.5 \& 104.1 \& 104.9 \& 104.5 \& 103. \& 2.5 \& 102.5 \& 103.1 \& 102.6 \& 99.0 <br>
\hline Printing, publishing, and allied industries \& 582.9 \& 585.5 \& 584.6 \& 578.4 \& 572.7 \& 568.3 \& 571.9 \& 566.8 \& 567.5 \& 567.6
162.6 \& 565. 16 \& 562. 4 \& 570. 6
165.8 \& 557.5
161.0 \& 545.4
157.2 <br>
\hline  \& \& 168. 1 \& 166.6 \& 165.3 \& 164.2 \& 163.7 \& 165.0 \& 164.0
27.0 \& 162.9 27.7 \& 162.6
27.6 \& 161.5
27.4 \& 161.5 27 \& 165.8
27.2 \& 161.0
26.6 \& 157.2 <br>
\hline Periodicals \& \& 28.5 \& 28.6 \& 28.5 \& 27.5
38 \& 26.6
38.0 \& 26.8
37.5 \& 27.4 \& 37.6 \& 37.2 \& 37.0 \& 36.6 \& 36.4 \& 35. 5 \& 33.7 <br>
\hline Books .-. \& \& 39.4 \& 39.1
187.9 \& 39.3
187.1 \& 38.7
184.8 \& 38.0
183.9 \& 184.5 \& 182.5 \& 184.6 \& 185.4 \& 184.4 \& 185.0 \& 185.4 \& 180.2 \& 177.5 <br>
\hline Commercial printin \& \& 187.5 \& 187.9
53.0 \& 182.7 \& 184.8 \& 183.8
51.8 \& 52.0 \& 51.8 \& 52.1 \& 51.5 \& 50.7 \& 48.9 \& 50.3 \& 50.1 \& 49.7 <br>
\hline Greeting cards \& \& 17.1 \& 17.6 \& 16.6 \& 16.4 \& 16.0 \& 16.6 \& 14.6 \& 14.5 \& 14.0 \& 13.7 \& 13.5 \& 15.4 \& 15.0 \& 14. 2 <br>
\hline Bookbinding and related industries \& \& 37.2 \& 37.6 \& 37.8 \& 38.0 \& 37.5 \& 38.0 \& 37.7 \& 37.6 \& 37.6 \& 37.2 \& 36.4 \& 36.8 \& 36.3 \& 35.0 <br>
\hline Miscellaneous publishing and printing services \& \& 54.5 \& 54.2 \& 51.1 \& 51.0 \& 50.8 \& 51.5 \& 51.8 \& 50.5 \& 51.7 \& 53.2 \& 53.1 \& 53.3 \& 52.8 \& 52.6 <br>
\hline Chemicals and allied product \& 532.3 \& 535.7 \& 538.1 \& 537.4 \& 537.6 \& 536.9 \& 540.4 \& 546.7 \& 551.0 \& 540.5 \& 537.3 \& 535.9 \& 537.1 \& 530.9 \& 512.2 <br>
\hline Industrial inorganic chemicals......-- \& \& 69.4 \& 69.4 \& 69.4 \& 69.9 \& 69.5 \& 69.5 \& 69.2 \& 69.3 \& 68.7 \& 68.8 \& 69.1 \& 69.6 \& 68. 4 \& 67.3
191.8 <br>
\hline Industrial organic chemicals. \& \& 207.9 \& 205.8 \& 207.1 \& 210.3 \& 211.3 \& 211.1 \& 210.0 \& 208.9 \& 208.7 \& 207.7 \& 208.0 \& 206.8 \& 203.3 \& 191.8 <br>
\hline Drugs and medicines. \& \& 56.4 \& 56.5 \& 57.2 \& 57.9 \& 58.3 \& 57.5 \& 56. 6 \& 56.7 \& 57 \& \& \& 57.3 \& \& 7.6 <br>
\hline Soap, cleaning and polishing preparations \& \& 32.0 \& 32.4 \& 32.5 \& 32.2 \& 31.7 \& 31.3 \& 30.8 \& 30.8 \& 30.7 \& 30.4 \& 30.2 \& 30.2 \& 30.3 \& 30.1 <br>
\hline  \& \& 44.7 \& 45.5 \& 46.1 \& 46. 9 \& 46. 7 \& 46.6 \& 46.3 \& 46.1 \& 45.7 \& 45.9 \& 45.3 \& 45.8 \& 45. 4 \& 43.7 <br>
\hline Gum and wood chemicals \& \& 6.2 \& 6.3 \& 6.3 \& 6.4 \& 6. 4 \& 6.4 \& 6.4 \& 6. 4 \& 6.3 \& 6.5 \& 6.4 \& 6.4 \& 6.3 \& 6.4 <br>
\hline Fertilizers. \& \& 23.6 \& 24.6 \& 23.7 \& 21.6 \& 21. 6 \& 25.8 \& 34.1 \& 38.7 \& 29.5 \& 27.4 \& 27.3 \& 24.9
29.4 \& 26.9 \& 26.1 <br>
\hline Vegetable and animal olls and fa \& \& 29.2 \& 29.3 \& 26.6 \& 24.1 \& 23.8 \& 23.9
68.3 \& 24.9
68.4 \& 26.5
67.6 \& 26.6
67.0 \& 27.4
66.2 \& 27.9
65.1 \& 29.4
66.7 \& 66 \& 63.1 <br>
\hline Miscellaneous chemicals. \& \& 66.3 \& 68.3 \& 68.5 \& 68.3 \& 67.6 \& 68.3 \& 68.4 \& 67.6 \& 67.0 \& 60.2 \& 65.1 \& 66.7 \& 66.0 \& 63.1 <br>
\hline Products of petroleum and coal \& 145.1 \& 147.6 \& 149.7 \& 150.5 \& 153.5 \& 153.2 \& 155.6 \& 154.9 \& 154. 4 \& 154.2 \& 154.9 \& 154.1 \& 154. 5 \& 155.4 \& 157.0 <br>
\hline Petroleum refining.--------- \& \& 113.2 \& 114.0 \& 115.1 \& 116.7 \& 117.0 \& 117.6 \& 116.7 \& 116.3 \& 116.4 \& 117.1 \& 116.4 \& 116.4 \& 118.4 \& 121.2 <br>
\hline Coke, other petroleum and coal products. \& \& 34.4 \& 35.7 \& 35.4 \& 36.8 \& 36.2 \& 38.0 \& 38.2 \& 38.1 \& 37.8 \& 37.8 \& 37.7 \& 38.1 \& 37.0 \& 35.8 <br>
\hline Rubber produc \& 189.7 \& 194.1 \& 197.9 \& 197.8 \& 196.1 \& 191. 7 \& 197.9 \& 197.6 \& 200.7 \& 207.5 \& 208.6 \& 208.0 \& 208.0 \& 199.4 \& 186.0 <br>
\hline Tires and inner tubes \& \& 72.6 \& 73.8 \& 74.5 \& 75.7 \& 75.9 \& 76.6 \& 77.0 \& 78.1 \& 78.8 \& 77.4 \& 77.9 \& 78.1 \& 74.6 \& 74.7 <br>
\hline Rubber footwear....- \& \& 18.6 \& 18.5 \& 18.5 \& 18.2 \& 17.6 \& 18. 2 \& 18.1 \& 18.5 \& 18.9 \& 19.0 \& 119.0 \& 19.4 \& 17.9
106.9 \& 16.7 <br>
\hline Other rubber products \& \& 102.9 \& 105.6 \& 104.8 \& 102.2 \& 98.2 \& 103.1 \& 102.5 \& 104.1 \& 109.8 \& 112.2 \& 111.1 \& 110.5 \& 106.9 \& 94.6 <br>
\hline Leather and leather produc \& 313.1 \& 319.8 \& 318.1 \& 321.2 \& 331.0 \& 322.2 \& 323.2 \& 315.2 \& 316.9 \& 328.1 \& 328.8 \& 329.0 \& 331.5 \& 331.6 \& 317.7 <br>
\hline Leather: tanned, curried, and finished. \& \& 30.0 \& 30.0 \& 30.1 \& 30.4 \& 29.9 \& 30.2 \& 29.7 \& 29.8 \& 30.1 \& 30.5 \& 31.3 \& 31.5 \& 32.8 \& 33.7 <br>
\hline Industrial leather belting and packing- \& \& 3.6 \& 3.6 \& 3.6 \& 3. 5 \& 3.2 \& 3.2 \& 3.1 \& 3.3 \& 3.7 \& 3.9 \& 3.9 \& 3.8 \& 3.8 \& 3. 16 <br>
\hline Boot and shoe cut stock and findings.-- \& \& 16.8 \& 16.1 \& 16.0 \& 17.2 \& 17.3 \& 17.3 \& 16.6 \& 16. 6 \& 17.5 \& 17.9 \& 18.1 \& 17.4 \& 17.4 \& 16.2 <br>
\hline Footwear (except rubber). \& \& 213.6 \& 211.4 \& 215.4 \& 222.8 \& 218.9 \& 218.9 \& 212.3 \& 213.7 \& 220.6 \& 221.7 \& 223.6 \& 224.0 \& 223.7 \& 213.8 <br>
\hline Luggage ...-. \& \& 13.5 \& 14.3 \& 14.1 \& 15.0 \& 14. 1 \& 13.8 \& 13.5 \& 13.3 \& 13.3 \& 12.8 \& 12.6 \& 12.8 \& 13.0 \& 12.5 <br>
\hline Handbags and small leather goods ------ \& \& 29.5
12.8 \& 29.5
13.2 \& 28.2
13.8 \& 28.0

14.1 \& | 25.9 |
| :--- |
| 12.9 | \& 13.8 \& 26.0

14.0 \& 26.5
13.7 \& 29.2
13.7 \& 12.9 \& 11.8 \& 13.7 \& 13.6 \& 12.3 <br>
\hline
\end{tabular}

See footnotes at end of table.

TABLE A-3. Production or nonsupervisory workers in nonagricultural establishments, by
industry ${ }^{1}$-Continued
[In thousands]

| Industry | 1960 |  |  |  |  |  |  |  |  |  |  |  | $1959$ <br> Dec. | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dec. ${ }^{2}$ | Nov. 2 | Oct. | Sept. | Aug. | July | June | May | Apr. | Mar. | Feb. | Jan. |  | 1959 | 1958 |
| Transportation and public utilities: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other public utilities |  | 531 | 533 | 538 | 540 | 544 | 537 | 529 | 530 | 524 | 530 | 530 | 532 | 534 | 537 |
| Gas and electric utilities.-.----i- |  | 510.1 217.1 | 511.8 218.1 | 517.0 220.7 | 517.9 | 522.1 | 515.7 | 508.0 | 508.9 | 503.7 | 509.4 | 509.9 | 511.3 | 513.0 | 516.4 |
| Gas utilities. |  | 139.4 | 139.4 | 140.7 | 137.2 | 140.2 | 139.0 | 2186.2 | 137.6 | 137.6 | 137.8 | 137.6 | 137.9 | 221.8 | 223.2 |
| Electric light and gas utilities combined |  |  |  |  |  |  |  |  |  |  |  |  |  | 138.0 | 137.5 |
|  |  | 153.6 | 154.3 | 155.6 | 157.5 | 157.5 | 155.1 | 152.9 | 152.4 | 147.0 | 152.3 | 152.5 | 153.1 | 153.2 | 7 |
|  |  |  |  |  |  |  |  |  |  | 20.6 | 20. | 20. | 20.4 | 20.6 | 20.4 |
| Wholesale and retail trade: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 2,715 | 2,715 | 2,704 | 2,705 | 2,693 | 2,687 | 2,670 | 2,679 | 2,671 | 2,674 | 2,674 | 2, 721 | 2,651 | 2,622 |
|  |  | 1,632.9 | 1,631.6 | 1,628.9 | 1,632. 7 | 1, 625.1 | 1,621.8 | 1,606.3 | 1,612.6 | 1,604.9 | 1,607.9 | 1,608.5 | 1,643.0 | 1,588.8 |  |
|  |  | 120.8 | 122.1 | 122.9 | 123.5 | 123.2 | 122.3 | 121.0 | 120.5 | 120.0 | 120.1 | 119.9 | 121.3 | 117.5 | 110.0 |
| Groceries, food specialities, beer, wines, and liquors |  | 290.3 | 283.0 | 279.9 | 279.6 | 280.4 | 278.9 | 277.9 | 279.8 | 282.2 | 281.0 | 282.9 | 287.2 | 276.9 | 272.2 |
| Electrical goods, machinery, hard- |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 272.2 |
| ware, and plumbing equipment..-- Other full-service and limited-func- |  | 385.0 | 387.5 | 390.1 | 393.8 | 394.7 | 394.0 | 392.4 | 392.6 | 392.2 | 392.0 | 391.2 | 394.8 | 388.1 | 382.1 |
| tion wholesalers..... |  | 836.8 | 839.0 | 836.0 | 835.8 |  |  | 815.0 | 819.7 |  |  |  |  |  |  |
| Wholesale distributors, other |  | 1,081.7 | 1,083.6 | 1,074. 7 | 1,072.2 | 1,067.7 | 1,065.4 | 1,063.7 | $1,066.7$ | 1,066.0 | 1,066.5 | 1,065.8 | 1,078.1 | 1,061.8 | 1,084.9 |
| Retail trade: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General merchandise stores |  | 1,542.5 | 1,443.9 | 1,395. 2 | 1,344. 5 | 1,328.4 | 1,359.5 | 1,362. 4 | 1,407.7 | 1,301.6 | 1, 299.7 | 1,362. 4 | 1,919.3 | 1,383.6 | 1,334.7 |
| Department stores and general mailorder houses |  |  |  |  |  | 1,328.4 | 1, 869.5 | 1,362. | , 407.7 | 1,301.6 | 1,299. | 1,362. 4 | $1,019.3$ | 1,383.6 | 1,334.7 |
| Other general merchandise stores. |  |  | 525.4 | 518.6 | 847.2 |  | 861.3 | 859.4 | 872.0 | 820.7 | 826.4 | 871.0 | 1,219.3 | 882.6 | 855.9 |
| Food and liquor stores--- |  | 1,515.9 | 1,510.9 | 1,497. 7 | 1,496.0 | 1,518.4 4 | 1, 513.4 | 1, 508.6 | 1, 512.6 | 1,489.9 ${ }^{480}$ | 1, 500.3 | 1,496.4 | 700.0 $1,532.9$ | 501.0 $1,485.3$ | 478.8 $1,483.2$ |
| Grocery, meat, and vegetable markets |  | 1,142.1 | 1, 1310.2 | 1,122.3 | 1,114.1 | 1, 131.3 | 1,513.4 | 1,508.6 | 1,512.6 | 1,499.9 | 1,500.3 | 1,496.4 | 1,032.9 | 1,485.3 | 1,483.2 |
| Dairy-product stores and dealers. |  | 181.9 | 182.7 | 188.4 | 193.7 | 194.7 | 192.4 | 188.7 | 185.8 | 173.0 | 181.2 | 181.4 |  |  | $1,078.7$ 198.5 |
| Other food and liquor stores. |  | 191.9 | 190.0 | 187.0 | 188.2 | 192.4 | 192.0 | 193.7 | 199.0 | 190.2 | 195.2 | 189.9 | 203.5 | 193.2 | 206.0 |
| Automotive and accessories dealers. |  | 715.7 | 715.7 | 717.4 | 723.1 | 728.1 | 729.4 | 722.5 | 720.0 | 705.9 | 705.1 | 704.3 | 720.5 | 699.8 | 677.2 |
| Apparel and accessories stores-....-.-.- |  | 591.9 | 575.4 | 562.5 | 529.5 | 542.8 | 571.7 | 570.2 | 623.8 | 530.1 | 530.2 | 556.4 | 692.0 | 554.7 | 542.0 |
| Other retail trade (except eating and drinking places) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Furniture and appliance stores |  | 366.6 | 364.6 | 358.0 | 356. 3 | 357.9 | 356. 9 | 258.7 | 358. 4 | 256.7 | ${ }^{358.6}$ | 259.5 | 2, 379.0 | 256.5 | 2,056. 3 |
| Drug stores |  | 384.7 | 386.1 | 385.7 | 378.1 | 377.9 | 378.2 | 371.6 | 375.4 | 363.1 | 361.8 | 368.4 | 393.3 | 357. 7 | 337.0 |

${ }_{1}$ For comparabllity of data with those published in issues prior to August 1958 and coverage of the series, see footnote 1, table A-2.
Production and related workers include working foremen and all nonsupervisory workers (including leadmen and trainees) engaged in fabricating, procossing, assembling, Inspection, receiving, storage, handling, packing, ware-
housing, shipping, maintenance, repair, janitorial, watchman services, product development, auxiliary production for plant's own use (e.g., power plant), and recordkeeping and other services closely associated with the aforementioned production operations.
${ }^{2}$ Preliminary.

TABLE A-4. Unemployment insurance and employment service programs, selected operations ${ }^{1}$
[All items except average beneflt amounts are in thousands]

${ }^{1}$ Data relate to the United States (Including Alaska and Hawail), except where otherwise indicated.
${ }^{2}$ Includes Guam, Puerto Rico, and the Virgin Islands.
${ }_{3}$ Initial claims are notices filed by workers to indicate they are starting periods of unemployment. Excludes transitional claims.

- Includes Puerto Rico and the Virgin Islands.
${ }^{6}$ Number of workers reporting the completion of at least 1 week of unemployment.
- The rate is the number of insured unemployed expressed as a percent of the average covered employment in a 12 -month period.
${ }^{T}$ Includes data for the Federal civilian employee program through June 1959.
${ }^{3}$ Includes data for the Federal civilian employee program for the period
October 1958-June 1959.
- Exeludes data on claims and payments made jointly with other programs.
${ }_{10}$ Excludes data on claims and payments made jointly with State programs.
${ }_{11}$ An application for benefits is filed by a railroad worker at the beginning of his first period of unemployment in a benefit year; no application is required for subsequent periods in the same year.
${ }_{12}$ Payments are for unemployment in 14 -day registration periods.
${ }_{18}$ The average amount is an average for all compensable periods, not adjusted for recovery of overpayments or settlement of underpayments.
is Adjusted for recovery of overpayments and settlement of underpayments.
${ }^{1 s}$ Represents an unduplicated count of insured unemployment under the State, Ex-servicemen and UCFE programs, the Railroad Unemployment Insurance Act, and the Veterans' Readjustment Assistance Act of 1952 (not presented separately in table), which terminated January 31, 1960.

Source: U.S. Department of Labor, Bureau of Employment Security for all items except railroad unemployment insurance, which is prepared by the U.S. Railroad Retirement Board.

## B.-Labor Turnover

Table B-1. Labor turnover rates, by major industry group ${ }^{1}$
[Per 100 employees]

| Major industry group | 1960 |  |  |  |  |  |  |  |  |  |  | 1959 |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Nov. ${ }^{2}$ | Oct. | Sept. | Aug. | July | June | May | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | 1959 | 1958 |
| Manufacturing | Accessions: Total ${ }^{8}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 2.1 | 2.8 | 3.8 | 3.8 | 2.9 | 3.9 | 3.2 | 2.8 | 2.7 | 2.9 | 3.6 | 3.8 | 3.0 | 3.6 | 3.0 |
| Durable goods .-.-.--------- | 2.2 | 3.0 | 4.2 | 4.1 | 2.9 | 3.8 | 3.2 | 2.8 | 2.7 | 2.9 | 3.8 | 4.7 | 3.2 | 3.8 | 3.2 |
| Ordnance and accessories_ | 2.4 | 3.9 | 3.3 | 2.7 | 2.2 | 3.2 | 2.1 | 1. 9 | 2.1 | 2.2 | 2. 4 | 2.2 | 2. 8 | 3.8 2.8 | 3. 2.8 |
| Lumber and wood product | 1.8 | 3.4 | 4.1 | 4. 4 | 4.2 | 8.3 | 6.9 | 5. 6 | 3.7 | 3.5 | 3.6 | 2.4 | 3.1 | 4.7 | 4.1 |
| Stone, clay, and glass | 2.0 | 2.7 | 3.5 | 5.3 | 3.5 | 4.0 | 4.0 | 3.5 | 3.3 | 3.3 | 3.9 | 2.9 | 3.0 | 4.0 | 3.4 |
| Primary metal industrie | 1.4 2.1 | 2.2 2 | 2.9 | 3. 2 | 2.6 | 3.3 | 2.8 | 2.8 | 2.3 | 2.5 | 2.6 | 1.9 | 2.8 | 3.1 | 2.9 |
| Fabricated metal products | 2.3 | 3.3 | 4.3 | 5. 5 | 2.3 2.9 | 2.4 3.9 | 1.8 3.9 | 1. 6 | 1.7 | 2.2 | 2. 7 | 2.7 | 2.2 | 2.9 | 2.8 |
| Machinery (except electrical) | 1.6 | 2.1 | 2.6 | 2. 5 | 2.3 | 3.1 | 2.3 | 1. 9 | 2.3 | 2.6 | 5. 3 | 3. 3 | 5. 8 | 4. 4 | 3. 6 |
| Electrical machinery .-........ | 2.5 | 2.8 | 3. 5 | 3. 4 | 2.7 | 3.8 | 2.8 2.8 | 2.1 | 2.5 | 2.6 2.7 | 3.3 3.1 | 3.1 2.9 | 2.7 3.1 | 3.2 3.6 | 2.5 2.8 |
| Transportation equipment---.----- | 3.0 | 4.3 | 8.2 | 6.3 | 3.1 | 3.5 | 3.3 | 3.1 | 3.1 | 3.3 | 5. 2 | 11.8 | 3.3 | 3.6 4.5 | 2.8 4.0 |
| Instruments and related products | 1.4 | 1.5 | 1.8 | 2.9 | 1.6 | 3.0 | 2.0 | 1.8 | 1.7 | 2.2 | 1. 9 | 1.4 | 2.2 | 2.5 | 1.8 |
| Miscellaneous manufacturing.-...- | 2.4 | 3.7 | 5.5 | 5. 6 | 4.8 | 5.2 | 4.9 | 4.8 | 5. 1 | 4.2 | 5.8 | 2.6 | 2.8 | 4.8 | 4.0 |
| Nondurable goods ${ }^{\text {d }}$ - | 1.9 | 2.5 | 3.1 | 3.3 | 2.9 | 4.1 | 3.3 | 2.8 | 2.6 | 2.8 | 3.1 | 2.1 | 2.6 | 3.1 | 2. 7 |
| Food and kindred produc | 2.5 | 3.8 | 4.5 | 4. 0 | 3.9 | 5. 4 | 4. 6 | 4.4 | 3.1 | 2.8 | 3. 9 | 2.7 | 3.8 | 4.1 | 3.5 |
|  | -. 9 | 1.4 | 1.8 | 2. 6 | 1.5 | 1.7 | 2. 5 | 1.3 | 1.4 | 1.4 | 1.4 | 2.6 | 3.8 1.1 | 1.8 | 1. 6 |
| Apparel and other finished textile | 2.0 | 2.5 | 2.8 | 3.5 | 2.9 | 3.5 | 3.3 | 2.8 | 3.1 | 3.0 | 3.2 | 2.1 | 2.5 | 3.2 | 3.0 |
| products | 2.1 | 2.7 | 3.9 | 4.2 | 3.8 | 4.2 | 4.0 | 3.4 | 3.4 | 4.0 | 4.4 | 2.2 | 3.1 | 4.2 | 3.4 |
| Paper and allied products. | 1.3 | 1.9 | 2.6 | 2.4 | 2.4 | 4.0 | 2. 5 | 2.2 | 2.1 | 2.2 | 2.3 | 1.7 | 1.8 | 2.6 | 2. 1 |
| Ohemicals and allied products | . 9 | 1.3 | 1.8 | 1.8 | 1.6 | 3.3 | 1.7 | 1.4 | 1.6 | 1. 7 | 1.6 | 1.2 | 1.3 | 1.8 | 1. 3 |
| Products of petroleum and coal. | . 3 | -7 | .9 | 1.1 | . 8 | 1.8 | 1.2 | 1.7 | 1.8 | . 6 | . 6 | . 4 | 1.3 | 1. 0 | . 7 |
| Rubber products.-..------ | 1.8 | 2.2 | 2. 9 | 3. 6 | 1.9 | 3.1 | 2.7 | 1.7 | 1.5 | 2.3 | 2.7 | 2.0 | 1.8 | 2.7 | 2. 6 |
| Leather and leather product | 4.2 | 3.9 | 3.7 | 4.2 | 4.0 | 6.1 | 5.1 | 3.0 | 3.1 | 3. 3 | 4.2 | 3. 6 | 4.7 | 4.1 | 3.3 |
| Nonmanufacturing: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Metal mining. | 1.1 | 2.1 | 3.4 | 2.7 | 2.8 | 4.0 | 3.6 | 6. 0 | 3.9 | 2.4 | 3.6 | 2.9 | 2.1 | 2.7 | 2.6 |
|  |  | 1.5 | 1. 5 | 2. 4 | 1.5 | 1.8 | 1.0 | 1.1 | 1.0 | . 7 | 1.8 | . 9 | 1.8 | 1.6 | 1.6 |
|  | 1.0 | 1.0 | 1.2 | 2.7 | 1.0 | . 9 | 1.0 | 1.2 | . 9 | 1.3 | 1.7 | 4.1 | 8.8 | 2.3 | 1.2 |
|  | Accessions: New hires |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Manufacturing | 0.9 | 1.5 | 1.9 | 1.9 | 1.7 | 2.3 | 1.7 | 1.4 | 1.5 | 1.7 | 1.9 | 1.3 | 1.5 | 2.0 | 1.3 |
| Durable goods. | . 9 | 1.5 | 1.8 | 1.8 | 1.5 | 2.1 | 1. 6 | 1.4 | 1.4 | 1.7 | 1.9 | 1.3 | 1.4 | 2.0 | 1.3 |
| Ordnance and accessories. | 1.3 | 2. 6 | 1. 9 | 1.7 | 1.6 | 1.6 | 1. 4 | 1. 2 | 1.5 | 1.6 | 1.5 | 1. 5 | 2.1 | 1.9 | 1.7 |
| Lumber and wood products.......-- | 1.3 | 2.6 | 3. 6 | 3. 6 | 3. 8 | 6.3 | 5. 5 | 3.7 | 2.6 | 2.4 | 2.3 | 1.7 | 2.3 | 3.7 | 2. 7 |
| Furniture and fixtures | 1.1 | 1.8 | 2. 7 | 4. 4 | 2.7 | 2. 7 | 2. 6 | 2. 1 | 2.3 | 2.2 | 2. 4 | 1. 5 | 2. 20 | 3.8 2.8 | 1. 7 |
| Stone, clay, and glass products | . 4 | 1.1 | 1.3 | 1.4 | 1.3 | 2.1 | 1. 5 | 1.2 | 1.2 | 1.3 | 1.2 | . 8 | 1.0 | 1.8 | . 9 |
| Primary metal industries Fabricated metal products | . 3 | . 4 | . 6 | . 6 | . 4 | . 7 | . 5 | . 6 | . 8 | 1. 2 | 1. 4 | 1.0 | 1.9 |  | . 5 |
| Fabricated metal products | . 8 | 1.5 | 1.9 | 2. 0 | 1.4 | 2. 0 | 1.7 | 1.4 | 1.5 | 2.0 | 2. 4 | 1.8 | 1.4 | 2.1 | 1.4 |
| Machinery (except electrical) | . 7 | -. 9 | 1.2 | 1.3 | 1.1 | 1. 7 | 1.2 | 1.1 | 1.4 | 1. 6 | 1.8 | 1.1 | 1.3 | 1.8 | . 9 |
| Electrical machinery | 1.4 | 1.7 | 2.2 | 1.8 | 1.4 | 2.1 | 1.3 | 1.0 | 1.4 | 1.7 | 1.8 | 1.4 | 1.8 | 2.2 | 1.4 |
| Transportation equipment.--...---- | . 9 | 2.0 | 1.9 | 1.6 | 1.1 | 1. 4 | 1.2 | 1.1 | . 9 | 1.6 | 2.0 | 1.5 | 1.8 | 1.5 | 1. 3 |
| Instruments and related products-- | $\begin{array}{r}.9 \\ \hline\end{array}$ | 1.0 | 1.2 | 1.7 | 1.2 | 2. 3 | 1. 3 | 1. 4 | 1.2 | 1.6 | 1.3 | 1.1 | 1.5 | 1.5 1.9 | 1.3 |
| Miscellaneous manufacturing.-.---- | 1.3 | 2.5 | 3.9 | 4.2 | 3.2 | 3.5 | 2.6 | 2.3 | 2.5 | 2.5 | 2. 8 | 1.4 | 1.9 | 3.0 | 1. 9 |
| Nondurable goods 4 | 1.0 | 1.5 | 2.0 | 2.1 | 1.9 | 2.7 | 1.9 | 1.6 | 1.5 |  |  |  |  |  |  |
| Food and kindred products | 1.2 | 2. 0 | 2.5 | 2.1 | 2.3 | 3. 1 | 1.9 2.2 | 1. 1.7 | 1. 1.4 | 1.7 1.5 | 1.7 | 1.2 | 1.5 1.9 | 2.0 2.0 | 1.3 1.5 |
| Tobacco manufactures. Textile-mill products | - 1.1 | .9 1.4 | 1.2 | 1.2 | $\begin{array}{r}2 . \\ \hline 1\end{array}$ | 1. 0 | 1.3 | 1. 6 | 1. 5 | 1.7 | 1.7 .7 | 1.1 +1 | 1.9 .7 | 1.1 | 1.5 .8 |
| Textile-mill products. Apparel and other finished textile | 1.1 | 1.4 | 1.8 | 2.2 | 1.9 | 2.4 | 2.0 | 1.7 | 1.7 | 1.8 | 1.7 | 1.2 | 1.5 | 2.1 | 1.5 |
| products | 1.2 | 1.9 | 2.9 | 3.2 | 2.9 | 2.9 | 2.8 | 2.6 | 2.6 |  | 2.9 |  |  |  |  |
| Paper and allied products.. | . 7 | 1.3 | 1.8 | 1.7 | 1.7 | 3. 0 | 1.8 | 1. 5 | 1. 3 | 1.5 | 1.5 | 1. 1.0 | 2.3 1.3 | 3.0 | 1.8 |
| Chemicals and allied products | . 6 | 1.8 .8 | 1.4 | 1.2 | 1.2 | 2.6 | 1.8 | 1.0 | 1.1 | 1.5 | 1.5 | 1.0 .7 | 1.3 .9 | 1.9 1.3 | 1.3 |
| Products of petroleum and coal.--- | . 1 | . 5 | . 6 | . 6 | . 6 | 1.3 | .8 .8 | 1.5 | 1.1 .4 | 1.2 .3 | 1. 2 | .2 | .9 .3 | 1.3 | .8 .3 |
|  | . 5 | . 9 | 1.7 | 1.4 | . 8 | 1.2 | . 7 | . 5 | . 6 | 1.3 | 1.6 | . 9 | 1. 0 | 1.7 | . 8 |
| Leather and leather products......- | 2.0 | 2.0 | 2.5 | 2.8 | 2.9 | 4.0 | 2.6 | 1.6 | 1.6 | 1.7 | 2.5 | 1.9 | 1.0 | 1.7 | 1.7 |
| Nonmanufacturing: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Metal mining_-.-.- | . 8 | 1.4 | 1.7 | 1.2 | 1.7 | 2.6 | 2.2 | 2.4 | 1.7 | 1.1 | 1.6 |  |  |  |  |
|  |  | . 2 | . 3 | . 9 | . 2 | . 5 | . 1 | . 1 | . 2 | . 2 | 1.3 | 1. 5 | 1.2 | 1.3 | .4 |
| Bituminous coal mining.----------- | . 2 | . 5 | . 4 | . 5 | .4 | . 5 | . 5 | . 4 | . 3 | . 5 | . 4 | . 3 | . 5 | . 4 | .3 |

See footnotes at end of table.

Table B-1. Labor turnover rates, by major industry group ${ }^{1}$-Continued
[Per 100 employees]

| Major Industry group | 1960 |  |  |  |  |  |  |  |  |  |  | 1959 |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Nov. ${ }^{2}$ | Oct. | Sept. | Aug. | July | June | May | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | 1959 | 1958 |
|  | Separations: Total ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 3.7 | 3.8 | 4.4 | 4.3 | 3.6 | 3.3 | 3.3 | 3.6 | 3.7 | 3.0 | 2.8 | 3.1 | 4.1 | 3.4 | 3.6 |
| Durable goods... | 4.0 | 4.0 | 4.6 | 4.6 | 40 | 3.7 | 3.5 | 3. 9 | 4.1 | 3.1 | 2.8 | 3.1 | 4. 5 | 3. 5 | 3.9 |
| Ordnance and accessories-...-....-. Lumber and wood products..... | 2.5 6.4 | 2.7 6.0 | 4.1 | 2.2 5.7 5. | 2.5 4.6 | 2.8 4.2 | 2.2 3.9 | 3.1 4.9 | 2.2 | 1.7 3.4 | 2.1 3.9 | 1.4 4.6 | 1.7 8.1 | 2.3 4.6 | 2.9 4.2 |
| Lumber and wood product | 6.4 4.7 | 6.0 4.8 | 6.6 4.7 | 5.7 4.1 | 4.6 3.7 | 4.2 3.3 | 3.9 3.5 | 4.9 4.2 | 5. 3 3.6 | 3.4 3.8 3.8 | 3.9 3.9 | 4.6 3.1 | 5. <br> 3.5 | 4.6 3.7 | 4.2 3.7 |
| Stone, clay, and glass products | 3.7 | 3.1 | 4.3 | 3. 6 | 3.2 | 3.5 | 2.8 | 3.1 | 3. 6 | 2.6 | 2.8 | 2.9 | 2.7 | 2.8 | 3. 5 |
| Primary metal industries...- | 4.4 | 4.6 | 4.6 | 4.5 | 4.4 | 4.4 | 4.4 | 3. 6 | 3. 5 | 2.2 | 1.8 | 2.0 | 2.5 | 2.3 | 3.3 |
| Fabricated metal products | 4.4 | 4.9 | 5. 0 | 5. 0 | 4.9 | 4.0 | 3.4 | 4.4 | 5.1 | 3. 9 | 3.1 | 3.0 | 5. 6 | 4.3 | 4.3 |
| Machinery (except electrical) | 2.7 | 3.2 | 4.1 | 3.8 | 3.0 | 3.3 | 3.1 | 3.2 | 2. 9 | 2.4 | 2.2 | 2.2 | 3.0 | 2.7 | 3.3 |
| Electrical machinery .-.---- | 3.6 | 2.8 | 3.6 | 2.9 | 2.6 | 3.1 | 3.1 | 3.7 | 4.0 | 3.1 | 3.0 | 2.7 | 2.8 | 2.8 | 3.1 |
| Transportation equipment. | 3.8 | 4.3 | 4.8 | 7.4 | 6.1 | 4.2 | 3. 8 | 4.8 | 5.4 | 3. 9 | 3.0 | 3.8 | 9.5 | 5. 2 | 5.1 |
| Instruments and related products.- | 2.0 | 1.7 | 3.3 | 2.8 | 2.2 | 2.2 4.0 | 2.3 3.9 | 2.1 4.9 | 1.9 4.3 | 2.1 3.9 | 1.8 4.3 | 2.0 7.8 | 2.1 6.6 | 2.17 | 2.4 4.7 |
| Miscellaneous manufacturing------ | 6.1 | 5.3 | 5.3 | 5.0 | 3.6 | 4.0 | 3.9 | 4.9 | 4.3 | 3.9 | 4.3 | 7.8 | 6.6 | 4.7 | 4.7 |
| Nondurable goods 4 . | 3.1 | 3.4 | 4.2 | 3.6 | 3.0 | 2.6 | 2.9 | 3.1 | 3.0 | 2.8 | 3. 0 | 2.9 | 3.2 | 3. 0 | 3.0 |
| Food and kindred produc | 3. 5 | 4.0 | 5. 2 | 4. 5 | 3. 6 | 3.1 | 3.7 | 3. 6 | 4.1 | 3.8 | 4.1 | 4.1 1.9 | 4. 1.3 | 4.0 1.9 | 3.8 2.1 |
| Tobacco manufactures...-----.-..-- | 1.5 | 1.8 | 1. 9 | 2.3 | 2.1 | 1.6 2.8 | 1.5 2.9 | 1.7 3.5 | 2.0 2.8 | 1.9 3.0 | 2.7 3.1 | 1.9 3.3 | 1.3 3.3 | 1.9 3.3 | 2. 3.4 |
|  | 2.9 | 3.7 | 4.5 | 4.0 | 3.4 | 2.8 | 2.9 | 3.5 | 2.9 | 3.0 | 3.1 | 3.3 | 3.3 | 3.3 | 3.4 |
| products | 4.4 | 4.1 | 4.4 | 4.4 | 4.2 | 3.0 | 4.0 | 4.0 | 3.6 | 3.3 | 4.0 | 3.3 | 3.8 | 3.8 | 3.8 |
| Paper and allied products.--------- | 2.7 | 2.8 | 4.2 | 2.9 | 2.3 | 2.3 | 2.3 | 2.2 | 2.4 | 2.3 | 2.6 | 2.4 | 2.6 | ${ }_{1}^{2.6}$ | 2.4 |
| Ohemical and allied products.-.-.- | 2.1 1.4 | 1.5 2.3 | 3.2 2.6 | 2.0 1.4 | 1.4 | 1.4 | 1.3 .9 | 1.5 | 1.4 | 1.2 | 1.6 | 1.5 | 1.6 <br> 1.3 <br> 1 | 1.6 | 1.8 1.3 |
| Products of petroleum and coal Rubber products | 4.1 | 2.3 3.4 | 3.6 | 1.4 | 1. 2.3 | ${ }_{2.6}$ | 2.7 | 3.8 | 4.1 | 2.8 | 2.4 | 2.7 | 3.6 | 2.5 | 2.7 |
| Leather and leather products.....-- | 3.7 | 5.0 | 4.8 | 4.8 | 3.4 | 3.3 | 4.2 | 4.6 | 4.8 | 4.2 | 3.7 | 3.3 | 3.8 | 3.9 | 3.7 |
| Nonmanufacturing: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Metal mining--- | 2.4 | 3.6 8.1 | 4.3 2.9 | 3.7 1.8 1. | 3.3 7.7 | 3.2 3.8 3 | 2.7 3.1 | 2.6 3.2 | 3.1 1.1. | 1.7 1.3 | 2.2 2.2 | 2.2 .7 | 2.2 2.5 | 2.6 2.9 | 3.9 4.3 |
| Bituminous coal mining | 1.8 | 1.9 | 1.8 | 3.3 | 10.0 | 3.1 | 4.0 | 3.8 | 1.9 | 1.3 | 1.5 | 1.7 | 2.1 | 3.6 | 2.5 |
|  | Separations: Quits |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Manufacturing | 0.7 | 1.0 | 1.9 | 1.5 | 1.1 | 1.1 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 0.8 | 1.0 | 1.3 | 0.9 |
| Durable foods. | . 6 | . 9 | 1.7 | 1.3 | 1.0 | 1.0 | 1.0 | 1.0 | . 9 | . 9 | . 9 | . 8 | .9 | 1.2 | . 8 |
| Ordnance and accessories. |  | . 9 | 1.9 | 1.1 | . 9 | . 8 | . 8 | 1.0 | .88 | . 8 | . 9 | . 7 | . 7 | 1.1 | . 8 |
| Lumber and wood product | 1.4 | 1. 6 | 4.0 | 3.1 | 2.4 | 2.4 | 2.2 | 2.3 | 1.8 | 1.5 | 1.4 | 1.4 | 1.8 | 2.3 | 1.7 |
| Furniture and fixtures | . 9 | 1.6 | 2. 5 | 2.3 | 1.6 | 1.5 | 1.7 | 1.9 | 1.4 | 1.4 | 1.5 | 1.0 | 1.3 | 1.7 | 1.1 |
| Stone, clay, and glass products | .4 | . 7 | 1. 6 | 1.1 | . 8 | . 8 |  | . 7 | . 7 | . 7 | . 7 | $\cdot .5$ | . 7 | $\cdot 9$ | . 7 |
| Primary metal industries-- | .3 | . 4 | - 7 | . 4 | .4 | . 5 | 1.5 | .5 1.0 | . 5 | . 5 | 1. 6 | .7 | . 8 | 1. ${ }^{7}$ | . 8 |
| Fabricated metal products | .5 .4 | . 8 | 1.6 | 1.2 .9 | . 8 | . 8 | 1.0 .8 | 1.0 .9 | . 9 | . 7 | 1.0 .7 | . 6 | . 8 | 1.19 | . 8 |
| Electrical machinery...-..-- | . 9 | 1.0 | 1.8 | 1.2 | . 9 | 1.0 | 1.0 | 1.0 | 1.1 | 1.0 | 1.1 | 1.0 | 1.1 | 1.3 | . 8 |
| Transportation equipment. | . 4 | . 8 | 1.2 | . 9 | . 8 | . 9 | . 8 | . 8 | . 7 | . 8 | . 8 | . 7 | . 7 | 1.0 | . 8 |
| Instruments and related products.. | . 6 | . 7 | 1.7 | 1.2 | . 8 | . 9 | . 8 | . 9 | . 8 | . 9 | . 8 | . 7 | . 8 | 1.0 | . 7 |
| Miscellaneous manufacturing --- -- | 1.0 | 1.8 | 3.0 | 2.4 | 1.8 | 1.6 | 1.5 | 1.6 | 1.5 | 1.4 | 1.5 | 1.1 | 1.5 | 1.8 | 1.2 |
| Nondurable goods ${ }^{4}$ | . 9 | 1.2 | 2.3 | 1.8 | 1.4 | 1.3 | 1.3 | 1.3 | 1.2 | 1.1 | 1.2 | 1.0 | 1.2 | 1.4 | 1.0 |
| Food and kindred products | .8 | 1.1 | 2.1 | 1.6 | 1.1 | 1.1 | 1.1 | 1.0 | . 9 | 1.0 | 1.0 | . 8 | 1.0 | 1.2 | . 9 |
|  | .7 | . 9 | 1.2 | 1.2 | 1.2 | 1.0 | . 9 | . 9 | . 8 | . 9 | 1.2 | . 7 | . 8 | 1.1 | . 9 |
| Textile-mill products.- | 1.0 | 1.4 | 2.2 | 2.1 | 1.7 | 1.6 | 1.6 | 1.7 | 1.4 | 1.3 | 1.4 | 1.1 | 1.4 | 1.6 | 1.2 |
| Apparel and other finished textile products | 1.6 | 2.3 | 3.0 | 3.2 | 2.8 | 2.1 | 2.6 | 2.4 | 2.3 | 2.2 | 2.3 | 1.8 | 2.2 | 2.5 | 1.7 |
|  | . 6 | . 9 | 2.5 | 1.5 | . 9 | 1.0 | 1.0 | . 9 | . 8 | . 8 | . 9 | . 7 | . 9 | 1.2 | . 8 |
| Chemicals and allied products. | .4 | . 6 | 1.9 | 1.0 | .6 | . 6 | . 6 | . 6 | . 5 | . 5 | . 6 | . 4 | . 5 | . 7 | . 5 |
| Products of petroleum and coal | . 2 | . 4 | 1.1 | . 6 | .3 | . 3 | . 3 | . 3 | . 3 | . 2 | . 3 | .2 | . 3 | . 4 | . 3 |
| Rubber products-.------- | . 6 | . 6 | 1.1 | . 9 | . 7 | . 8 | . 8 | . 7 | . 7 | . 8 | . 8 | . 7 | . 7 | . 9 | . 6 |
| Leather and leather products....-- | 1.7 | 1.9 | 3.0 | 3.0 | 2.2 | 2.2 | 2.0 | 1.9 | 1.6 | 1.7 | 1.8 | 1.4 | 1.7 | 2.1 | 1.5 |
| Nonmanufacturing: | . 7 | . 9 | 1.8 | 1.6 | 1.6 | 1.2 | 1.6 | 1.7 | 2.1 | . 9 | . 9 | 1.0 | . 9 | 1.4 | 1.2 |
| Anthracite mining |  | .1 | . 5 | + 2 | 1.6 .1 | 1.5 | 1. 7 | . 3 | . 3 | .2 | (5) | . 2 | . 2 | . 3 | 1.2 |
| Bituminous cosl mining ---- | . 3 | . 3 | . 4 | . 3 | .4 | . 2 | . 3 | . 3 | . 2 | . 2 | . 3 | . 3 | . 4 | . 3 | 3 |

See footnotes at end of table.

TaBLE B-1. Labor turnover rates, by major industry group ${ }^{1}$ - Continued
[Per 100 employees]

| Major industry group | 1960 |  |  |  |  |  |  |  |  |  |  | 1959 |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Nov. ${ }^{2}$ | Oct. | Sept. | Aug. | July | June | May | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | 1959 | 1958 |
|  | Separations: Layofis |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Manufacturin | 2.5 | 2.2 | 2.0 | 2.2 | 2.0 | 1.7 | 1.6 | 2.0 | 2.2 | 1.5 | 1.3 | 1.7 | 2.6 | 1.6 | 2.3 |
|  | 2.9 | 2.6 | 2.2 | 2.7 | 2.5 | 2.1 | 1.9 | 2.3 | 2.6 | 1.6 | 1.3 | 1.8 | 3.1 | 1.8 | 2.6 |
| Ordnance and accessories | . 4.9 | 1.4 | 1.5 | . 7 | 1.3 | 1.5 | 1.1 | 1.7 | 1.0 | 1. 5 | . 7 | - 4 | . 7 | 1.7 | 1.8 |
| Lumber and wood products.-...-- -- | 4.6 3.4 | 3.8 | 1.9 | 1.9 | 1.5 | 1.2 | 1.1 | 1. 9 | 2.8 | 1.5 | 1.9 | 2.7 | 2.7 | 1.7 | 2.1 |
| Stone, clay, and glass products----------- | 3.4 2.8 | 2.6 1.9 | 1.5 2.2 | 1.2 <br> 1.8 | 1.5 | 1.2 | 1.1 | 1.7 | 1.7 | 1.9 | 1.9 | 1. 6 | 1.7 | 1.4 | 2.2 |
| Primary metal industries | 3.7 | 3.7 | 3.3 | 3.5 | 3.4 | 3.4 | 3.4 | 1.8 2.5 | 2.4 2.4 | 1.4 | 1.5 .8 | 2.1 | 1. 1.3 | 1. 1.4 | 2.5 2.6 |
| Fabricated metal products | 3.4 | 3.5 | 2.8 | 3.2 | 3.5 | 2.5 | 1.8 | 2.9 | 3.7 | 2.4 | 1.6 | 1.8 | 4.3 | 2.7 | 3.1 |
| Machinery (except electrical) --...- | 1.9 | 2.1 | 2.3 | 2. 4 | 1.8 | 1.9 | 1.8 | 1.8 | 1.6 | 1.1 | 1.0 | 1.1 | 1.9 | 1.2 | 2.4 |
| Electrical machinery | 2. 0 | 1.2 | 1. 0 | 1.1 | 1.1 | 1.4 | 1.4 | 1.9 | 2.3 | 1.3 | 1.1 | 1.1 | 1.0 | 1.2 .9 | 1.8 |
| Transportation equipment.------- | 3.1 | 2.8 | 2.8 | 5. 8 | 4.7 | 2.7 | 2.4 | 3.4 | 4.0 | 2.4 | 1.7 | 2.5 | 8.2 | 3. 6 | 3.8 |
| Instruments and related products.- | 1.1 | - 8 | 1.2 | 1.1 | 1.0 | . 8 | 1.0 | . 8 | . 7 | . 8 | . 7 | . 9 | 8. 9 | . 6 | 1. 3 |
| Miscellaneous manufacturing.-.--- | 4.6 | 2.8 | 1.4 | 1.7 | 1.2 | 1.6 | 1.7 | 2.7 | 2.2 | 1.9 | 2.2 | 6.4 | 4.7 | 2.3 | 3.1 |
|  | 1.8 | 1.7 | 1.4 | 1.2 | 1.1 | . 8 | 1.1 | 1.4 | 1.4 | 1.2 | 1.3 | 1. 6 | 1.6 | 1.2 | 1.7 |
| Food and kindred products | 2.2 | 2.3 | 2.6 | 2. 4 | 2. 0 | 1.6 | 2.1 | 2.1 | 2.7 | 2.3 | 2.6 | 3.0 | 3. 0 | 2. 4 | 2. 5 |
| Tobacco manufactures. Textile-mill products | 1. 6 | $\begin{array}{r}.5 \\ \hline\end{array}$ | 1. 4 | .6 1.4 | 2.7 1.7 | . 2 | $\begin{array}{r}.4 \\ \hline\end{array}$ | 2.5 1.5 | .8 1.8 | 2.3 1.3 | 1.2 1.2 | $\begin{array}{r}\text { 3. } \\ \hline 19\end{array}$ | $\begin{array}{r}3.3 \\ \hline 1.5\end{array}$ | 2. 5 | 2.5 .9 |
| Textile-mill products. Apparel and other finished textile | 1. 5 | 1.9 | 1. 7 | 1.4 | 1.2 | . 8 | . 9 | 1.4 | 1.0 | 1.3 | 1.2 | 1. 7 | 1. 5 | 1.2 | 1.8 |
| products | 2.4 | 1.5 | 1.0 | . 8 | . 8 | . 6 | 1.0 | 1.1 | . 9 | . 7 | 1.2 | 1.1 | 1.1 | . 9 | 1.8 |
| Paper and allied products | 1.6 | 1.4 | 1.0 | . 8 |  | .7 | . 8 | . 8 | 1.0 | 1.0 | 1.2 | 1.2 | 1.2 | . 9 | 1.3 |
| Ohemicals and allied products | 1.3 | . 6 | . 8 | . 5 | . 4 | .4 | . 4 | . 6 | . 5 | . 4 | . 6 | . 7 | . 8 | . 5 | 1.0 |
| Products of petroleum and coal...- | 1.0 | 1.3 | . 9 | . 5 | . 8 | . 4 | .3 | . 5 | .3 | . 2 | . 5 | . 4 | .8 .7 | . 4 | 1.6 |
| Rubber products | 3.1 | 2.3 | 1. 7 | 1.7 | 1.2 | 1.3 | 1.5 | 2.7 | 2.9 | 1.6 | 1.1 | 1.7 | 2.5 | 1.1 | 1.8 |
| beather and leather products.....-- | 1.6 | 2.5 | 1.1 | 1.1 | . 7 | . 7 | 1.6 | 2.1 | 2.6 | 1.7 | 1.2 | 1.3 | 1.4 | 1.2 | 1.8 |
| Nonmanufacturing: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Metal mining--.-- | 1.3 | 2. 0 | 1. 6 |  |  |  |  |  |  | .3 | . 7 | (1) 4 | . 9 | . 6 | 2.2 |
| Anthracite mining |  | 7.3 | 1.3 | . 6 | 6.1 | 1. 9 | 1.6 | 1.8 | .2 | .6 | . 8 | (5) | 1.8 | 1.7 | 3.7 |
| Bituminous cosl mining | 1.3 | 1.3 | 1.0 | 2.6 | 8.7 | 2.6 | 3.5 | 3.1 | 1.4 | . 8 | . 9 | 1.1 | 1.5 | 3.1 | 2.0 |

${ }^{1}$ 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 serles for the following reasons:
(1) The labor turnover serles measures changes during the calendar month, while the employment series measures changes from midmonth to midmonth;
(2) Industry coverage is not identical, as the printing and publishing ndustry and some seasonal industries are excluded from turnover;
(3) Turnover rates tend to be understated because small firms are not as prominent in the turnover sample as in the employment sample; and
(4) Reports from plants affected by work stoppages are excluded from the
turnover series, but the employment series reflects the influence of such stoppages.
${ }_{2}$ Preliminary.
${ }^{3}$ Beginning with January 1959, transfers between establishments of the same firm are included in total accessions and total separations; therefore, rates for these items are not strictly comparable with prior data. Transfers comprise part of other accessions and other separations, the rates for which are not shown separately.
${ }^{4}$ Excludes the printing, publishing, and allied industries group, and the following industries: Canning and preserving; women's, misses', and children's outerwear; and fertilizer.
${ }_{5}{ }^{2}$ Less than 0.05 .
C.-Earnings and Hours

TABLE C-1. Gross hours and earnings of production workers, ${ }^{1}$ by industry

| Industry | 1960 |  |  |  |  |  |  |  |  |  |  | 1959 |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Nov. 2 | Oct. | Sept. | Aug. | July | June | May | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | 1959 | 1958 |
|  | Average weekly earnings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mining | \$104.40 | \$108. 41 | \$107. 47 | \$108. 67 | \$111. 22 | \$110.83 | \$110. 70 | \$111.38 | \$110.98 | \$108. 13 | \$111. 11 | \$114. 51 | \$109.89 | \$107. 73 | \$100. 10 |
| Metal | 108.27 | 110.43 | 112, 74 | 111.48 | 111.37 | 110.27 | 114.01 | 113.58 | 111.30 | 107.71 | 113.05 | 111.41 | 108.84 | 103. 31 |  |
| Iron- | 105.82 115.18 | 110.21 115.72 | 115.95 | 113.88 11 | 117.67 112.14 | 110.98 115.46 | 120. 22 115.54 | 120.80 114.66 | 115.66 | 115.95 103.94 | 122.40 111.87 | 118.98 110.32 | 119.00 105.64 | 107. 34 106.17 | 100.27 94.62 |
| Lead and zin | 86.64 | 86.79 | 87.17 | 88.62 | 91.66 | 95.04 | 94.58 | 93.71 | 92.52 | 92. 62 | 94.71 | 94.58 | 93. 20 | 90. 63 | 84. 62 85.93 |
| Anthracite | 94.46 | 95.22 | 84. 39 | 94. 28 | 93. 50 | 93.23 | 82.29 | 80.88 | 99.91 | 76.16 | 88.09 | 94. 73 | 93. 84 | 84. 98 | 76. 01 |
| Bituminous coal | 103.68 | 111.51 | 108.23 | 114.10 | 121.60 | 121.69 | 119.03 | 122.30 | 127. 26 | 121.97 | 127.32 | 135.38 | 118.14 | 118.30 | 102.38 |
| Crude-petroleum and natural-gas production: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Petroleum and natural-gas production (except contract services).. | 114.77 | 115. 87 | 116. 44 | 112. 44 | 116. 16 | 113. 52 | 118. 03 | 115. 18 | 113. 52 | 112.12 | 116. 72 | 113. 81 | 117.83 | 114.93 | 109.75 |
| Nonmetallic mining and quarrying.-.- | 97.75 | 102.12 | 101. 66 | 102. 37 | 102. 60 | 101. 70 | 98.78 | 88. 55 | 92. 89 | 91.46 | 92.38 | 96.13 | 95.90 | 95. 48 | 89.63 |
| Contract construction | 117.20 | 125. 50 | 123.13 | 124.31 | 123.61 | 121. 18 | 119.56 | 119.19 | 115.50 | 113.75 | 113.72 | 117.81 | 113.88 | 114.82 | 110.47 |
| Nonbuilding construction. | 115.03 | 128.65 | 126. 42 | 126.90 | 124. 91 | 121.06 | 118.03 | 117.96 | 116. 91 | 111. 18 | 108.00 | 113.47 | 110.87 | 113.24 | 109. 47 |
| Highway and street construction..- | 106.75 | 126. 43 | 123. 98 | 124.26 | 122.36 | 117.43 | 111.90 | 112. 36 | 105.69 | 101.01 | 96.75 | 103.88 | 104. 80 | 108. 09 | 104. 14 |
| Other nonbullding construction-... | 123.70 | 131. 02 | 128.88 | 129.97 | 127.80 | 125.15 | 123.86 | 123. 51 | 124. 26 | 117. 56 | 115. 50 | 120.87 | 116. 74 | 118.40 | 114. 26 |
| Building construction. | 117.30 | 125.17 114 | 112. 73 | 1123.68 | 123.68 <br> 113 <br> 17 | 121.24 | 119.91 | 119.19 | 115.60 | 114. 22 | 114.87 | 119.13 | 114. 14 | 115. 28 | 110. 67 |
| Speneral-trade contract | 122.12 | 129.93 | 127.44 | 128.82 | 128.83 | 126.69 | 124.93 | 124.57 | 120.74 | 119.71 | 119.72 | 124.53 | 120.04 | 120.27 | 115.28 |
| Plumbing and heating | 129.60 | 137. 52 | 134.61 | 135. 58 | 135. 20 | 134.87 | 132. 68 | 131.98 | 130. 27 | 128.43 | 129.83 | 133.32 | 129.08 | 128.58 | 123.23 |
| Painting and decorating | 114.22 | 122. 11 | 119.70 | 119.65 | 120.70 | 118. 62 | 116. 60 | 115. 58 | 113.91 | 110.22 | 111.89 | 115. 87 | 113.86 | 113. 40 | 107.95 |
| Electrical work | 148. 54 | 155. 62 | 151. 70 | 151. 32 | 150.93 | 149.38 | 148. 23 | 147.07 | 146.69 | 144. 77 | 146. 30 | 148. 19 | 142. 51 | 142.08 | 135. 97 |
| Other speclal-trade contractors. | 115.55 | 124.23 | 121.80 | 124.55 | 124.21 | 121. 41 | 119.70 | 118.99 | 112.83 | 112. 53 | 111.54 | 118.27 | 113.23 | 113.80 | 109.31 |
|  | Average weekly hours |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mining | 39.1 | 40.3 | 40.1 | 40.7 | 41.5 | 41.2 | 41.0 | 41.1 | 40.8 | 39.9 | 40.7 | 42.1 | 40.7 | 40.5 | 39.1 |
| Metal | 40.1 | 40.6 | 41.6 | 41.6 | 41.4 | 41.3 | 42.7 | 42.7 | 42.0 | 40.8 | 42.5 | 42.2 | 41.7 | 40.2 | 38.8 |
| Iron. | 37.0 | 38.4 | 40.4 | 40.1 | 41.0 | 38.4 | 41.6 | 41.8 | 40.3 | 40.4 | 42.5 | 41. 6 | 41.9 | 37.4 | 36.2 |
| Copper | 42.5 | 42.7 | 43.4 | 43.7 | 42.0 | 43.9 | 44.1 | 44.1 | 44.1 | 40.6 | 43.7 | 45.4 | 44.2 | 42.3 | 39.1 |
| Lead and zin | 38.0 | 37.9 | 37.9 | 38. 7 | 40.2 | 41.5 | 41. 3 | 41.1 | 40.4 | 40.8 | 41.0 | 41.3 | 40.7 | 40.1 | 39.6 |
| Anthracite | 34.6 | 34.5 | 30.8 | 34.4 | 34.0 | 33.9 | 29.6 | 29.2 | 36.2 | 27.2 | 31.8 | 34.2 | 34.0 | 30.9 | 28.9 |
| Bituminous coal | 32.0 | 34.1 | 33.2 | 35.0 | 37.3 | 37.1 | 36.4 | 37.4 | 38.8 | 37.3 | 38.7 | 40.9 | 35.8 | 36.4 | 33.9 |
| Orude-petroleum and natural-gas production: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Petroleum and natural-gas production (excent contract services) | 40.7 | 40.8 | 41.0 | 40.3 | 40.9 | 40.4 | 41.0 | 40.7 | 40.4 | 39.9 | 41.1 | 40.5 | 41.2 | 40.9 | 40.8 |
| Nonmetallic mining and quarrying-.--- | 42.5 | 44.4 | 44.2 | 44. 9 | 45.0 | 45.2 | 43.9 | 43.8 | 41.1 | 41.2 | 41.8 | 43.3 | 43.2 | 43.8 | 43.3 |
| Contract construction. | 35.3 | 37.8 | 37.2 | 37.9 | 37.8 | 37.4 | 36.9 | 36.9 | 35.0 | 35.0 | 35.1 | 36.7 | 35.7 | 36.8 | 36.7 |
| Nonbuilding construction | 38.6 | 42.6 | 42.0 | 42.3 | 42.2 | 41. 6 | 40.7 | 41.1 | 39.1 | 38.2 | 37.5 | 39.4 | 38.9 | 40.3 | 40.1 |
| Highway and street construction.-- | 38.4 | 43.9 | 43.5 | 43.6 | 43.7 | 42.7 | 41.6 | 42.4 | 39.0 | 38.7 | 37.5 | 39.2 | 39.4 | 41.1 | 41.0 |
| Other nonbuilding construction...- | 38.9 | 41.2 | 40.4 | 41.0 | 40.7 | 40.5 | 39.7 | 40.1 | 39.2 | 37.8 | 37.5 | 39.5 | 38.4 | 39.6 | 39.4 |
| Buflding construction. | 34.4 | 36.6 | 36.0 | 36.7 | 36.7 | 36.3 | 35.9 | 35.9 | 34.2 | 34.3 | 34.6 | 36.1 | 34.8 | 35.8 | 35. 7 |
| General contractors. | 34.5 | 36.4 | 35. 9 | 36.5 | 36.7 | 36. 2 | 35. 8 | 35. 9 | 33. 6 | 34.2 | 34.5 | 35. 9 | 34.3 | 35.7 | 35.6 |
| Special-trade contractors | 34.4 | 36.6 | 36.0 | 36.7 | 36.6 | 36. 3 | 35.9 | 35.9 | 34.4 | 34.4 | 34.6 | 36.2 | 35.1 | 35.9 | 35.8 |
| Plumbing and heating | 36.1 | 38.2 | 37.6 | 38.3 | 38.3 | 38.1 | 37.8 | 37.6 | 36.8 | 36.8 | 37.2 | 38.2 | 37.2 | 37.7 | 37.8 |
| Painting and decor | 33.3 | 35.6 | 35. 0 | 35. 4 | 35. 5 | 35.2 | 34. 6 | 34.4 | 33.8 | 32.9 | 33. 4 | 34.9 | 34.4 | 35.0 | 34. 6 |
| Electrical work | 37.7 | 39.1 | 38.7 | 38. 9 | 38.7 | 38.7 | 38.5 | 38.3 | 38.1 | 37.8 | 38.4 | 39.1 | 37.8 | 38.4 | 38.3 |
| Other speclal-trade contractors | 33.3 | 35.8 | 35.1 | 36.1 | 35.9 | 35.5 | 35.0 | 35.1 | 32.8 | 33.0 | 33.0 | 35.2 | 33.9 | 34.8 | 34.7 |
|  | Average hourly earnings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mining | \$2. 67 | \$2. 69 | \$2. 68 | \$2. 67 | \$2. 68 | \$2. 69 | \$2.70 | \$2.71 | \$2. 72 | \$2. 71 | \$2. 73 | \$2. 72 | \$2.70 |  | \$2. 56 |
| Metal | 2.70 | 2.72 | 2.71 | 2.68 | 2. 69 | 2.67 | 2.67 | 2.66 | 2.65 | 2.64 | 2.66 | 2.64 | 2.61 | 2.57 | 2. 48 |
| Iron | 2.86 | 2.87 | 2.87 | 2.84 | 2.87 | 2.89 | 2.89 | 2.89 | 2.87 | 2.87 | 2.88 | 2.86 | 2.84 | 2.87 | 2.77 |
| Copper | 2.71 | 2.71 | 2. 69 | 2. 66 | 2. 67 | 2.63 | 2.62 | 2.60 | 2. 60 | 2. 56 | 2. 56 | 2.43 | 2. 39 | 2. 51 | 2. 42 |
| Lead and zinc | 2.28 | 2.29 | 2. 30 | 2.29 | 2.28 | 2.29 | 2.29 | 2.28 | 2. 29 | 2.27 | 2.31 | 2. 29 | 2. 29 | 2.26 | 2. 17 |
| Anthracite | 2.73 | 2.76 | 2. 74 | 2. 74 | 2.75 | 2.75 | 2. 78 | 2. 77 | 2. 76 | 2. 80 | 2.77 | 2.77 | 2.76 | 2.75 | 2.63 |
| Bituminous coal. | 3.24 | 3.27 | 3.26 | 3.26 | 3.26 | 3. 28 | 3.27 | 3. 27 | 3. 28 | 3. 27 | 3. 29 | 3.31 | 3.30 | 3.25 | 3.02 |
| Crude-petrolenm and natural-gas production: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Petroleum and natural-gas producthon (except contract services) | 2.82 | 2.84 | 2.84 | 2. 79 | 2.84 | 2.81 | 2.83 | 2.83 | 2.81 | 2.81 | 2.84 | 2.81 | 2.86 | 2.81 | 2. 69 |
| Nonmetallic mining and quarrying.---- | 2.30 | 2.30 | 2.30 | 2. 28 | 2.28 | 2. 25 | 2. 25 | 2.25 | 2. 26 | 2. 22 | 2. 21 | 2. 22 | 2. 22 | 2.18 | 2.07 |
| Contract construction. | 3.32 | 3.32 | 3.31 | 3.28 | 3.27 | 3.24 | 3.24 | 3.23 | 3. 30 | 3.25 | 3.24 | 3.21 | 3. 19 | 3.12 | 3. 01 |
| Nonbuilding construction | 2. 98 | 3.02 | 3.01 | 3. 00 | 2. 96 | 2.91 | 2. 90 | 2.87 | 2. 99 | 2. 91 | 2. 88 | 2.88 | 2.85 | 2. 81 | 2.73 |
| Highway and street construction.-- | 2.78 | 2.88 | 2.85 | 2.85 | 2.80 | 2. 75 | 2. 69 | 2.65 | 2. 71 | 2. 61 | 2. 58 | 2. 65 | 2. 66 | 2. 63 | 2. 54 |
| Other nonbuilding construction.--- | 3.18 | 3. 18 | 3.19 | 3.17 | 3.14 | 3.09 3.34 | 3. 3. 3 | 3.08 3.32 | 3.17 <br> 3.38 | 3.11 3.33 | 3.08 3.32 | 3.06 3.30 3 | 3.04 <br> 3.28 | 2.99 3.22 | 2. 3.10 |
| Building construction.-. General contractors. | 3.41 3.15 | 3.42 3.15 | 3. 3. 3 3 | 3. 37 3.11 3.11 | 3. 37 3.10 | 3.34 3.07 3 | 3.34 <br> 3.08 | 3.32 3.05 3 | 3.38 3.12 3 | 3.11 3.05 3.05 | 3.32 3.04 3.0 | 3.30 3.03 3.0 | 3.28 3.03 3. | 3. 22 <br> 2.98 | 2. 28 |
| Qeneral contractors | 3.15 <br> 3.55 | 3.15 3.55 3.5 | 3.14 | 3. 11 3.51 3 | 3.10 | 3.07 3.49 | 3.08 3.48 | 3.05 <br> 3.47 | 3.12 3.51 | 3.05 3.48 | 3.04 3.46 | 3.03 3.44 | 3.03 <br> 3.42 | 3.35 | 2. 3.22 |
| Plumbing and heating | 3. 59 | 3.60 | 3. 58 | 3. 54 | 3. 53 | 3. 54 | 3. 51 | 3.51 | 3. 54 | 3. 49 | 3. 49 | 3. 49 | 3. 47 | 3. 41 | 3. 26 |
| Painting and decorating | 3.43 | 3.43 | 3.42 | 3.38 | 3.40 | 3.37 | 3.37 | 3.36 | 3.37 | 3.35 | 3.35 | 3.32 | 3.31 | 3.24 | 3.12 |
| Electrical work.-...... | 3.94 | 3.98 | 3.92 | 3.89 | 3.90 | 3.86 | 3.85 | 3.84 | 3.85 | 3.83 | 3.81 | 3.79 | 3. 77 | 3.70 | 3.55 |
| Other special-trade contractors | 3.47 | 3.47 | 3.47 | 3.45 | 3. 46 | 3.42 | 3.42 | 3.39 | 3.44 | 3.41 | 3.38 | 3.36 | 3.34 | 3.27 | 3.15 |

See footnotes st end of table.

Table C-1. Gross hours and earnings of production workers, ${ }^{1}$ by industry-Continued

| Industry | 1960 |  |  |  |  |  |  |  |  |  |  | 1959 |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Nov. ${ }^{2}$ | Oct. | Sept. | Aug. | July | June | May | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | 1959 | 1958 |
| Manufacturing $\qquad$ <br> Durable goods. <br> Nondurable goods. $\qquad$ | Average weekly earnings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{array}{r} \$ 90.16 \\ 97.42 \\ 81.48 \end{array}$ | $\begin{array}{r} \$ 91.31 \\ 98.89 \\ 81.51 \end{array}$ | $\begin{array}{\|} \$ 91.08 \\ 98.15 \\ 81.72 \end{array}$ | $\begin{array}{r} \$ 90.35 \\ 97.20 \\ 81.77 \end{array}$ | $\begin{array}{\|} \$ 91.14 \\ 97.76 \\ 82.37 \end{array}$ | $\begin{array}{r} \$ 91.60 \\ 98.98 \\ 82.16 \end{array}$ | $\begin{array}{\|} \$ 91.37 \\ 98.58 \\ 81.35 \end{array}$ | $\begin{array}{r} \$ 89.60 \\ 97.36 \end{array}$ | $\begin{array}{r} \$ 90.91 \\ 98.74 \end{array}$ | $\begin{array}{r} \$ 1.14 \\ 98.98 \end{array}$ | $\begin{array}{\|c} \$ 02.29 \\ 100.86 \end{array}$ | $\begin{array}{r} \$ 92.16 \\ 99.87 \end{array}$ | $\begin{array}{r} \$ 88.98 \\ 95.44 \end{array}$ | $\begin{array}{r} \$ 89.47 \\ 97.10 \end{array}$ | $\begin{gathered} \$ 83.50 \\ 90.06 \end{gathered}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | 79.52 | 79.93 | 79.95 | 80.77 | 81. 19 | 80.39 | 79.60 | 75. 27 |
| Durable goods |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ordnance and accessories. |  | 108.81 | 108.27 | 108.14 | 105.60 | 105. 20 | 107.30 | 107.79 | 106. 49 | 108.73 | 107. 68 | 108.21 | 109.10 | 106.97 | 105,06 | 101. 43 |
| Lumber and wood products.... | 77.18 | $\begin{aligned} & 81.58 \\ & 77.61 \end{aligned}$ | 84.19 | 81.97 | 81.35 | 83.84 | 81.40 | 80.20 | 77.60 | 78. 01 | 77.03 | 80. 40 | 80.60 | 79.79 | 75. 41 |
| Sawmills and planing mills.. Millwork, plywood, and prefabri- |  |  | 80.00 | 80.00 | 79.00 | 81.18 | 78.94 | 77.95 | 75.27 | 75.25 | 75.83 | 78.14 | 78.18 | 77.74 | 73.23 |
| cated structual wood products.-- | $\begin{aligned} & 79.93 \\ & 58.95 \\ & 67.54 \end{aligned}$ | $\begin{aligned} & 83.20 \\ & 60.89 \\ & 69.70 \end{aligned}$ | 82.56 | 84.00 | 82.89 | 83.37 | 84. 42 | 82.97 | 81.95 | 81.95 | 82. 58 | 83.42 | 83.82 | 84.05 | 79.38 |
| Wooden containers |  |  | 59.37 | 60.74 | 63.14 | 62. 42 | 62.47 | 60.70 | 59.10 | 59.25 | 59.50 | 60.09 | 59.35 | 59.79 | 56.88 |
| Miscellaneous wood products.-.--- |  |  | 69.19 | 68.45 | 68.61 | 70.55 | 69.29 | 68.04 | 68.38 | 66.99 | 67.32 | 67.32 | 67.08 | 66.42 | 63. 52 |
| Furniture and fixtures | $\begin{aligned} & 73.47 \\ & 68.95 \end{aligned}$ | 75.55 71.10 | 75.74 | 75.89 | 74.40 | 74. 77 | 74.19 | 73.82 | 72.73 | 74.56 | 74.56 | 77.33 | 75. 21 | 74.44 | 70.31 |
| Household furniture-.-.---.-.--- |  | 88.99 <br> 95.83 <br> 79.95 | 71.46 | 71.23 | 69.30 | 69.83 | 69.65 | 69.83 | 67.94 | 70.35 | 70.35 | 73.92 | 72.21 | 70.93 | 66.76 |
| sional furniture .------...-....--- | 85.81 <br> 94.56 <br> 77.41 |  | 88.58 | 89.03 | 88.40 | 88.40 | 87.54 | 86.88 | 87.74 | 86.92 | 87.97 | 88.83 | 82.99 | 85.49 | 79.78 |
| Partitions, shelving, lockers, and fixtures. |  |  | 95. 20 | 97.27 | 97.68 | 96.76 | 94.60 | 92.10 | 93.26 | 92.80 | 93.73 | 96.05 | 94.66 | 91.66 | 85.97 |
| Screens, blinds, and miscellaneous furniture and fixtures. |  |  | 77.20 | 77.76 | 76.57 | 77.36 | 76.76 | 72.91 | 74.80 | 75. 22 | 74.82 | 75.33 | 73.23 | 73.93 | 71.56 |
|  | Average weekly hours |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Manufacturing <br> Durable goods. $\qquad$ $\qquad$ <br> Nondurable goods. $\qquad$ | $\begin{aligned} & 39.2 \\ & 39.6 \\ & 38.8 \end{aligned}$ | $\begin{aligned} & 39.7 \\ & 40.2 \\ & 39.0 \end{aligned}$ | $\begin{aligned} & 39.6 \\ & 39.9 \end{aligned}$ | $\begin{aligned} & 39.8 \\ & 40.0 \end{aligned}$ | $\begin{aligned} & 39.8 \\ & 39.9 \end{aligned}$ | $\begin{aligned} & 40.0 \\ & 40.4 \end{aligned}$ | 39.9 | 39.3 | 39.7 | 39.8 | 40.3 | 40.6 | 39.9 | 40.3 | 39.2 |
|  |  |  |  |  |  |  | 40,4 | 39.9 | 40.3 | 40.4 | 41.0 | 41.1 | 40.1 | 40.8 | 39.5 |
|  |  |  |  |  | 39.6 | 39.5 | 39.3 | 38.6 | 38.8 | 39.0 | 39.4 | 39.8 | 39.6 | 39.6 | 38.8 |
| Durable goods |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ordnance and accessories. | 40.6 | 40.4 | 40.5 | 40.0 | 40.0 | 40.8 | 41.3 | 40.8 | 41.5 | 41.1 | 41.3 | 41.8 | 41.3 | 41.2 | 40.8 |
| Lumber and wood products | 38.4 | 39.6 | 39.9 | 39.6 | 39.3 | 40.5 | 40.1 | 39.9 | 38.8 | 39.4 | 39.3 | 40.2 | 40.1 | 40.5 | 39.9 |
| Sawmills and planing mills.------ Millwork, plywood, and prefabri- | 39.1 | 39.8 | 40.2 | 40.2 | 39.9 | 41.0 | 40.9 | 40.6 | 39.0 | 394 | 39.7 | 40.7 | 40.3 | 40.7 | 39.8 |
| cated structural wood products. | 38.8 | 40.0 | 39.5 | 40.0 | 39.1 | 39.7 | 40.2 | 39.7 | 39.4 | 39.4 | 39.7 | 40.3 | 40.3 | 41.0 | 40.5 |
| Wooden containers | 39.3 | 39.8 | 38.3 | 39.7 | 41.0 | 40.8 | 41.1 | 40.2 | 39.4 | 39.5 | 40.2 | 40.6 | 40.1 | 40.4 | 39.5 |
| Miscellaneous wood products.....- | 40.2 | 41.0 | 40.7 | 40.5 | 40.6 | 41.5 | 41.0 | 40.5 | 40.7 | 40.6 | 40.8 | 40.8 | 40.9 | 41.0 | 40.2 |
| Furniture and fixtures..---------------- | 39.5 | 40.4 | 40.5 | 40.8 | 40.0 | 40.2 | 40.1 | 39.9 | 39.1 | 40.3 | 40.3 | 41.8 | 41.1 | 40.9 | 39.5 |
| Household furniture-.-.-.-.-.-..-- Office, public-building, | 39.4 | 40.4 | 40.6 | 40.7 | 39.6 | 39.9 | 39.8 | 39.9 | 38.6 | 40.2 | 40.2 | 42.0 | 41.5 | 41.0 | 39.5 |
| Office, public-building, and professional furniture | 40.1 | 41.2 | 41.2 | 41.8 | 41.5 | 41.5 | 41.1 | 40.6 | 41.0 | 41.0 | 41.3 | 41.9 | 39.9 | 41.1 | 39.8 |
| Partitions, shelving, lockers, and fixtures | 39.4 | 39.6 | 39.5 | 40.7 | 40.7 | 41.0 | 40.6 | 39.7 | 40.2 | 40.0 | 40.4 | 41.4 | 40.8 | 40.2 | 38.9 |
| Screens, blinds, and miscellaneous |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 8.8 |
| furniture and fixtures. | 39.9 | 41.0 | 40.0 | 40.5 | 40.3 | 40.5 | 40.4 | 39.2 | 40.0 | 39.8 | 39.8 | 40.5 | 39.8 | 40.4 | 40.2 |
|  |  |  |  |  |  |  | Avera | hour | earning |  |  |  |  |  |  |
| Manufacturing - | \$2. 30 | \$2.30 | \$2. 30 | \$2. 27 | \$2. 29 | \$2. 29 | \$2. 29 | \$2.28 | \$2.29 | \$2. 29 | \$2. 29 | \$2. 27 | \$2. 23 | \$2. 22 |  |
| Durable goods. | 2. 46 | 2.46 | 2.46 | 2.43 | 2.45 | 2.45 | 2.44 | 2.24 | 2.45 | 2. 45 | 2.46 | 2. 43 | 2.38 | 2.38 | 2.28 |
| Nondurable goods | 2.10 | 2.09 | 2.09 | 2.07 | 2.08 | 2.08 | 2.07 | 2.06 | 2.06 | 2. 05 | 2.05 | 2.04 | 2.03 | 2.01 | 1. 94 |
| Durable goods |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ordnance and accessories | 2.68 | 2.68 | 2. 67 | 2.64 | 2.63 | 2.63 | 2.61 | 2.61 | 2. 62 | 2.62 | 2. 62 | 2.61 | 2. 59 | 2.55 | 2. 48 |
| Lumber and wood products ----------- | 2.01 | 2.06 | 2.11 | 2.07 | 2.07 | 2.07 | 2.03 | 2.01 | 2.00 | 1.98 | 1.96 | 2.00 | 2.01 | 1.97 | 1.89 |
| Sawmills and planing mills_------- Millwork, plywood, and prefabri- | 1.91 | 1.95 | 1.99 | 1.99 | 1.98 | 1.98 | 1.93 | 1.92 | 1.93 | 1.91 | 1.91 | 1.92 | 1.94 | 1.91 | 1.84 |
| eated structural wood products.- | 2.06 | 2.08 | 2.09 | 2.10 | 2.12 | 2.10 | 2.10 | 2.09 | 2.08 | 2.08 | 2.08 | 2.07 | 2.08 | 2.05 | 1.96 |
| Wooden containers --...-..- | 1.50 | 1. 53 | 1. 55 | 1. 53 | 1.54 | 1. 53 | 1. 52 | 1.51 | 1. 50 | 1. 50 | 1.48 | 1. 48 | 1.48 | 1. 48 | 1.44 |
| Miscellaneous wood products | 1.68 | 1.70 | 1.70 | 1.69 | 1.69 | 1.70 | 1.69 | 1.68 | 1. 68 | 1.65 | 1.65 | 1.65 | 1.64 | 1. 62 | 1. 58 |
| Furniture and fixtures. | 1.86 | 1.87 | 1.87 | 1.86 | 1.86 | 1.86 | 1.85 | 1.85 | 1.86 | 1.85 | 1.85 | 1.85 | 1.83 | 1.82 | 1.78 |
| Household furniture------------1 | 1.75 | 1.76 | 1.76 | 1.75 | 1.75 | 1.75 | 1.75 | 1.75 | 1.76 | 1.75 | 1.75 | 1.76 | 1.74 | 1.73 | 1.69 |
| sional furniture | 2.14 | 2.16 | 2.15 | 2.13 | 2.13 | 2.13 | 2.13 | 2.14 | 2.14 | 2.12 | 2.13 | 2.12 | 2.08 | 2.08 | 2.02 |
| Partitions, shelving, lockers, fixtures | 2.40 | 2.42 | 2.41 | 2.39 | 2. 40 | 2.36 | 2. 33 | 2.32 | 2.32 | 2.32 | 2.32 | 2.32 | 2.32 | 2.28 | 2.21 |
| Screens, blinds, and miscellaneous furniture and fixtures. | 1.94 | 1.95 | 1.93 | 1.92 | 1.90 | 1.91 | 1.90 | 1.86 | 1.87 | 1.89 | 1.88 | 1.86 | 1.84 | 1.83 | 1.78 |

[^41]Table C-1. Gross hours and earnings of production workers, ${ }^{1}$ by industry-Continued

| Industry | 1960 |  |  |  |  |  |  |  |  |  |  | 1959 |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Nov. ${ }^{2}$ | Oct. | Sept. | Aug. | July | June | May | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | 1959 | 1958 |
|  | Average weekly earnings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Manufacturing-Continued <br> Durable goods-Continued |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Stone, clay, and glass products |  | ${ }^{\$ 94.07}$ | $\left\lvert\, \begin{array}{\|c} \$ 92.75 \\ 126.54 \end{array}\right.$ | $\begin{array}{\|c} \$ 93.89 \\ 125.42 \end{array}$ | $\begin{aligned} & \$ 83.02 \\ & 124.26 \end{aligned}$ | $\left\lvert\, \begin{aligned} & \$ 93.07 \\ & 125.29 \end{aligned}\right.$ | $\begin{aligned} & \$ 92.84 \\ & 124.97 \end{aligned}$ | $\begin{array}{\|} \$ 91.08 \\ 123.78 \end{array}$ | $\begin{aligned} & \$ 90.57 \\ & 124.74 \end{aligned}$ | $\left\lvert\, \begin{gathered} \$ 90.85 \\ 123.48 \end{gathered}\right.$ | $\$ 91.30$126.80 | \$92.25 | \$91. 39 | \$90. 83 | \$84. 80 |
| Flat glass | 134.09 |  |  |  |  |  |  |  |  |  |  | 127.39 | 127.58 | 113.46 |  |
| Glass and glassware, pressed or blown_ | 93.20 | 92.57 | 91.25 | 92.86 | 91.54 | 92.86 | 93.15 | 89.47 | 91.88 | 90.63 | 89.95 | 88.93 | 88.65 | 88.13 | 85.75 |
| Glass products made of purchased glass. | $\begin{array}{r} 79.32 \\ 105.56 \end{array}$ | $\begin{array}{r} 79.10 \\ 104.75 \end{array}$ | $\begin{array}{r} 78.34 \\ 105.18 \end{array}$ | $\begin{array}{r} 74.48 \\ 103.57 \end{array}$ | $\begin{array}{r} 74.84 \\ 106.71 \end{array}$ | 73.71105.63 | $\begin{array}{r} 72.95 \\ 104.14 \end{array}$ | $\begin{array}{r} 71.82 \\ 101.18 \end{array}$ | $\begin{aligned} & 70.50 \\ & 97.66 \end{aligned}$ | 71. 62 | 70.87 | $\begin{array}{r} 75.14 \\ 101.02 \end{array}$ | $\begin{array}{r} 74.21 \\ 103.25 \end{array}$ | 73.45 |  |
| Cement, hydraulic. |  |  |  |  |  |  |  |  |  | 98.15 | 100.04 |  |  | 98. 98 | 71. 55 92.92 |
| Structural clay produc | $\begin{aligned} & 81.60 \\ & 83.76 \end{aligned}$ | $\begin{aligned} & 82.01 \\ & 83.76 \end{aligned}$ | 81.6080.41 | $\begin{aligned} & 83.64 \\ & 83.28 \end{aligned}$ | 82.2279.21 | 83.4382.46 | 83.23 | 83.03 <br> 81.75 | 79. 78 | 80.19 | 80.40 | 82.2182.60 | 81.61 | 80.39 | 75.2573.24 |
| Pottery and related products |  |  |  |  |  |  | 81.70 |  |  | 80.30 | 80.14 |  | 80.98 | 79.80 |  |
| Concrete, gypsum, and plaster products | $\begin{aligned} & 93.50 \\ & 76.38 \end{aligned}$ | $\begin{aligned} & 95.91 \\ & 78.28 \end{aligned}$ | $\begin{aligned} & 95.48 \\ & 76.73 \end{aligned}$ | $\begin{aligned} & 96.36 \\ & 78.62 \end{aligned}$ | 95.2675.89 | $\begin{aligned} & 94.60 \\ & 77.27 \\ & \hline \end{aligned}$ | $\begin{array}{\|l\|} \hline 93.74 \\ 78.81 \\ \hline \end{array}$ | 92. 02 | $\begin{aligned} & 87.08 \\ & 72.20 \end{aligned}$ | 89.03 | $\begin{aligned} & 88.83 \\ & 75.48 \end{aligned}$ | $\begin{aligned} & 91.14 \\ & 76.96 \end{aligned}$ | $\begin{aligned} & 90.93 \\ & 75.26 \end{aligned}$ | 91. 96 | 86.4373.31 |
| Out-stone and stone products. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Miscellaneous nonmetallic mineral products. | 97.28 | 97.77 | 97.53 | 98.49 | 97.20 | 96.96 | 97.44 | 95.84 | 98.29 | 98.29 | 99.01 | 98.53 | 95.24 | 96.93 | 87.96 |
| Primary metal industries | 104.35 | 106.12 | 106. 78 | 106. 68 | 108.75 | 109.70 | 109. 70 | 112.29 | 114.29 | 115.26 | 117.96 | 117.14 | 107.86 | 112. 72 | $\begin{aligned} & 100.97 \\ & 108.00 \end{aligned}$ |
| Blast furnaces, steel works, and rolling mills. |  | $\begin{array}{r} 109.63 \\ 95.76 \end{array}$ | $\begin{array}{r} 110.60 \\ 95.76 \end{array}$ | $\begin{array}{\|r} 110.53 \\ 95.98 \end{array}$ | $\begin{array}{\|r} 113.83 \\ 97.61 \end{array}$ | $\begin{array}{r} 115.74 \\ 97.61 \end{array}$ | $\begin{array}{\|c} 116.21 \\ 96.61 \end{array}$ | $\begin{array}{r} 122.22 \\ 95.48 \end{array}$ | $\begin{array}{r} 122.89 \\ 99.00 \end{array}$ | $\begin{array}{r} 123.60 \\ 99.25 \end{array}$ | $\begin{aligned} & 128.54 \\ & 100.35 \end{aligned}$ | $\begin{array}{\|r} 127.72 \\ 99.29 \end{array}$ | $\begin{array}{\|r} 113.10 \\ 94.28 \end{array}$ | $\begin{array}{r} 122.28 \\ 97.44 \end{array}$ |  |
| Iron and steel foundries | $\begin{array}{r} 100.80 \\ 94.13 \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{array}{r} 108.00 \\ 85.93 \end{array}$ |
| Primary smelting and refining of nonferrous metals. |  | 110.29 | 111.51 | 110. 43 | 109.74 | 108.24 | 108. 47 | 112. 25 | 108.05 | 107.04 | 108.62 | 105.86 | 108.92 | 105. 93 | $\begin{aligned} & 99.05 \\ & 88.84 \end{aligned}$ |
| Secondary smelting and refining of nonferrous metals | 96.72 | 96.08 | 95.20 | 84. 40 | 94.00 | 93.67 | 95.06 | 94.77 | 95.06 | 94.66 | 95. 76 | 96.05 | 96.28 | 94.16 |  |
| Rolling, drawing, and alloying of nonferrous metals |  |  |  | 109.89 |  |  |  |  | 107.87 |  |  |  |  |  | $\begin{array}{r} 100.90 \\ 93.06 \end{array}$ |
| Nonferrous foundries-..-- | $\begin{aligned} & 101.09 \\ & 108.35 \end{aligned}$ | $\left\lvert\, \begin{aligned} & 102.11 \\ & 109.42 \end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & 101.96 \\ & 109.42 \end{aligned}\right.$ | $\begin{aligned} & 101.96 \\ & 108.47 \end{aligned}$ | $\begin{aligned} & 101.81 \\ & 109.57 \end{aligned}$ | $\begin{aligned} & 101.91 \\ & 109.85 \\ & 10 \end{aligned}$ | $\begin{aligned} & 101.50 \\ & 110.12 \\ & 120 \end{aligned}$ | $\begin{array}{r} 87.32 \\ 110.40 \end{array}$ | 100.60 <br> 115.08 | $\begin{aligned} & 108.04 \\ & 101.00 \\ & 117.88 \end{aligned}$ | $\begin{aligned} & 108.20 \\ & 113.16 \\ & 118.72 \end{aligned}$ | $\left\lvert\, \begin{aligned} & 102.92 \\ & 117.32 \end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & 100.61 \\ & 107.96 \end{aligned}\right.$ | 100.2810.28113.85 |  |
| Miscellaneous primary metal industries |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 102.31 |

Stone, clay, and glass products.
Flat glass
Glass and glassware, pressed or Glass products made of purchased glass.
Cement, hydraulic-------
Structural clay products.
Pottery and related products
Concrete, gypsum, and plaster
products------
Miscellaneous nonmetallic mineral products..
Primary metal industries
Blast furnaces, steel works, and
roling mills -....-..........
Primary smelting and refining of nonferrous metals
Secondary smelting and refining of nonferrous metals
Rolling, drawing, and alloying of nonferrous metals.
Nonferrous foundries dustrles

Stone, clay, and glass products
Flat glass
Glass and glassware, pressed or blown.
Glass products made of purchased glass.

Structural clay products
Pottery and related products.-.... Concrete, gypsum, and plaster products

路 Miscellaneous nonmetallic mineral products.
Primary metal industries
Blast furnaces, steel works, and rolling mills.
Iron and steel foundries.
Primary smelting and refining of nonferrous metals.
Secondary smelting and refining of nonferrous metals.
Rolling, drawing, and alloying of nonerrous metals
Nonferrous foundries
Miscellaneous primary metal industries
See footnotes at end of table.

Table C-1. Gross hours and earnings of production workers, ${ }^{1}$ by industry-Continued

| Industry | 1860 |  |  |  |  |  |  |  |  |  |  | 1959 |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Nov. 2 | Oct. | Sept. | Aug. | July | June | May | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | 1959 | 1958 |
| Manufacturing-Continued Durable goods-Continued |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fabricated metal product | \$98.15 | \$100.04 | \$100.94 |  | \$99.63 | \$100.21 | \$99.96 | \$96. 56 | \$98. 42 | \$98. 42 | \$100.94 | \$99.77 | \$94. 64 | \$97. 41 | $\begin{aligned} & \$ 90.80 \\ & 104.42 \end{aligned}$ |
| Tin cans and other tinware | 113.24 | 114.09 | 115.79 |  | 119.9493.83 | 118.40 | 116.4793.90 | 111.6690.85 | 108. 94 | $\begin{array}{r} 10840 \\ 91.31 \end{array}$ | 111.25 | 112.10 | 110.24 | 112.36 |  |
| Cutlery, handtools, and hardware-- | 113.24 95.27 | 95.34 | 94.56 | $\begin{array}{r} 119.26 \\ 94.77 \end{array}$ |  | 93.60 |  |  | 92.63 |  | 98.00 | 96.79 | 88.91 | 92.25 | 86.15 |
| tric) and plumbers' supplies | 90.30 | 92.90 | 93.30 | 93.38 | 92.51 | 92.98 | 82.28 | 89.71 | 91.42 | 91.42 | 01.34 | 92.34 | 90.02 | 91.83 |  |
| Fabricated structural metal prod- | 100.94 | 101.68 | 102.18 | 101.84 | 102.26 | 102.09 | 100.86 | 98.74 | 97.60 | 97.51 | 98.25 | 98.58 | 94.62 | 96.72 |  |
| Metal stampIng, coating, and engraving | 101.24 | 104.70 | 109.62 | 107.17 | $\begin{array}{r} 103.97 \\ 87.02 \\ 88.75 \end{array}$ | 107.33 | 108.00 | 102.21 | 105.57 | 97.51 107.78 |  |  |  |  | 93.43 |
| Lighting fixtur | 10.2489.5089 | 104. 94 | $\begin{array}{r} 109.62 \\ 93.79 \\ 90.12 \end{array}$ | 107.1789.2489.60 |  | $\begin{array}{r} 107.33 \\ 91.08 \end{array}$ | 108.00 | 102.21 86.02 | 105.57 88.44 | 107.78 88.62 | 111.54 90.72 | 107.70 <br> 90.39 | 99. 14 | $\begin{array}{r} 102.58 \\ 87.72 \end{array}$ | 92.63 80.17 83.74 |
| Fabricated wire products |  | 90.35 | $\begin{aligned} & 93.79 \\ & 90.12 \end{aligned}$ |  |  | 88.75 | 89.38 | 87.91 | 90.32 | 90.94 | 93.56 | 93.83 | 89.95 | 89.60 |  |
| products. | $95.28$ | 96.48 | 94.64 | 95.91 | 95. 20 | 95.68 | 95.75 | 93.77 | 98.29 | 98.95 | 98.77 | 98.00 | 93.09 | 97.44 | 88.53 |
| Machinery (except electrical) | $\begin{aligned} & 103.86 \\ & 113.24 \end{aligned}$ | $\begin{aligned} & 104.49 \\ & 112.80 \end{aligned}$ | $\begin{array}{\|l\|} 103.57 \\ 113.08 \end{array}$ | $\begin{aligned} & 103.68 \\ & 114.90 \end{aligned}$ | $\begin{aligned} & 105.11 \\ & 112.33 \end{aligned}$ | $\begin{aligned} & 105.88 \\ & 114.26 \end{aligned}$ | $\begin{aligned} & 106.14 \\ & 113.15 \end{aligned}$ | $\begin{aligned} & 104.04 \\ & 108.38 \end{aligned}$ | $\begin{aligned} & 105.47 \\ & 112.20 \end{aligned}$ | $\begin{aligned} & 104.55 \\ & 110.02 \end{aligned}$ | 105.32113.01 | $\begin{aligned} & 105.92 \\ & 112.48 \end{aligned}$ | $\begin{aligned} & 102.82 \\ & 110.16 \end{aligned}$ | $\begin{aligned} & 103.25 \\ & 110.42 \end{aligned}$ | 94.25102.26 |
| Engines and turbines. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 105.07 | 104.80 | 104.66 | 104. 12 | 102.43 | 102.80 | 102.91 | 102.80 | 102.82 | 100.75 | 103.74 | 102.82 | 100.49 | 104.09 | 95. 59 |
| Construction and mining machinery $\qquad$ | 100. 33 | $\begin{aligned} & 101.49 \\ & 111.25 \end{aligned}$ | $\begin{aligned} & 100.86 \\ & 109.62 \end{aligned}$ | $\begin{aligned} & 100.84 \\ & 110.84 \end{aligned}$ | $\begin{aligned} & 102.00 \\ & 118.30 \end{aligned}$ | $\begin{aligned} & 102.77 \\ & 122.24 \end{aligned}$ | $\begin{aligned} & 102.47 \\ & 123.36 \end{aligned}$ | $\begin{aligned} & 101.05 \\ & 120.37 \end{aligned}$ | $\begin{aligned} & 100.65 \\ & 123.76 \end{aligned}$ | $\begin{array}{r} 99.15 \\ 120.50 \end{array}$ | $\begin{aligned} & 100.10 \\ & 119.35 \end{aligned}$ | 101.09 | $\begin{array}{r} 97.81 \\ 115.72 \end{array}$ | $\begin{aligned} & 101.35 \\ & 114.06 \end{aligned}$ |  |
| Metalworking machinery- | 109.75 |  |  |  |  |  |  |  |  |  |  | 118.48 |  |  | 91.89 101.38 |
| Special-Industry machinery (except metalworking machinery) .- | $\begin{aligned} & 100.28 \\ & 101.45 \end{aligned}$ | $\begin{aligned} & 101.50 \\ & 102.87 \end{aligned}$ | $\begin{aligned} & 101.02 \\ & 102.72 \end{aligned}$ | $\begin{aligned} & 101.46 \\ & 103.22 \end{aligned}$ | $\begin{aligned} & 102.37 \\ & 102.66 \end{aligned}$ | $\begin{aligned} & 102.61 \\ & 103.91 \end{aligned}$ | $\begin{aligned} & 102.12 \\ & 103.16 \end{aligned}$ | $\begin{array}{r} 99.66 \\ 101.34 \end{array}$ | $\begin{aligned} & 102.43 \\ & 101.84 \end{aligned}$ | $\begin{aligned} & 101.28 \\ & 100.85 \end{aligned}$ | $\begin{aligned} & 101.58 \\ & 101.84 \end{aligned}$ | $\begin{aligned} & 101.81 \\ & 105.00 \end{aligned}$ | $\begin{aligned} & 100.25 \\ & 102.18 \end{aligned}$ | $\begin{array}{r} 98.05 \\ 100.94 \end{array}$ | $\begin{aligned} & 89.55 \\ & 93.06 \end{aligned}$ |
| General industrial machinery |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 105.97 | 106. | 105.30 | 101.63 | 105.88 | 103.42 | 103.28 | 101. 20 | 103.12 | 102.36 | 102.87 | 102.56 | 102.41 | 98.89 | 93.30 |
| Service-industry and household machines $\qquad$ |  | 98.70 |  |  |  | 98.65 | 99.14 | 98.00 | 96.62 | 99.29 | 98.74 | 102.51 | 93.65 |  |  |
| Miscellaneous machinery parts | 100.69 | 101.85 | 101.20 | 100.65 | 100.25 | 101.25 | 100.85 | 98.70 98 | 100.85 | 102.09 | 102. 59 | 102.67 | 93.65 99.88 | 97.20 101.43 | 90.68 <br> 92.73 |
|  |  |  |  |  |  |  | A vera | we | hours |  |  |  |  |  |  |
| Fabricated metal products - | 39.9 | 40.5 | 40.7 | 41.0 | 40.5 | 40.9 | 40.8 | 39.9 | 40.5 | 40.5 | 41.2 | 41.4 | 40.1 | 41. 1 | 40.0 |
| Tin cans and other tinware | 40.3 | 40.6 | 41.8 | 42.9 | 43.3 | 42.9 | 42.2 | 40.9 | 40.2 | 40.0 | 40.9 | 42.3 | 41.6 | 42.4 | 41.6 |
| Cutlery, handtools, and hardware Heating apparatus (except elec- | 40.2 | 40.4 | 39.9 | 40.5 | 40.1 | 40.0 | 40.3 | 39.5 | 40.1 | 39.7 | 41.7 | 41.9 | 40.6 | 41.0 | 39.7 |
| tric) and plumbers' supplies.---- | 38.1 | 39.2 | 39.2 | 39.4 | 39.2 | 39.4 | 39.1 | 38.5 | 38.9 | 38.9 | 39.2 | 39.8 | 38.8 | 40.1 | 39.6 |
| Fabricated structural metal products $\qquad$ | 40.7 | 41.0 | 41.2 | 41.4 | 41.4 | 41.5 | 41.0 | 40.3 | 40.0 | 39.8 | 40.1 | 40.8 40.4 | 38.8 39.1 | 40.1 40.3 | 40.1 |
| Metal stamping, coating, and en- | 30.7 | 40.9 | 12. | 41.7 | 41.4 | 41.5 | 1.0 |  |  | 39.8 | 40.1 | 40.4 | 39.1 | 40.3 | 40.1 |
| ${ }_{\text {Lighting }}$ | 39.7 | 40.9 | 42.0 | 41.7 | 40.3 | 41.6 | 41.7 | 40.4 | 41.4 | 42.1 | 42.8 | 42.4 | 40.8 | 41.7 | 40.1 |
| Fabricated wire products-------------- | 39.4 39.6 | 40.8 39.8 | 40.6 39.7 | 40.2 40.0 | 39.2 39.8 | 40.3 39.8 | 40.0 39.9 | 39.1 39.6 | 40.2 40.5 | 40.1 40.6 | 40.5 41.4 | 40.9 41.7 | 39.8 40.7 | 40.8 41.1 | 39.3 39.5 |
| Miscellaneous fabricated metal products | 39.7 | 40.2 | 39.6 | 40.3 | 40.0 | 40.2 | 40.4 | 39.9 | 41.3 | 41.4 | 41.5 | 41.7 | 40.7 40.3 | 41.1 42.0 | 39.5 39.7 |
| Machinery (except electrical) | 40.1 | 40.5 | 40.3 | 40.5 | 40.9 | 41.2 | 41.3 | 40.8 | 41.2 | 41.0 | 41.3 | 41.7 | 40.8 | 41.3 | 39.6 |
| Engines and turbines...----------- | 40.3 | 40.0 | 40.1 | 40.6 | 40.7 | 41.1 | 40.7 | 39.7 | 41.1 | 40.3 | 41.7 | 41.2 | 40.5 | 41.2 | 40.1 |
| Agricultural machinery and tractors $\qquad$ | 39.5 | 40.0 | 40.1 | . 2 | 39.7 | . 0 | 40.2 | 40.0 | 39.7 | 38.9 | 39.9 | 39. | 38.8 |  |  |
| Construction and mining machin- |  |  |  |  |  |  |  |  |  |  |  | 39.7 | 38.8 | 40.5 | 5 |
|  | 39.5 | 39.8 | 39.4 | 39.7 | 40.0 | 40.3 | 40.5 | 40.1 | 40.1 | 39.5 | 40.2 | 40.6 | 39.6 | 41.2 | 39.1 |
| Metalworking machinery--.------- | 40.2 | 40.9 | 40.6 | 40.9 | 42.4 | 43.5 | 43.9 | 43.3 | 44.2 | 43.5 | 43.4 | 43.4 | 42.7 | 42.4 | 39.6 |
| Special-industry machinery (except metalworking machinery).- | 41.1 | 41.6 | 41.4 | 42.1 | 42.3 | 42.4 | 42.2 | 41.7 | 42.5 | 42.2 | 42.5 | 42.6 | 42.3 | 41.9 | 39.8 |
| General industrial machinery | 40.1 | 40.5 | 40.6 | 40.8 | 40.9 | 41.4 | 41.1 | 40.7 | 40.9 | 40.5 | 40.9 | 42.0 | 41.2 | 41.2 | 39.6 |
| Office and store machines and devices | 40.6 | 41.0 | 40.5 | 39.7 | 41.2 | 40.4 | 40.5 | 40.0 | 40.6 | 40.3 | 40.5 | 40.7 | 40.8 | 40.2 | 9. 7 |
| Service-industry and household | 10.6 | 1.0 | 10.5 | 3. 7 | 41.2 | 40.4 | 40.5 | 10.0 | 40.6 | 40.3 | 40.5 | 40.7 | 40.8 | 40.2 | 9.7 |
| machines ...-. | 39.4 | 39.8 | 39.7 | 39.7 | 39.6 | 40.1 | 40.3 | 40.0 | 39.6 | 40.2 | 40.3 | 41.5 | 38.7 | 40.5 | 39.6 |
| Miscellaneous machinery par | 39.8 | 40.1 | 40.0 | 40.1 | 40.1 | 40.5 | 40.5 | 39.8 | 40.5 | 41.0 | 41.2 | 41.46 | 40.6 | 41.4 | 39.8 |
|  |  |  |  |  |  |  | verage | ourly | arnings |  |  |  |  |  |  |
| Fabricated metal products | \$2.46 | \$2. 47 | \$2.48 | \$2. 45 | \$2.46 | \$2. 45 | \$2. 45 | \$2.42 | \$2.43 | \$2.43 | \$2.45 | \$2.41 | \$2.36 | \$2. 37 | \$2.27 |
| Tin cans and other tinware | 2.81 | 2.81 | 2.77 | 2.78 | 2.77 | 2.76 | 2.76 | 2.73 | 2.71 | 2.71 | 2.72 | 2.65 | 2.65 | 2.65 | 2.51 |
| Cutlery, handtools, and hardware-- Heating apparatus (except elec- | 2.37 | 2.36 | 2.37 | 2. 34 | 2.34 | 2.34 | 2.33 | 2.30 | 3.31 | 2.30 | 2.35 | 2.31 | 2.19 | 2.25 | 2.17 |
| tric) and plumbers' supplies...-- | 2.37 | 2.37 | 2.38 | 2. 37 | 2.36 | 2.36 | 2.36 | 2.33 | 2. 35 | 2.35 | 2.33 | 2.32 | 2.32 | 2.29 | 2.22 |
| Fabricated structural metal products $\qquad$ | 2.48 | 2. 48 | 2.48 | 2.46 | 2.47 | 2. 46 | 2.46 | 2.45 | 2.44 | 2.45 | 2.45 | 2.44 | 2.42 | 2. 40 | 2.33 |
| Metal stamping, coating, and en- |  |  |  |  |  | 2.40 | 2, 6 | 2.45 |  | 2.45 | 2.45 | 2.44 | 2. 42 | 2. 40 | 2.33 |
| graving --.-.---------- | 2. 55 | 2. 56 | 2. 61 | 2. 57 | 2. 58 | 2. 58 | 2. 59 | 2. 53 | 2.55 | 2.56 | 2. 60 | 2.54 | 2.43 | 2.46 | 2.31 |
| Fighting fixtures | 2.26 2.26 | 2.31 2.27 | 2.31 2.27 | 2. 22 2. 24 | 2.22 2.23 | 2.26 2.23 | 2.24 2.24 | 2. 20 | 2. 20 | 2. 21 | 2.24 | 2. 21 | 2.13 | 2.15 | 2.04 |
| Miscellaneous fabricated metal |  |  | 2. 27 | 2. 24 | 2.23 | 2.23 | 2.24 | 2.22 | 2.23 | 2.24 | 2.26 | 2.25 | 2.21 | 2.18 | 2.12 |
| products.- | 2.40 | 2.40 | 2.39 | 2. 38 | 2.38 | 2.38 | 2.37 | 2.35 | 2.38 | 2.39 | 2.38 | 2.35 | 2.31 | 2.32 | 2.23 |
| Machinery (except electrical) | 2. 59 | 2. 58 | 2. 57 | 2. 56 | 2. 57 | 2.57 | 2. 57 | 2. 55 | 2. 56 | 2. 55 | 2. 55 | 2. 54 | 2. 52 | 2. 50 | 2.38 |
| Engines and turbines...-.-.-.-...-- | 2.81 | 2.82 | 2.82 | 2. 83 | 2.76 | 2.78 | 2.78 | 2.73 | 2.73 | 2.73 | 2.71 | 2.73 | 2. 72 | 2.68 | 2.55 |
| Agricultural machinery and tractors. | 2.66 | 2.62 | 2.61 | 2. 59 | 2.58 | 2.57 | 2.56 | 2.57 | 2. 59 | 2.59 | 2.60 | 2. 59 | 2. 59 | 2.57 | 2.42 |
| Construction and mining machin- |  |  |  |  |  |  |  |  |  |  |  |  | 2. 50 | 2.57 | 2.42 |
|  | 2. 54 | 2. 55 | 2. 56 | 2. 54 | 2. 55 | 2.55 | 2.53 | 2. 52 | 2.51 | 2.51 | 2.49 | 2.49 | 2.47 | 2.46 | 2.35 |
| Metalworking machinery --.------- | 2.73 | 2. 72 | 2. 70 | 2. 71 | 2.79 | 2.81 | 2.81 | 2.78 | 2.80 | 2.77 | 2.75 | 2.73 | 2.71 | 2.69 | 2. 56 |
| Special-industry machinery (except metalworking machinery) .- | 2.44 | 2.44 | 2.44 | 2. 41 | 2.42 | 2.42 | 2.42 | 2.39 | 2.41 | 2.40 | 2.39 | 3.39 | 2.37 | 2.34 | 2.25 |
| General industrial machinery --.-- | 2. 53 | 2.54 | 2.53 | 2. 53 | 2. 51 | 2. 51 | 2. 51 | 2.49 | 2. 49 | 2. 49 | 2.49 | 2. 50 | 2.48 | 2.45 | 2.35 |
| Office and store machines and devices. | 2.61 | 2.60 | 2. 60 | 2. 56 | 2. 57 | 2.56 | 2.55 | 2.53 | 2. 54 | 2.54 | 2.54 | 2.52 | 2.51 | 2.46 | 2.35 |
| Service-industry and household machines |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 2.51 <br> 2.53 | 2.48 <br> 2.54 | 2.48 <br> 2.53 | 2. 44 2.51 | 2.44 2.50 | 2.46 2.50 | 2.46 <br> 2.49 | 2.45 2.48 | 2.44 2.49 | 2.47 2.49 | 2.45 2.49 | 2.47 2.48 | 2.42 2.46 | 2.40 2.45 | 2.29 2.33 |

TABLE C-1. Gross hours and earnings of production workers, ${ }^{1}$ by industry-Continued

| Industry | 1960 |  |  |  |  |  |  |  |  |  |  | 1959 |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Nov. ${ }^{2}$ | Oct. | Sept. | Aug. | July | June | May | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | 1959 | 1958 |
|  | Average weekly earnings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | \$92.97 | \$93.09 | \$93.03 | \$91. 77 | \$90. 39 | \$92. 23 | \$91. 37 | \$88. 98 | \$91. 43 | \$90.97 | \$92.80 | \$93.07 | \$90.72 | \$89.91 | \$85. 14 |
| Electrical machinery |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Electrical generating, transmission, distribution, and industrial apparatus |  |  |  |  |  |  |  |  |  |  | 80.87 | 07.88 | 95. 18 |  |  |
| apparatus | 96.87 90.09 | 96.16 92.00 | 96.80 89.93 | 96.80 90.00 | 96.80 90.62 | 96.88 91.25 | 96.24 91.80 | 94. 25 | 96. 15 | 95. 84 | 96.87 | 97.88 | 95. 18 | 94.19 | 89.72 |
| Insulated wire and cable | 87.97 | 89.21 | 87.76 | 88.20 | 88.40 | 89.68 | 88.62 | 84.66 | 89.46 | 89. 24 | 88.39 | 88.15 | 85.70 | 89.15 | 85. 36 |
| Electrical equipment for vehicles.-- | 98.53 | 101.85 | 102.77 | 95. 59 | 98.21 | 97.32 | 98.55 | 95.40 | 96.53 | 98.65 | 104.25 | 101. 52 | 91.54 | 96.56 | 89.47 |
| Electric lamps | 89.83 | 89.65 | 86.08 | 87.47 | 85. 25 | 86.75 | 87.30 | 86.41 | 88.36 | 87.42 | 89.91 | 91.24 | 92.77 | 88.13 | 80.57 |
| Communication equipment | 90.23 | 90.94 | 90.05 | 88.80 | 85.69 | 89.24 | 87.34 | 85.19 | 88.18 | 87.34 | 89.10 | 88.73 | 88.32 | 86.86 | 81.97 |
| Miscellaneous electrical products..- | 90.50 | 90.58 | 89.60 | 89.82 | 89.15 | 88.43 | 89.65 | 89. 20 | 89.60 | 88.65 | 91.13 | 93.18 | 90.42 | 88.94 | 85.03 |
| Transportation equipment.-...-------- | $\begin{aligned} & 111.88 \\ & 113.77 \\ & 112.34 \end{aligned}$ | $\begin{aligned} & 115.49 \\ & 119.39 \\ & 111.93 \end{aligned}$ | $\begin{array}{\|l\|} 112.96 \\ 116.52 \\ 111.24 \end{array}$ | $\begin{array}{\|l} 108.90 \\ 108.64 \\ 110.84 \end{array}$ | $\begin{aligned} & 110.15 \\ & 111.20 \\ & 110.97 \end{aligned}$ | $\begin{aligned} & 110.97 \\ & 112.87 \\ & 110.57 \end{aligned}$ | $\left\lvert\, \begin{aligned} & 111.66 \\ & 113.85 \\ & 110.29 \end{aligned}\right.$ | $\begin{aligned} & 107.59 \\ & 108.23 \\ & 107.07 \end{aligned}$ | 110.84 | $\begin{aligned} & 111.79 \\ & 116.62 \\ & 108.81 \end{aligned}$ | $\left\lvert\, \begin{aligned} & 115.92 \\ & 124.11 \\ & 108.40 \end{aligned}\right.$ | 110.70 | 104. 66 | 107. 73 | $\begin{array}{r} 100.69 \\ 99.96 \\ 101.91 \end{array}$ |
| Motor vehicles and equipment. |  |  |  |  |  |  |  |  | 113.83 |  |  | 113. 29 | 102. 38 | 110.16 |  |
| Aircraft and parts.. |  |  |  |  |  |  |  |  | 109.34 |  |  | 109.88 | 108.00 | 106. 63 |  |
| repairing <br> Railroad equipment | $\begin{array}{r} 105.54 \\ 103.58 \\ 86.94 \end{array}$ | $\begin{array}{r} 109.53 \\ 108.67 \\ 88.46 \end{array}$ | $\left\lvert\, \begin{array}{r} 103.97 \\ 106.96 \\ 86.75 \end{array}\right.$ | $\begin{array}{r} 108.23 \\ 107.24 \\ 83.63 \end{array}$ | $\left\lvert\, \begin{array}{r} 106.90 \\ 107.90 \\ 84.80 \end{array}\right.$ | $\begin{array}{r} 105.60 \\ 110.65 \\ 86.36 \end{array}$ | $\begin{array}{r} 105.46 \\ 11.39 \\ 86.63 \end{array}$ | $\begin{array}{r} 103.49 \\ 110.26 \\ 84.588 \end{array}$ | $\begin{array}{r} 103.62 \\ 112.18 \\ 84.10 \end{array}$ | $\begin{array}{r} 102.31 \\ 102.11 \\ 87.42 \end{array}$ | $\left\lvert\, \begin{array}{r} 101.92 \\ 110.15 \\ 87.07 \end{array}\right.$ | $\begin{array}{r} 102.44 \\ 109.69 \\ 89.82 \end{array}$ | $\left\lvert\, \begin{array}{r} 101.26 \\ 102.65 \\ 86.41 \end{array}\right.$ | $\begin{array}{r} 101.40 \\ 107.41 \\ 89.13 \end{array}$ | $\begin{array}{r} 98.00 \\ 100.70 \\ 82.74 \end{array}$ |
| Other transportation equipment.-.- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | A verage weekly hours |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Electrical machinery-.------------------ | 39.9 | 40.3 | 40.1 | 39.9 | 39.3 | 40.1 | 39.9 | 39.2 | 40.1 | 39.9 | 40.7 | 41.0 | 40.5 | 40.5 | 39.6 |
| Electrical generating, transmission, distribution, and industrial |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 39.7 | 39.9 | 40.0 | 40.0 | 40.0 | 40.2 | 40.1 | 39.6 | 40.4 | 40.1 | 40.7 | 41.3 | 40.5 | 40.6 | 39.7 |
| Electrical appliances | 39.0 | 40.0 | 39.1 | 39.3 | 39.4 | 39.5 | 39.4 | 38.6 | 39.1 | 39.4 | 39.4 | 40.1 | 39.8 | 39.5 | 38.8 |
| Insulated wire and cable--- | 41.3 | 41.3 | 41.2 | 41.8 | 41.5 | 42.3 | 42.2 | 40.9 | 42.6 | 42.7 | 42.7 | 43.0 | 41.4 | 41.9 | 41.4 |
| Electrical equipment for vehicles. | 39.1 | 40.1 | 40.3 | 38.7 | 39.6 | 39.4 | 39.9 | 39.1 | 39.4 | 40.1 | 41.7 | 41.1 | 38.3 | 40.4 | 38.9 |
| Electric lamps. | 39.4 | 40.2 | 38.6 | 39.4 | 38.4 | 38.9 | 39.5 | 39.1 | 39.8 | 39.2 | 40.5 | 41.1 | 41.6 | 40.8 | 39.3 |
| Communication equipment | 40.1 | 40.6 | 40.2 | 40.0 | 38.6 | 40.2 | 39.7 | 38.9 | 39.9 | 39.7 | 40.5 | 40.7 | 40.7 | 40.4 | 39.6 |
| Miscellaneous electrical products.-- | 40.4 | 40.8 | 40.0 | 40.1 | 39.8 | 39.3 | 40.2 | 40.0 | 40.0 | 39.4 | 40.5 | 41.6 | 41.1 | 40.8 | 40.3 |
| Transportation equipment | 40.1 | 41.1 | 40.2 | 39.6 | 40.2 | 40.5 | 40.9 | 39.7 | 40.6 | 40.8 | 42.0 | 40.7 | 39.2 | 40.5 | 39.8 |
| Motor vehicles and equipment | 40.2 | 41.6 | 40.6 | 38.8 | 40.0 | 40.6 | 41.1 | 39.5 | 40.8 | 41.5 | 43.7 | 40.9 | 38.2 | 40.8 | 39.2 |
| Aircraft and parts.-..-.-....- | 41.0 | 41.0 | 40.6 | 40.9 | 41.1 | 40.8 | 41.0 | 40.1 | 40.8 | 40.6 | 40.6 | 41.0 | 40.6 | 40.7 | 40.6 |
| repairing | 38.1 | 39.4 | 37.4 | 39.5 | 39.3 | 39.7 | 40.1 | 39.5 | 39.4 | 39.2 | 38.9 | 39.1 | 38.5 | 39.0 | 39.2 |
| Railroad equipment---- | 36.6 | 38.4 | 38.2 | 38.3 | 38.4 | 39.1 | 39.5 | 39.1 | 39.5 | 36.6 | 39.2 | 39.6 | 37.6 | 39.2 | 38.0 |
| Other transportation equipment |  |  | 38.9 | 37.5 | 38.2 | 38.9 | 39.2 | 38.8 | 38.4 | 39.2 | 39.4 | 40.1 | 39.1 | 40.7 | 39.4 |
|  |  |  |  |  |  |  | A verage | hourly | earning |  |  |  |  |  |  |
| Electrical machinery | \$2.33 | \$2. 31 | \$2.32 | \$2. 30 | \$2. 30 | \$2. 30 | \$2. 29 | \$2. 27 | \$2. 28 | \$2. 28 | \$2. 28 | \$2.27 | \$2. 24 | \$2. 22 | \$2.15 |
| Electrical generating, transmission, distribution, and industrial |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 2.44 | 2. 41 | 2. 42 | 2. 42 | 2. 42 | 2. 41 | 2. 40 | 2. 38 | 2. 38 | 2. 39 | 2. 38 | 2. 37 | 2. 35 | 2. 32 | 2. 26 |
| Electrical appliances | 2.31 | 2.30 | 2. 30 | 2.29 | 2.30 | 2.31 | 2. 33 | 2.31 | 2.33 | 2. 33 | 2. 31 | 2.27 | 2.25 | 2.26 | 2.20 |
| Insulated wire and cable. | 2.13 | 2.16 | 2.13 | 2.11 | 2.13 | 2.12 | 2.10 | 2.07 | 2.10 | 2.09 | 2.07 | 2.05 | 2.07 | 2.08 | 2.08 |
| Electrical equipment for vehicles.-- | 2. 52 | 2.54 | 2. 55 | 2. 47 | 2. 48 | 2. 47 | 2. 47 | 2. 44 | 2. 45 | 2. 46 | 2. 50 | 2.47 | 2.39 | 2.39 | 2.30 |
| Electric lamps.- | 2. 28 | 2.23 | 2. 23 | 2.22 | 2. 22 | 2. 23 | 2. 21 | 2. 21 | 2.22 | 2. 23 | 2. 22 | 2.22 | 2.23 | 2.16 | 2.05 |
| Communication equipment | 2.25 | 2.24 | 2.24 | 2.22 | 2.22 | 2.22 | 2.20 | 2.19 | 2.21 | 2. 20 | 2. 20 | 2.18 | 2.17 | 2.15 | 2.07 |
| Miscellaneous electrical products.-- | 2.24 | 2.22 | 2.24 | 2.24 | 2.24 | 2.25 | 2. 23 | 2. 23 | 2.24 | 2.25 | 2.25 | 2. 24 | 2. 20 | 2.18 | 2.11 |
| Transportation equipment.------------ | 2.79 | 2.81 | 2.81 | 2. 75 | 2.74 | 2.74 | 2. 73 | 2.71 | 2.73 | 2. 74 | 2. 76 | 2.72 | 2.67 | 2.66 | 2.53 |
| Motor vehicles and equipment.-.-- | 2. 83 | 2.87 | 2.87 | 2.80 | 2.78 | 2.78 | 2.77 | 2.74 | 2.79 | 2.81 | 2.84 | 2.77 | 2.68 | 2. 70 | 2.55 |
|  | 2.74 | 2.73 | 2.74 | 2.71 | 2.70 | 2.71 | 2. 69 | 2.67 | 2.68 | 2. 68 | 2. 67 | 2. 68 | 2.66 | 2. 62 | 2.51 |
| $\qquad$ | 2.77 | 2.78 | 2. 78 | 2. 74 | 2.72 | 2. 66 | 2. 63 | 2.62 | 2.63 | 2.61 | 2.62 | 2. 62 | 2.63 | 2. 60 | 2.50 |
| Railroad equipment- | 2.83 | 2.83 | 2. 80 | 2. 80 | 2.81 | 2.83 | 2.82 | 2.82 | 2.84 | 2. 79 | 2.81 | 2.77 | 2. 73 | 2. 74 | 2. 65 |
| Other transportation equipment.- | 2. 27 | 2.28 | 2.23 | 2.23 | 2. 22 | 2. 22 | 2. 21 | 2.18 | 2.19 | 2. 23 | 2. 21 | 2. 24 | 2.21 | 2.19 | 2. 10 |

See footnotes at end of table.

Table C-1. Gross hours and earnings of production workers, ${ }^{1}$ by industry-Continued


[^42]Table C-1. Gross hours and earnings of production workers, ${ }^{1}$ by industry-Continued

| Industry | 1960 |  |  |  |  |  |  |  |  |  |  | 1959 |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Nov. ${ }^{2}$ | Oct. | Sept. | Aug. | July | June | May | Apr. | Mar. | Feb. | J8n. | Dec. | Nov. | 1959 | 1958 |
|  | A verage weekly earnings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nondurable goods |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Food and kindred products | \$89. 32 | \$88.97 | \$89. 02 | \$88. 58 | \$89. 60 | \$88. 51 | \$88.91 | \$87. 16 | \$86. 94 | \$86. 33 | \$88.91 | \$88.78 | \$87. 74 | \$85. 68 | \$81. 81 |
| Meat products...-. | 102.01 | 101.11 | 102. 51 | 99.70 | 100.94 | 98.90 | 99.55 | 95.74 | 95.01 | 95. 26 | 104. 66 | 104.73 | 105. 22 | 97.23 | 91.08 |
| Dairy products | 89.82 | 89.40 | 91.76 | 90. 30 | 91. 79 | 90.73 | 89.01 | 89. 21 | 87.53 | 87.53 | 87.53 | 86.30 | 86. 30 | 86.32 | 81.90 |
| Canning and preserving | 64.79 | 72.00 | 74. 69 | 74.03 | 70.71 | 67.86 | 70.05 | 69.75 | 69.75 | 69.17 | 68.74 | 68.15 | 63. 47 | 67. 64 | 66.13 |
| Grain-mill products | 98.78 | 101. 93 | 99.46 | 98. 35 | 99. 01 | 94. 61 | 94.18 | 92.87 | 94. 61 | 92.87 | 95.70 | 93. 96 | 95.05 | 92. 66 | 89.79 |
| Bakery products | 89.69 | 89. 51 | 89.06 | 88. 48 | 89.16 | 88.54 | 87.05 | 85.79 | 85.39 | 84.56 | 83.92 | 85.22 | 85. 01 | 83.21 | 79.00 |
| Sugar-- | 101.30 | 92.64 | 98.25 | 96. 96 | 101. 92 | 99.84 | 97.61 | 95.88 | 98. 77 | 95. 04 | 94. 61 | 97.31 | 94.77 | 93.10 | 89.73 |
| Confectionery and related products. | 70.88 | 72.85 | 74. 66 | 73.12 | 72. 10 | 72.62 | 71.50 | 68.92 | 70.67 | 69.38 | 70.49 | 68.90 | 69.55 | 68.90 | 66. 30 |
|  | 100.00 | 99. 20 | 99. 29 | 100. 53 | 102. 42 | 100.37 | 99.79 | 100.19 | 95.16 | 93.03 | 93.99 | 96. 07 | 95. 26 | 96.80 | 92.23 |
| Miscellaneous food products.------- | 90.27 | 89.67 | 89.02 | 86.93 | 86.74 | 86.11 | 85.90 | 84.85 | 84.85 | 86.11 | 85.49 | 86.73 | 87.35 | 84. 65 | 80.95 |
| Tobacco manufactures | 65.63 | 65.21 | 63.27 | 64.81 | 68.43 | 71.53 | 68.58 | 64.80 | 59.86 | 61.37 | 66.05 | 67.49 | 64.56 | 65.40 | 62.56 |
| Cigarettes | 82.86 | 82. 32 | 78.58 | 79.13 | 80.88 | 85.07 | 80.26 | 77.17 | 67.47 | 72.76 | 83.23 | 83. 64 | 81.81 | 81.80 | 77.55 |
| Oigars | 58.80 | 56.79 | 55.01 | 54.72 | 53. 58 | 54.38 | 54. 43 | 49. 48 | 53.05 | 52.26 | 53.20 | 53.11 | 55. 58 | 53.02 | 51.79 |
| Tobacco and snuff | 67.90 | 70. 49 | 69.19 | 70.47 | 67.52 | 70.46 | 68. 08 | 66. 06 | 62.10 | 61.94 | 66.38 | 68.08 | 66.70 | 66.82 | 62.79 |
| Tobacco stemming and redrying.-- | 45.09 | 53.26 | 53.97 | 49.87 | 59.93 | 64.34 | 61.78 | 58.32 | 50.81 | 50.75 | 50.90 | 57.65 | 44.82 | 52.40 | 49.92 |
|  | A verage weekly hours |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Food and kindred products | 40.6 | 41.0 | 41.6 | 41.2 | 41.1 | 40.6 | 40.6 | 39.8 | 39.7 | 39.6 | 40.6 | 41.1 | 41.0 | 40.8 | 40.7 |
| Meat products...-.-- | 41.3 | 41.1 | 41.5 | 41.2 | 41.2 | 40.7 | 40.8 | 39.4 | 39.1 | 39.2 | 42.2 | 42.4 | 43.3 | 41.2 | 40.3 |
| Dairy products | 41.2 | 41.2 | 41.9 | 42.0 | 42.3 | 42.2 | 41.4 | 41.3 | 40.9 | 40.9 | 40.9 | 40.9 | 40.9 | 41.7 | 42.0 |
| Oanning and preservi | 36.4 | 40.0 | 42.2 | 40.9 | 39.5 | 37.7 | 38.7 | 37.7 | 37.5 | 37.8 | 38.4 | 38.5 | 36.9 | 39.1 | 39.6 |
| Grain-mill products | 43.9 | 45.1 | 44.8 | 44.5 | 44.8 | 43.4 | 43.4 | 42.6 | 43.2 | 42.6 | 43.5 | 43.1 | 43.6 | 43.5 | 43.8 |
| Bakery products | 40.4 | 40.5 | 40.3 | 40.4 | 40.9 | 40.8 | 40.3 | 39.9 | 39.9 | 39.7 | 39.4 | 40.2 | 40.1 | 40.2 | 40.1 |
| Sugar---.- | 50.4 | 42.3 | 40.6 | 40.4 | 41.6 | 41.6 | 40.5 | 40.8 | 41.5 | 41.5 | 43.2 | 48.9 | 48.6 | 43.3 | 44.2 |
| Confectionery and related products. | 39.6 | 40.7 | 40.8 | 40.4 | 39.4 | 39.9 | 39.5 | 38.5 | 39.7 | 39.2 | 39.6 | 39.6 | 40.2 | 39.6 | 39.7 |
|  | 40.0 | 40.0 | 40.2 | 40.7 | 41.3 | 40.8 | 40.4 | 40.4 | 39.0 | 38.6 | 39.0 | 39.7 | 39.2 | 40.5 | 40.1 |
| Miscellaneous food products.-.---- | 41.6 | 41.9 | 41.6 | 41.2 | 41.5 | 41.4 | 41.3 | 40.6 | 40.6 | 41.2 | 41.1 | 41.9 | 42.2 | 41.7 | 41.3 |
| Tobacco manufacture | 37.5 | 40.5 | 40.3 | 37.9 | 37.6 | 39.3 | 38.1 | 36.0 | 34.8 | 36.1 | 38.4 | 39.7 | 38.2 | 39.4 | 39.1 |
| Cigarettes. | 38.9 | 39.2 | 37.6 | 38.6 | 38.7 | 40.9 | 38.4 | 37.1 | 33.4 | 36.2 | 40.6 | 41.0 | 40.3 | 40.9 | 40.6 |
| Oigars.-- | 39.2 | 38.9 | 38.2 | 38.0 | 36.7 | 37.5 | 37.8 | 34.6 | 37.1 | 36.8 | 37.2 | 37.4 | 38. 6 | 37.6 | 37.8 |
|  | 36.7 | 37.9 |  |  | 37.1 | 38.5 |  | 36.1 | 34.5 | 34.8 | 37.5 | 38.9 | 37.9 | 38.4 | 37.6 |
|  | 33.4 | 43.3 | 44.6 | 36.4 | 36.1 | 38.3 | 37.9 | 36.0 | 34.1 | 35.0 | 36.1 | 40.6 | 33.7 | 39.4 | 38.7 |
|  | A verage hourly earnings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Food and kindred products. | \$2. 20 | \$2.17 | \$2.14 | \$2.15 | \$2. 18 | \$2.18 | \$2. 19 | \$2. 19 | \$2. 19 | \$2. 18 | \$2.19 | \$2.16 | \$2.14 | \$2. 10 | \$2. 01 |
| Meat products.......... | 2.47 | 2.46 | 2.47 | 2.42 | 2.45 | 2.43 | 2.44 | 2. 43 | 2.43 | 2. 43 | 2. 48 | 2.47 | 2. 43 | 2. 36 | 2. 26 |
| Dairy products. | 2.18 | 2.17 | 2.19 | 2.15 | 2.17 | 2.15 | 2.15 | 2.16 | 2.14 | 2.14 | 2. 14 | 2.11 | 2.11 | 2.07 | 1.95 |
| Canning and preserving | 1. 78 | 1.80 | 1.77 | 1.81 | 1.79 | 1.80 | 1.81 | 1.85 | 1.86 | 1.83 | 1. 79 | 1.77 | 1.72 | 1.73 | 1. 67 |
| Grain-mill products | 2.25 | 2.26 | 2.22 | 2.21 | 2.21 | 2.18 | 2.17 | 2.18 | 2.19 | 2. 18 | 2. 20 | 2.18 | 2.18 | 2.13 | 2.05 |
| Bakery products | 2.22 | 2.21 | 2.21 | 2.19 | 2.18 | 2.17 | 2.16 | 2.15 | 2.14 | 2. 13 | 2. 13 | 2.12 | 2.12 | 2.07 | 1.97 |
| Sugar ........ | 2.01 | 2.19 | 2.42 | 2. 40 | 2. 45 | 2.40 | 2.41 | 2.35 | 2.38 | 2. 29 | 2.19 | 1.99 | 1.95 | 2.15 | 2.03 |
| Oonfectionery and related products. | 1. 79 | 1. 79 | 1.83 | 1.81 | 1.83 | 1.82 | 1.81 | 1.79 | 1.78 | 1.77 | 1.78 | 1.74 | 1.73 | 1.74 | 1.67 |
|  | 2. 50 | 2. 48 | 2. 47 | 2. 47 | 2. 48 | 2. 46 | 2. 47 | 2. 48 | 2.44 | 2.41 | 2.41 | 2. 42 | 2. 43 | 2.39 | 2.30 |
| Miscellaneous food products...-.-. | 2.17 | 2.14 | 2.14 | 2.11 | 2.09 | 2.08 | 2.08 | 2.09 | 2.09 | 2.09 | 2.08 | 2.07 | 2.07 | 2.03 | 1.96 |
| Tobacco manufactures. | 1.75 | 1.61 | 1.57 | 1.71 | 1.82 | 1.82 | 1.80 | 1. 80 | 1.72 | 1.70 | 1.72 | 1.70 | 1.69 | 1.66 | 1.60 |
| Cigarettes | 2.13 | 2.10 | 2.09 | 2.05 | 2.09 | 2.08 | 2.09 | 2.08 | 2.02 | 2.01 | 2.05 | 2.04 | 2.03 | 2.00 | 1.81 |
| Cigars.-... | 1. 50 | 1. 46 | 1. 44 | 1. 44 | 1.46 | 1.45 | 1. 44 | 1. 43 | 1.43 | 1.42 | 1.43 | 1.42 | 1.44 | 1. 41 | 1.37 |
| Tobacco and snuff --.-.-.-......-- | 1.85 | 1.86 | 1.85 | 1.84 | 1.82 | 1.83 | 1.83 | 1. 83 | 1.80 | 1.78 | 1. 77 | 1.75 | 1.76 | 1. 74 | 1. 67 |
| Tobacco stemming and redrying..- | 1.35 | 1.23 | 1.21 | 1.37 | 1.66 | 1.68 | 1.63 | 1. 62 | 1.49 | 1.45 | 1.41 | 1.42 | 1.33 | 1.33 | 1. 29 |

See footnotes at end of table.

Table C-1. Gross hours and earnings of production workers, ${ }^{1}$ by industry-Continued

| Industry | 1960 |  |  |  |  |  |  |  |  |  |  | 1959 |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Nov. ${ }^{2}$ | Oct. | Sept. | Aug. | July | June | May | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | 1959 | 1958 |
| Mannfacturing-Continued | Average weekly earnings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nondurable goods-Continued |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Textile-mill products. | \$63.18 | \$63.24 | \$62. 05 | \$64. 31 | \$64. 31 | \$65. 53 | \$65. 36 | \$63.76 | \$63.83 | \$64. 16 | \$64.48 | \$64.87 | \$64. 40 | \$63. 43 | \$58. 29 |
| Scouring and combing | 66.95 | 67.82 | 67.25 | 72.45 | 75. 50 | 74. 03 | 73.15 | 70.69 | 70.18 | 69.70 | 72.25 | 71.06 | 70. 53 | 72.16 | 64.96 |
| Yarn and thread mills. | 57.38 | 56. 63 | 56.02 | 58. 29 | 58.98 | 59. 74 | 59. 89 | 59. 49 | 58.59 | 59.70 | 60. 20 | 60.35 | 59.90 | 58.95 | 52.36 |
| Broad-woven fabric mills, | 62.81 | 62.88 | 61.92 | 64.88 | 65.37 | 66. 58 | 66.01 | 64.96 | 65. 12 | 64. 27 | 64.74 | 65. 52 | 64.74 | 63. 29 | 56.26 |
| Narrow fabrics and smallwa | 64.90 57.53 | 64.51 57.99 | 64.18 57.15 | 66.80 58.29 | 65.57 57.60 | 68. 30 58.67 | 66.50 58.22 | 65.11 55.95 | 66.17 55.48 | 65.76 56.47 | 65.36 | 66.75 | 65. 27 | 65. 53 | 60. 37 54 |
| Dyeing and finishing textiles | 71.10 | 71.20 | 67.94 | 70.58 | ${ }^{50} 762$ | 75.00 | 74.05 | 71.28 | 71.05 | 56.47 71.10 | 56.32 70.58 | 56.77 73.78 | 57.96 72.83 | 57. 51 | 54.75 |
| Carpets, rugs, other floor coverings- | 79.56 | 79.97 | 79.17 | 80.75 | 79.59 | 79. 60 | 79.00 | 78.99 | 79.97 | 81.32 | 81.71 | 81.32 | 79.17 | 81. 51 | 66.83 77.30 |
| Hats (except cloth and millinery)-- | 61.15 | 59.07 | 57. 59 | 60.80 | 57.95 | 62.53 | 61. 66 | 58.64 | 59.49 | 59.57 | 62.24 | 63.00 | 57.78 | 61.71 | 58.74 |
| Miscellaneous textile goods....-...-- | 76.02 | 76.78 | 75.64 | 75. 58 | 75.41 | 76.55 | 75.58 | 73.42 | 74.37 | 76.30 | 77.27 | 76.45 | 72.68 | 73.71 | 68.95 |
| Apparel and other finished textile products Men's and boys' suits and coats | 55.97 | 56.45 | 55.93 | 57.62 | 56.42 | 55. 90 | 55. 90 | 53.70 | 55.85 | 56.11 | 55. 44 |  |  |  |  |
|  | 67.61 | 69.52 | 69.72 | 72.38 | 70.67 | 72. 58 | 69.12 | 65. 49 | 66.95 | 68.00 | 67. 08 | 68. 32 | 68. 02 | 65. 63 | 53. 45 |
| Men's and boys' furnishings and work clothing. | 46.42 | 47.75 | 48. 55 | 49.37 | 49.24 | 49.37 | 48.84 | 47.29 | 47.35 | 48. 58 | 48. 58 |  | 68.02 |  |  |
|  | 57.93 | 57.85 | 57.70 | 61.08 | 58.65 | 56. 95 | 59.00 | 56.10 | 59.69 | 59.86 | 58.14 | 58.99 | 498.48 | 48.76 59.51 | 46.08 57.63 |
| Women's, children's undergarments. | 52.99 | 53.65 | 52.05 | 52.11 | 50.26 | 51. 12 | 51.05 | 48.99 | 50.41 | 51.18 | 50.96 | 51.52 | 53.02 | 51. 29 | 49. 59 |
|  | 59.76 | 69.52 | 67.04 | 69. 48 | 67.03 | 58. 56 | 55.94 | 54. 65 | 67.13 | 71. 04 | 65.08 | 60.82 | 58.70 | 62.93 | 64.05 |
|  | 51.19 | 51.84 | 50.22 | 53.42 | 53.28 | 53.05 | 51.62 | 48.79 | 51.70 | 52.48 | 52.62 | 50.54 | 52.22 | 51.10 | 50.23 |
| Miscellaneous apparel and accessories. | 52.54 | 55.20 | 53.13 | 53.95 | 52.85 | 52.27 | 52.27 | 51.26 | 52.71 | 52.42 | 52.20 | 52. 91 | 52.91 |  |  |
| Other fabricated textile products.-- | 67.37 | 66.30 | 63.08 | 61.56 | 63.79 | 61.94 | 61.66 | 58.67 | 60.96 | 60.38 | 59.78 | 59.97 | 59.52 | 52.54 59.59 | 56.76 56.85 |
|  | Average weekly hours |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Textile-mill products. | 39.0 | 38.8 | 38.3 | 39.7 | 39.7 | 40.2 | 40.1 | 39.6 | 39.4 | 40.1 | 40.3 | 40.8 | 40.5 | 40.4 | 38.6 |
| Scouring and combing plants | 38.7 | 39.2 | 39.1 | 41.4 | 42.9 | 42.3 | 41.8 | 41.1 | 40.8 | 41.0 | 42.5 | 41.8 | 40.3 | 42.2 | 40.6 |
| Yarn and thread mills | 38.0 | 37.5 | 37.1 | 38.6 | 38.8 | 39.3 | 39.4 | 39.4 | 38.8 | 39.8 | 40.4 | 40.5 | 40.2 | 40.1 | 37.4 |
| Broad-woven fabric mills...- | 39.5 | 39.3 | 38.7 | 40.3 | 40.6 | 41.1 | 41.0 | 40.6 | 40.7 | 41.2 | 41.5 | 42.0 | 41.5 | 41.1 | 38.8 |
| Narrow fabrics and smallwar | 38.4 | 38.4 | 38.2 | 40.0 | 39.5 | 40.9 | 40.3 | 39.7 | 40.1 | 40.1 | 40.1 | 40.7 | 39.8 | 40.7 | 38.8 39.2 |
| Knitting mills ----.------- | 37.6 | 37.9 | 37.6 | 38.6 | 38.4 | 38.6 | 38.3 | 37.3 | 36. 5 | 37.4 | 37.3 | 38.1 | 38.9 | 38.6 | 37.5 |
| Dyeing and finishing textiles-.----- | 40.4 | 40.0 | 38.6 | 40.1 | 39.9 | 41.9 | 41.6 | 40.5 | 40.6 | 41.1 | 40.8 | 42.4 | 42.1 | 41.8 | 40.5 |
| Carpets, rugs, other floor coverings. Hats (except cloth and millinery) | 40.8 36.4 | 40.8 35.8 | 40.6 34.9 | 41.2 37.3 | 40.4 34.7 | 40.2 37.0 | 40.1 36.7 | 40.3 34 | 40.8 35 | 41.7 | 41.9 | 41.7 | 40.6 | 41.8 | 40.9 <br> 5.8 |
| Hats (except cloth and millinery) - --- Miscellaneous textile goods..---- | 36.4 39.8 | 35.8 40.2 | 34.9 39 | 37.3 | 34.7 | 37.0 | 36.7 | 34.7 | 35.2 | 36.1 | 36.4 | 37.5 | 34.6 | 36.3 | 35.6 |
| Miscellaneous textile goods.------- | 39.8 | 40.2 | 39.6 | 40.2 | 39.9 | 40.5 | 40.2 | 39.9 | 40.2 | 40.8 | 41.1 | 41.1 | 39.5 | 40.5 | 39.4 |
| Apparel and other finished textile products | 35.2 | 35.5 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Men's and boys' suits and coats... Men's and boys' furnishings and | 35.4 |  | 35.4 | 36.7 | 36.4 | 36.3 | 36.3 | 35.1 | 35.8 | 36.2 | 36.0 | 36.5 | 36.7 | 36.6 | 35.4 |
|  | 35.4 | 36.4 | 36.5 | 37.7 | 38.2 | 38.2 | 38.4 | 37.0 | 37.4 | 38.2 | 37.9 | 38.6 | 38.0 | 37.2 | 34.3 |
|  | 34.9 | 35.9 | 36.5 | 37.4 | 37.3 | 37.4 | 37.0 | 36.1 | 35.6 | 36.8 | 36.8 | 37.5 | 37.9 | 37.8 | 36.0 |
|  | 33.1 | 32.5 | 32.6 | 34.9 | 34.3 | 33.7 | 34.5 | 33.0 | 34.5 | 34.4 | 33.8 | 34.1 | 34.0 | 34.6 | 34.1 |
|  | 36.8 | 37.0 | 36.4 | 36.7 | 35.9 | 36.0 |  |  |  |  |  |  |  |  |  |
|  | 32.3 | 36.4 | 35.1 | 3 36.0 | 34.2 | 32.0 | 30.4 | 29.7 | 35.5 35.9 | 36.3 37.0 | 36.4 34.8 | 36.8 33.6 | 37.6 31.9 | 36.4 34.2 | 36.2 35.0 |
|  | 35.8 | 36.0 | 34.4 | 37.1 | 37.0 | 37.1 | 36.1 | 34.6 | 35. 9 | 36.7 | 36.8 36.8 | 36.6 36.1 | 31.9 37.3 | 34.2 36.5 | 36.0 36.4 |
| Miscellaneous apparel and accessories. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other fabricated textile products--- | 39.4 | 3.68 3.90 | 38.9 38.0 | 38 | 36.2 38.2 | 37.3 38 | 36.3 | 35.6 | 36. 1 | 36.4 | 36.5 | 37.0 | 37.0 | 37.0 | 36.0 |
|  |  |  |  |  |  |  |  | 36.8 | 38.1 | 37.5 | 37.6 | 38.2 | 38.4 | 38.2 | 37.4 |
|  | Average hourly earnings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Textile-mill products.---------------- | \$1.62 | \$1.63 | \$1. 62 | \$1. 62 | \$1. 62 | \$1. 63 | \$1.63 | \$1.61 | \$1. 62 | \$1.60 | \$1.60 |  |  |  |  |
| Scouring and combing plants....--- | 1.73 | 1.73 | 1.72 | 1.75 | 1.76 | 1.75 | 1.75 | 1.72 | 1.72 | 1.70 | 1.70 | 1.70 | \$1. 1.75 | \$1.57 | \$1. ${ }^{1} 60$ |
| Yarn and thread mills | 1.51 | 1.51 | 1.51 | 1.51 | 1. 52 | 1. 52 | 1.52 | 1.51 | 1.51 | 1. 50 | 1. 49 | 1.49 | 1.49 | 1.47 | 1. 1.40 |
| Broad-woven fabric mills | 1. 59 | 1. 60 | 1. 60 | 1.61 | 1. 61 | 1. 62 | 1.61 | 1. 60 | 1.60 | 1. 56 | 1.56 | 1. 56 | 1.56 | 1. 54 | 1.45 |
| Narrow fabrics and smallwares | 1.69 | 1.68 | 1. 68 | 1.67 | 1. 66 | 1. 67 | 1.65 | 1. 64 | 1. 65 | 1. 64 | 1.63 | 1.64 | 1.64 | 1.61 | 1.54 |
| Knitting mills---.-.----- | 1.53 1.76 | 1. 1.73 | 1. 1.72 | 1.51 1.76 | 1.50 <br> 1.77 <br> 1.78 | 1.62 1.52 1.79 | 1. 52 | 1.50 1.76 | 1. 52 | 1. 51 | 1.51 | 1. 49 | 1. 49 | 1. 49 | 1.46 |
| Carpets, rugs, other floor coverings- | 1.76 1.95 | 1.78 1.96 | 1.76 1.95 | 1.76 1.96 | 1.77 1.97 | 1.79 1.98 | 1.78 | 1.76 1.96 | 1.75 1.96 | 1.73 1.95 | 1.73 1.95 | 1.74 1.95 | 1.73 1.95 | 1.71 <br> 1.95 <br> 1.70 | 1.65 1.89 |
| Hats (except cloth and millinery).- | 1.68 | 1. 65 | 1.65 | 1. 63 | 1.67 | 1. 69 | 1.68 | 1. 69 | 1. 69 | 1.65 | 1.71 | 1.68 | 1.67 | 1.70 1.78 | 1.89 1.65 1.65 |
| Miscellaneous textile goods........- | 1.91 | 1.91 | 1.91 | 1.88 | 1. 89 | 1.89 | 1.88 | 1.84 | 1. 85 | 1.87 | 1.88 | 1.86 | 1. 84 | 1.82 | 1.75 1.75 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1.59 | 1.59 | 1. 58 | 1. 57 | 1.55 | 1.54 | 1. 54 | 1. 53 | 1. 56 | 1. 55 | 1. 54 | 1. 53 | 1. 53 | 1. 52 | 1.51 |
| Men's and boys' furnishings and work clothing. | 1.91 | 1.91 | 1.91 | 1.92 | 1.85 | 1.90 | 1.80 | 1.77 | 1.79 | 1.78 | 1. 77 | 1.77 | 1.79 | 1. 76 | 1.76 |
|  | 1.33 | 1.33 | 1.33 | 1.32 | 1.32 | 1.32 | 1.32 | 1.31 | 1.33 | 1.32 | 1.32 | 1.31 | 1.31 | 1.29 |  |
|  | 1.75 | 1.78 | 1.77 | 1.75 | 1.71 | 1. 69 | 1.71 | 1.70 | 1.73 | 1.74 | 1. 72 | 1.73 | 1.72 | 1.72 | 1.69 |
|  | 1.44 | 1.45 | 1.43 | 1.42 | 1.40 | 1.42 | 1.43 | 1.42 | 1.42 | 1.41 | 1.40 | 1. 40 | 1.41 |  |  |
|  | 1.85 | 1.91 | 1.91 | 1.93 | 1.96 | 1.83 | 1. 84 | 1. 84 | 1.87 | 1.92 | 1.87 | 1. 1.81 | 1.41 1.84 | 1.39 1.84 | 1.37 |
|  | 1.43 | 1.44 | 1.46 | 1.44 | 1.44 | 1. 43 | 1. 43 | 1.41 | 1. 44 | 1.43 | 1.43 | 1.40 | 1. 40 | 1.40 | 1.83 1.38 |
| Miscellaneous apparel and accessories. $\qquad$ | 1.48 | 1.50 | 1.48 | 1.47 | 1,46 | 1. 44 | 1.44 | 1.44 | 1.46 1.46 | 1.44 | 1.43 1.43 | 1.40 1.43 | 1.40 1.43 | 1.40 1.42 | 1.41 |
| Other fabricated textile products...- | 1.71 | 1.70 | 1.66 | 1. 62 | 1.67 | 1. 63 | 1.61 | 1. 59 | 1. 60 | 1. 61 | 1. 59 | 1. 57 | 1.55 | 1. 56 | 1.41 |

[^43]Table C-1. Gross hours and earnings of production workers, ${ }^{1}$ by industry-Continued

| Industry | 1960 |  |  |  |  |  |  |  |  |  |  | 1959 |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Nov. ${ }^{2}$ | Oct. | Sept. | Aug. | July | June | May | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | 1959 | 1958 |
|  | A verage weekly earnings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Manufacturing-Continued |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nondurable goods-Continued |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Paper and allied products. | \$96. 14 | \$97. 71 | \$98.14 | \$97. 75 | \$97. 33 | \$97. 13 | \$96. 05 | \$93. 63 | \$94. 30 | \$94. 73 | \$95. 20 | \$95. 22 | \$95. 22 | \$94. 16 | \$88. 83 |
| Pulp, paper, and paperboard mills. | 105.53 | 106. 76 | 107.20 | 106.82 | 106.87 | 106. 19 | 104. 64 | 102. 15 | 103. 29 | 103. 97 | 104. 24 | 104. 48 | 104, 72 | 102. 73 | 96. 10 |
| Paperboard containers and boxes..- | 88. 13 | ${ }^{91.10}$ | ${ }^{91 .} 30$ | 90.69 | 88.99 | 89.64 | 88. 34 | 86. 43 | 86.03 | 86. 67 | 87. 74 | 86. 93 | 88. 20 | 87.78 | 82.41 |
| Other paper and allied products...-. | 85.88 | 85.06 | 85.68 | 85.90 | 85.49 | 85.70 | 86.11 | 84. 26 | 84.87 | 84. 05 | 84.67 | 85. 07 | 83.64 | 83.42 | 78.96 |
| Printing, publishing, and allied industries. | 106.86 | 107. 14 | 108.08 | 106. 09 | 106. 20 | 105. 54 | 106. 37 | 103.95 | 105.05 | 104.12 | 104. 56 | 106. 86 | 103. 79 | 103. 41 | 97.90 |
|  | 113.80 | 113.49 | 113.49 | 110. 14 | 111.47 | 112. 10 | 113.31 | 110.05 | 108.72 | 108. 42 | 107. 45 | 113. 31 | 107. 76 | 108. 28 | 103.43 |
| Periodicals. | 116.44 | 117. 83 | 125.38 | 119.19 | 120.10 | 114.09 | 114.37 | 115. 30 | 116.57 | 111. 20 | 111. 35 | 108. 93 | 113. 96 | 113.15 | 102. 97 |
| Books..... | 93. 85 | 93. 77 | 93.53 | 97.17 | 92.97 | 93. 43 | 94. 25 | 91.66 | 91.43 | 89. 44 | 91. 14 | 92. 57 | 90. 29 | 90. 52 | 85.80 |
| Commercial pr | 105.72 | 106. 92 | 108.80 | 105. 72 | 105. 18 | 105. 18 | 105. 06 | 103.33 | 105.86 | 103.35 | 105. 34 | 106. 92 | 104. 28 | 102. 96 | 97.22 |
| Lithographing. | 107.36 | 107. 64 | 110.48 | 112. 16 | 109.97 | 109. 53 | 110. 55 | 106. 23 | 109. 20 | 107. 86 | 107. 73 | 109. 89 | 107. 19 | 106. 40 | 98.81 |
| Greeting cards .........-.-.-... | 73.84 | 74.40 | 73.66 | 71.55 | 73.30 | 69.74 | 73.53 | 70.48 | 73. 54 | 76.63 | 75. 08 | 70.10 | 70.25 | 70.07 | 67.03 |
| Bookbinding and related industries. | 84.10 | 83.93 | 82.56 | 82.64 | 82.60 | 82.64 | 81.20 | 79.92 | 82.01 | 81. 20 | 81.79 | 83.28 | 81.66 | 80.50 | 74.86 |
| Miscellaneous publishing and printing services. | 117.58 | 117.66 | 118.87 | 116.73 | 119.81 | 116.18 | 115.97 | 115.06 | 117.35 | 118.81 | 118. 50 | 118.78 | 117.18 | 116.19 | 110.75 |
|  | A verage weekly hours |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Paper and allied products | 41.8 | 42.3 | 42.3 | 42.5 | 42.5 | 42.6 | 42.5 | 41.8 | 42.1 | 42.1 | 42.5 | 42.7 | 42.7 | 42.8 | 41.9 |
| Pulp, paper, and paperboard mills. | 42.9 | 43.4 | 43.4 | 43.6 | 43.8 | 43.7 | 43.6 | 43.1 | 43.4 | 43.5 | 43.8 | 43.9 | 44.0 | 43.9 | 42.9 |
| Paperboard containers and boxes... | 40.8 | 41.6 | 41.5 | 41.6 | 41.2 | 41.5 | 40.9 | 40.2 | 40.2 | 40.5 | 41.0 | 41.2 | 41.8 | 41.8 | 41.0 |
| Other paper and allied products..- | 40.7 | 40.7 | 40.8 | 41.1 | 41.1 | 41.4 | 41.8 | 41.1 | 41.4 | 41.0 | 41.3 | 41.7 | 41.2 | 41.5 | 40.7 |
| Printing, publishing, and allied indus- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 38.3 35.9 | 38.4 35.8 | 38.6 35.8 | 38.3 35.3 | 38.2 35.5 | 38.1 35.7 | 38.4 36.2 | 37.8 35.5 | 38.2 35.3 | 38.0 35.2 | 38.3 35.0 | 39.0 36.2 | 38.3 35.1 | 38.3 35.5 | 37.8 35.3 |
| Perlodicals. | 41.0 | 41.2 | 42.5 | 41.1 | 41.7 | 40.6 | 40.7 | 40.6 | 40.9 | 40.0 | 40.2 | 39.9 | 40.7 | 40.7 | 39.3 |
| Books.- | 39.6 | 39.9 | 39.8 | 41.0 | 39.9 | 40.1 | 40.8 | 40.2 | 40.1 | 39.4 | 39.8 | 40.6 | 39.6 | 39.7 | 39.0 |
| Commercial printing | 39.3 | 39.6 | 40.0 | 39.3 | 39.1 | 39.1 | 39.2 | 38.7 | 39.5 | 39.0 | 39.9 | 40.5 | 39.8 | 39.6 | 39.2 |
| Lithographing | 38.9 | 39.0 | 39.6 | 40.2 | 39.7 | 39.4 | 40.2 | 39.2 | 40.0 | 39.8 | 39.9 | 40.7 | 39.7 | 39.7 | $3{ }^{3} .9$ |
|  | 39.7 | 40.0 |  |  | 39.2 | 37.9 | 38.1 | 36.9 | 38.3 | 38.7 | 38.5 | 38.1 | 38.6 | 38.5 | 38.3 |
| Bookbinding and related industries Miscellaneous publishing and | 38.4 | 38.5 | 38.4 | 38.8 | 38.6 | 38.8 | 38.3 | 37.7 | 38.5 | 38.3 | 38.4 | 39.1 | 38.7 | 38.7 | 38.0 |
| Miscellaneous publishing and printing services | 38.3 | 38.2 | 38.1 | 37.9 | 38.4 | 37.6 | 37.9 | 37.6 | 38.1 | 38.7 | 38.6 | 39.2 | 38.8 | 38.6 | 37.8 |
|  | A verage hourly earnings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Paper and allied products | \$2.30 | \$2. 31 | \$2.32 | \$2. 30 | \$2. 20 | \$2. 28 | \$2. 26 | \$2. 24 | \$2. 24 | \$2. 25 | \$2. 24 | \$2. 23 | \$2. 23 | \$2. 20 | \$2. 12 |
| Pulp, paper, and paperboard mills | 2. 46 | 2.46 | 2.47 | 2.45 | 2.44 | 2.43 | 2.40 | 2.37 | 2.38 | 2.39 | 2.38 | 2. 38 | 2.38 | 2.34 | 2. 24 |
| Paperboard containers and boxes-- | 2.16 | 2.19 | 2.20 | 2.18 | 2.16 | 2.16 | 2.16 | 2.15 | 2.14 | 2.14 | 2.14 | 2.11 | 2.11 | 2.10 | 2.01 |
| Other paper and allied products.--- | 2.11 | 2.09 | 2.10 | 2.09 | 2.08 | 2.07 | 2.06 | 2.05 | 2.05 | 2.05 | 2.05 | 2.04 | 2.03 | 2.01 | 1. 94 |
| Printing, publishing, and allied industries. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 2. 79 | 2.79 | 2.80 | 2. 77 | 2.78 | 2.77 | 2.77 | 2.75 | 2.75 | 2.74 | 2.73 | 2. 74 | 2.71 | 2. 70 | 2. 59 |
| Newspapers | 3.17 | 3.17 | 3.17 | 3.12 | 3.14 | 3.14 | 3.13 | 3.10 | 3.08 | 3.08 | 3.07 | 3.13 | 3.07 | 3.05 | 2.93 |
| Periodicals.. | 2.84 | 2.86 | 2.95 | 2.90 | 2.88 | 2. 81 | 2.81 | 2.84 | 2.85 | 2.78 | 2.77 | 2.73 | 2.80 | 2. 78 | 2. 62 |
| Books. | 2.37 | 2.35 | 2.35 | 2.37 | 2.33 | 2.33 | 2.31 | 2.28 | 2.28 | 2.27 | 2.29 | 2.28 | 2.28 | 2.28 | 2.20 |
| Commercial printing | 2. 69 | 2.70 | 2.72 | 2.69 | 2.69 | 2.69 | 2.68 | 2.67 | 2.68 | 2.65 | 2.64 | 2. 64 | 2. 62 | 2.60 | 2. 48 |
| Lithographing. | 2.76 | 2.76 | 2.79 | 2. 79 | 2.77 | 2. 78 | 2. 75 | 2.71 | 2.73 | 2.71 | 2.70 | 2. 70 | 2.70 | 2.68 | 2. 54 |
| Greeting cards .-.-...--........ | 1. 86 | 1. 86 | 1.86 | 1. 83 | 1.87 | 1.84 | 1. 93 | 1. 91 | 1.92 | 1.98 | 1.95 | 1. 84 | 1.82 | 1. 82 | 1. 75 |
| Bookbinding and related Industries. Miscellaneous publishing and | 2.19 | 2.18 | 2.15 | 2.13 | 2.14 | 2.13 | 2.12 | 2.12 | 2.13 | 2.12 | 2.13 | 2.13 | 2.11 | 2.08 | 1.97 |
| printing services. | 3.07 | 3.08 | 3.12 | 3.08 | 3.12 | 3.09 | 3.06 | 3.06 | 3.08 | 3.07 | 3.07 | 3.03 | 3.02 | 3.01 | 2.93 |

See footnotes at end of table.

Table C-1. Gross hours and earnings of production workers, ${ }^{1}$ by industry-Continued

| Industry | 1960 |  |  |  |  |  |  |  |  |  |  | 1959 |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Nov. ${ }^{2}$ | Oct | Sept. | Aug. | July | June | May | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | 1959 | 1958 |
|  | Average weekly earnings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Manufacturing-Continued |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nondurable goods-Continued |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Chemicals and allied products.------- | \$105. 16 | \$104. 24 | \$104.90 | \$104.90 | \$106. 08 | \$105. 59 | \$103. 58 | \$104. 41 | \$102. 01 | \$101. 60 | \$101. 60 | \$102. 66 | \$101. 75 | \$100.02 | \$94. 48 |
| Industrial inorganie chemicals....-. | 117.03 | 117.16 | 117.16 | 116. 05 | 117.46 | 116. 20 | 114.53 | 117. 45 | 113.02 | 112.75 | 112.61 | 114.93 | 113. 55 | 111.64 | 104. 70 |
| Industrial organic chemicals.......- | 111.24 95.18 | 110.16 94.30 | 110.97 <br> 95.18 | 110.42 94.02 | 113.13 94.60 | 112.67 | 110.77 93.73 | 112.29 92.75 | 108.62 92.97 | 108.21 93.66 | 108.21 92.62 | 109.78 92.66 | 108.58 93.11 | 106.81 90.58 | 100.04 85.88 |
| Drugs and medicines Soap, cleaning and polishing prep- | 95.18 | 94.30 | 95.18 | 94.02 | 94.60 | 94. 19 | 93.73 | 92.75 | 92.97 | 93.66 | 92.62 | 92.66 | 93.11 | 90.58 | 85.88 |
|  | 111.92 | 113.30 | 112.19 | 114.93 | 111.51 | 113.82 | 110.95 | 108. 24 | 111.72 | 109.15 | 107. 94 | 109.36 | 108.16 | 105. 47 | 100.86 |
| Paints, pigments, and fillers | 101.84 | 101.34 | 100.78 | 101. 27 | 101.11 | 103.07 | 102.41 | 101. 19 | 98. 90 | 98. 42 | 98.01 | 98.33 | 99.22 | 98. 29 | 93. 25 |
| Gum and wood chemicals. | 88.20 | 88.41 | 93.09 | 88.62 | 93.10 | 90.29 | 87. 74 | 86.29 | 84. 20 | 84.00 | 82.60 | 84.77 | 87.90 | 83.36 | 80.45 |
|  | 80.51 | 80.94 | 81.64 | 80.37 | 81.90 | 80.70 | 79. 74 | 85. 44 | 74.07 | 77. 96 | 78.75 | 78. 57 | 76. 44 | 78.12 | 74.03 |
| Vegetable and animal oils and fats. | 89. 90 | 90.94 | 90.35 | 90.50 | 92.42 | 92.17 | 89. 42 | 87.23 | 87.96 | 86.29 | 87.30 | 86.48 | 87.23 | 85. 44 | 82.21 |
| Miscellaneous chemicals...-.......- | 97.03 | 96.22 | 95.99 | 95.18 | 95.99 | 94.77 | 95.06 | 95.71 | 94.89 | 93.96 | 93.96 | 94.25 | 93.43 | 91.58 | 87.02 |
| Products of petroleum and coal. | 118.84 | 117.62 | 120.60 | 117.62 | 121.18 | 119.60 | 118.03 | 119.54 | 116.87 | 116.87 | 116.98 | 117.74 | 118.90 | 117.38 | 110.97 |
| Petroleum refining--...-.-. | 124.12 | 121.80 | 124.53 | 120.90 | 124.84 | 123.22 | 123.11 | 124.23 | 120.20 | 120.60 | 120.40 | 121.80 | 124. 01 | 121.29 | 114.90 |
| Coke, other petroleum and coal products. | 100. 74 | 104.70 | 108. 52 | 107. 43 | 109.82 | 108.36 | 102. 51 | 105. 44 | 106.49 | 105.97 | 106.90 | 105.30 | 103.17 | 105.83 | 97.28 |
| Rubber products | 100.58 | 101.49 | 98. 28 | 100.15 | 103.53 | 102.72 | 100. 04 | 94. 60 | 97.71 | 100.00 | 102.16 | 101. 59 | 97.66 | 101.60 | 92.59 |
| Tires and inner tu | 117.00 | 117.00 | 112.40 | 114. 66 | 123.71 | 121.39 | 117.51 | 107. 38 | 113.68 | 117.71 | 119.80 | 118.59 | 112.62 | 120. 01 | 106.04 |
|  | 81.77 | 82.59 | 79.18 | 81. 40 | 82.21 91.66 | 82. 82 | 81.40 | 77.01 88.43 | 78. 61 | 77.21 91.76 | 79.40 | 80.79 | 79.80 89.87 | 79. 19 | 76.62 84.59 |
| Other rubber products....-...------ | 92.00 | 93.73 | 92.10 | 92.75 | 91.66 | 92, 34 | 90.12 | 88.43 | 89.78 | 91.76 | 93.52 | 92.93 | 89.87 | 92.99 | 84.59 |
|  | A verage weekly hours |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Chemicals and allied products | 41.4 | 41.2 | 41.3 | 41.3 | 41.6 | 41.9 | 41.6 | 42.1 | 41.3 | 41.3 | 41.3 | 41.9 | 41.7 | 41.5 | 40.9 |
| Industrial inorganic chemicals. | 41.5 | 41.4 | 41.4 | 41.3 | 41.8 | 41.8 | 41.8 | 42.4 | 41.4 | 41.3 | 41.4 | 42.1 | 41.9 | 41.5 | 40.9 |
| Industrial organic che micals. | 41.2 | 40.8 | 41.1 | 41.2 | 41.9 | 42.2 | 41.8 | 41.9 | 41.3 | 41.3 | 41.3 | 41.9 | 41.6 | 41.4 | 40.5 |
| Drugs and medicines--.---..------ | 40.5 | 40.3 | 40.5 | 40.7 | 40.6 | 40.6 | 40.4 | 40.5 | 40.6 | 40.9 | 40.8 | 41.0 | 41.2 | 40.8 | 40.7 |
| Soap, cleaning and polishing preparations. | 41.3 | 41.5 | 41.4 | 42.1 | 41.3 | 42.0 | 41.4 | 41.0 | 42.0 | 41.5 | 41.2 | 41.9 | 41.6 | 41.2 | 41.0 |
| Paints, pigments, and fill | 40.9 | 40.7 | 40.8 | 41.0 | 41.1 | 41.9 | 41.8 | 41.3 | 40.7 | 40.5 | 40.5 | 40.8 | 41.0 | 41.3 | 40.8 |
| Gum and wood chemicals. | 41.8 | 41.9 | 43.5 | 42.4 | 43.3 | 43.2 | 42.8 | 42.3 | 42.1 | 42.0 | 41.3 | 42.6 | 43.3 | 42.1 | 41.9 |
| Fertilizers. | 42.6 | 42.6 | 42.3 | 42.3 | 42.0 | 42.7 | 43.1 | 48.0 | 40.7 | 42.6 | 42.8 | 42.7 | 42.0 | 43.4 | 42.3 |
| Vegetable and animal oils and fats. | 46.1 | 46.4 | 45.4 | 43.3 | 43.8 | 44.1 | 43.2 | 43.4 | 44.2 | 43.8 | 45.0 | 46.0 | 46.4 | 44.5 | 44.2 |
| Miscellaneous chemicals...-.------ | 40.6 | 40.6 | 40.5 | 40.5 | 40.5 | 40.5 | 40.8 | 40.9 | 40.9 | 40.5 | 40.5 | 40.8 | 40.8 | 40.7 | 40.1 |
| Products of petroleum and coal...----- | 40.7 | 40.7 | 41.3 | 40.7 | 41.5 | 41.1 | 40.7 | 40.8 | 40.3 | 40.3 | 40.2 | 40.6 | 41.0 | 40.9 | 40.5 |
| Petroleum refining | 41.1 | 40.6 | 41.1 | 40.3 | 41.2 | 40.8 | 40.9 | 41.0 | 40.2 | 40.2 | 40.0 | 40.6 | 41.2 | 40.7 | 40.6 |
| Coke, other petroleum and coal products | 39.2 | 40.9 | 41.9 | 41.8 | 42.4 | 420 | 40.2 | 40.4 | 40.8 | 40.6 | 40.8 | 40.5 | 40.3 | 41.5 | 40.2 |
| Rubber products | 39.6 | 39.8 | 39.0 | 39.9 | 40.6 | 40.6 | 39.7 | 38.3 | 39.4 | 40.0 | 40.7 | 40.8 | 39.7 | 41.3 | 39.4 |
| Tires and inner tubes | 39.0 | 39.0 | 38.1 | 39.0 | 41.1 | 40.6 | 39.7 | 36. 9 | 38.8 | 39.5 | 40.2 | 40.2 | 38.7 | 41.1 | 38.7 |
| Other rubber products | 39.5 | 39.9 | 39.2 | 40. 1 | 40.3 | 40.6 | 40. 1 | 38. 7 | 39.5 | 38.8 | 39.5 | 39.8 | 39.9 | 40.2 | 39.7 |
|  | 40.0 | 40.4 | 39.7 | 40.5 | 40.2 | 40.5 | 39.7 | 39.3 | 39.9 | 40.6 | 41.2 | 41.3 | 40.3 | 41.7 | 39.9 |
|  | Average hourly earnings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Chemicals and allied products. | \$2.54 | \$2. 53 | \$2. 54 | \$2. 54 | \$2. 55 | \$2. 52 | \$2. 49 | \$2. 48 | \$2. 47 | \$2. 46 | \$2. 46 | \$2. 45 | \$2. 44 | \$2. 41 | \$2. 31 |
| Industrial inorganic chemicals. | 2.82 | 2.83 | 2.83 | 2. 81 | 2.81 | 2.78 | 2.74 | 2.77 | 2.73 | 2.73 | 2.72 | 2.73 | 2.71 | 2.69 | 2.56 |
| Industrial organic chemicals. | 2.70 | 2.70 | 2.70 | 2.68 | 2.70 | 2.67 | 2.65 | 2.68 | 2.63 | 2.62 | 2.62 | 2.62 | 2.61 | 2. 58 | 2.47 |
| Drugs and medicines --.--.....-.-- | 2.35 | 2.34 | 2.35 | 2.31 | 2.33 | 2.32 | 2.32 | 2.29 | 2.29 | 2.29 | 2.27 | 2.26 | 2.26 | 2.22 | 2.11 |
| Soap, cleaning and polishing preparations |  | 2.73 |  |  | 2.70 | 2.71 | 2.68 | 2.64 | 2.66 | 2.63 | 2.62 | 2.61 | 2. 60 |  |  |
| Paints, pigments and fillers.--- | 2.49 | 2.49 | 2.47 | 2. 47 | 2.46 | 2.46 | 2.45 | 2.45 | 2.43 | 2.43 | 2.42 | 2.41 | 2. 42 | 2.38 | 2.28 |
| Gum and wood chemicals. | 2.11 | 2.11 | 2.14 | 2.09 | 2.15 | 2.09 | 2.05 | 2.04 | 2.00 | 2.00 | 2.00 | 1.99 | 2.03 | 1.98 | 1.92 |
| Fertilizers. | 1.89 | 1.90 | 1.93 | 1.90 | 1.95 | 1.89 | 1.85 | 1.78 | 1.82 | 1.83 | 1.84 | 1.84 | 1.82 | 1.80 | 1.75 |
| Vegetable and animal oils and fats. | 1.95 | 1.96 | 1.99 | 2.09 | 2.11 | 2.09 | 2. 07 | 2.01 | 1.99 | 1.97 | 1.84 | 1.88 | 1.88 | 1.92 | 1. 86 |
| Miscellaneous chemicals.........-- | 2.39 | 2.37 | 2.37 | 2.35 | 2.37 | 2.34 | 2. 33 | 2.34 | 2.32 | 2. 32 | 2.32 | 2.31 | 2. 29 | 2.25 | 2.17 |
| Products of petroleum and coal. | 2.92 | 2.89 | 2.92 | 2.89 | 2.92 | 2.91 | 2.90 | 2. 93 | 2.90 | 2. 90 | 2.91 | 2.90 | 2.90 | 2.87 | 2.74 |
| Petroleum refining .-.-.------ | 3.02 | 3.00 | 3.03 | 3.00 | 3.03 | 3.02 | 3.01 | 3.03 | 2. 99 | 3.00 | 3.01 | 3.00 | 3.01 | 2.98 | 2.83 |
| Coke, other petroleum and coal products. | 2.57 | 2. 56 | 2.59 | 2. 57 | 2. 59 | 2. 58 | 2.55 | 2.61 | 2.61 | 2. 61 | 2. 62 | 2. 60 | 2. 56 | 2. 55 | 2.42 |
| Rubber products. | 2. 54 | 2. 55 | 2.52 | 2.51 | 2.55 | 2. 53 | 2.52 | 2. 47 | 2. 48 | 2.50 | 2.51 | 2. 49 | 2.46 | 2.46 | 2.35 |
| Tires and inner tubes | 3.00 | 3.00 | 2.95 | 2. 94 | 3.01 | 2. 99 | 2.96 | 2. 91 | 2.93 | 2.98 | 2.98 | 2. 95 | 2. 91 | 2.92 | 2.74 |
| Rubber footwear- | 2. 70 | 2. 07 | 2.02 | 2.03 | 2.04 | 2.04 | 2.03 | 1. 99 | 1.99 | 1.99 | 2. 01 | 2.03 | 2. 00 | 1.97 | 1. 93 |
| Other rubber products.-----..--...- | 2.30 | 2.32 | 2.32 | 2. 29 | 2. 28 | 2.28 | 2. 27 | 2.25 | 2.25 | 2. 26 | 2.27 | 2.25 | 2. 23 | 2.23 | 2.12 |

Bee footnotes at end of table.

Table C-1. Gross hours and earnings of production workers, ${ }^{1}$ by industry-Continued


Seef ootnotes at end of table.

Table C-1. Gross hours and earnings of production workers, ${ }^{1}$ by industry-Continued

| Industry | 1960 |  |  |  |  |  |  |  |  |  |  | 1959 |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Nov. ${ }^{2}$ | Oct. | Sept. | Aug. | July | June | May | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | 1959 | 1958 |
| Wholesale and retall trade: Wholesale trade | A verage weekly earnings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | \$93. 50 | \$93.90 | \$94.13 | \$93.56 | \$94. 19 | \$93.09 | \$92.46 | \$91.83 | \$91.37 | \$90.35 | \$90.80 | \$91.94 | \$91. 71 | \$90. 27 | \$87.02 |
| Retail trade (except eating and drinkIng places) | 68.25 | 68.44 |  |  | 69.52 |  |  |  | $\begin{array}{r}\text { 66. } \\ \hline\end{array}$ | 66.95 | 800.80 66.95 | 66.09 | +1.71 66.38 | 800. 27 67.06 |  |
| General merchandise stores | 48.53 | 48.87 | 49.30 | 50.26 | 69.52 50.75 | 68.80 49.74 | 48.87 | 48.99 | 48. 33 | 66.90 48.19 | 68.95 48.19 | 50.01 | 47.46 | 48.37 | 64.77 46.85 |
| Department stores and general mail-order houses | 54.06 | 54.90 | 55. 71 | 56.32 | 56.99 | 56.00 | 55.04 | 55.14 | 53. 53 | 53.69 | 54.19 | 56.70 | 52.98 | 48.37 54.36 | 46. 52.60 |
| Food and liquor stores. | 73.54 | 72.01 | 72. 27 | 72.76 | 73.16 | 72.16 | 70.60 | 70.13 | 68.89 | 69.34 | 59.38 | 56. 70 69.26 | 52.98 | 54.36 69.89 | 52.60 67.52 |
| Automotive and accessories dealers. | 89.35 | 89.59 | 88.24 | 89.96 | 91.29 | 91.29 | 90.87 | 91.73 | 88.91 | 87.40 | 88.04 | 86. 29 | 88.71 | 88.24 | 83.22 |
| A pparel and accessories stores Other retail trade: | 52.51 | 52.82 | 52.48 | 52.65 | 52.59 | 52.82 | 51.56 | 53.48 | 50.85 | 51.64 | 51.87 | 53.35 | 51.83 | 51.90 | 50.81 |
| Furniture and appliance stores Lumber and hardware supply | 77.52 | 77.14 | 77.30 | 77.49 | 76.70 | 77.08 | 75.07 | 75.44 | 74.80 | 75. 44 | 76.67 | 79.80 | 77.46 | 75. 76 | 72.31 |
| stores.-..............- | 81.93 | 83.56 | 82. 94 | 83.69 | 83.50 | 82.88 | 82.49 | 81.64 | 79.49 | 78.28 | 78.09 | 79.99 | 80.22 | 79.95 | 77.04 |
| Finance, insurance, and real estate: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Security dealers and exchan | $\begin{array}{r} 70.12 \\ 108.52 \\ 88.23 \end{array}$ | $\begin{array}{r} 70.69 \\ 112.25 \end{array}$ | 69.75 | 69.75 | 70.31 | 69.75 | 69.75111.54 | 69.94 | 69.56 112.67 | $\begin{array}{r} 69.94 \\ 114.52 \end{array}$ | 69.93 | 68.81 | 68.26110.15 | $\begin{array}{r} 68.07 \\ 119.24 \end{array}$ | $\begin{array}{r} 66.57 \\ 106.88 \end{array}$ |
| Insurance carriers. |  | 112.25 88.40 | +87.92 | +113.14 | 117.33 88.08 | 117.16 |  | 113.61 | 112.67 |  | 115. 49 | 117. 14 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hotels and lodging places: Hotels, year-round ${ }^{6}$ | 48.95 | 49.48 | 48.83 | 49.04 | 48.80 | 48.80 | 48.28 | 47.52 | 48.00 | 47.64 | 48.12 | 48.40 | 48.24 | 47.44 | 45. 20 |
| Personal services: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Laundries | 54.29 | 48.8356.20 | $\begin{aligned} & 48.46 \\ & 54.67 \end{aligned}$ | $\begin{aligned} & 48.07 \\ & 53.02 \end{aligned}$ | $\begin{aligned} & 48.56 \\ & 54.43 \end{aligned}$ | $\begin{aligned} & 48.68 \\ & 57.06 \end{aligned}$ | 48.6855.95 | $\begin{aligned} & 48.00 \\ & 57.94 \end{aligned}$ | $\begin{aligned} & 46.68 \\ & 52.68 \end{aligned}$ | $\begin{aligned} & 46.92 \\ & 52.40 \end{aligned}$ | $\begin{aligned} & 47.04 \\ & 53.10 \end{aligned}$ | $\begin{aligned} & 47.24 \\ & 54.91 \end{aligned}$ | $\begin{aligned} & 46.37 \\ & 54.35 \end{aligned}$ | $\begin{aligned} & 46.45 \\ & 53.29 \end{aligned}$ | $\begin{aligned} & 44.30 \\ & 50.82 \end{aligned}$ |
| Cleaning and dyeing plants.- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Motion pictures: <br> Motion-picture production and distribution | 122.70 | 116.15 | 116. 45 | 118. 61 | 114.62 | 112.12 | 113.37 | ${ }_{107.96}$ | 107.23 | 112.13 | ${ }_{111.63}$ | 12.89 | 114.31 | 53.2 | 50.82 |
| Wholesale and retail trade: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wholesale trade | 40.3 | 40 | 40.4 | 40.5 | 40.6 | 40.3 | 40.2 | 40.1 | 39.9 | 39.8 | 40.0 | 40.5 | 40.4 | 40.3 | 10.1 |
| Retail trade (except eating and drink- ing places) |  | $\begin{aligned} & 37.4 \\ & 33.7 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ing places) General merchandise st | $\begin{aligned} & 37.5 \\ & 33.7 \end{aligned}$ |  | 37.6 | 38.3 34.9 | $\begin{aligned} & 38.2 \\ & 35.0 \end{aligned}$ | 37.8 | $\begin{aligned} & 37.4 \\ & 33.7 \end{aligned}$ | 37.7 | 37.4 | 37.4 | 37.4 | 38.2 | $\begin{aligned} & 37.5 \\ & 33.9 \end{aligned}$ | 38.1 | $\begin{aligned} & 38.1 \\ & 34.7 \end{aligned}$ |
| Department stores and general | 33.7 | 33.7 |  | 34.9 | $35.0$ | 34.3 | 33.7 | 34.5 | 33.8 | 33.7 | 33.7 | 36.5 |  | 34.8 |  |
| mail-order houses.- | 34.0 | 34.1 | 34.6 | 35.2 | 35.4 | 35.0 | 34.4 | 34.9 | 34.2 | 34.2 | 34.3 | 37.3 | 34.4 | 35.3 | 35.3 <br> 36.3 <br> 43.8 <br> 34.8 |
| Food and liquor stores. | 35.7 | 35.3 | 35.6 | 36.2 | 36.4 | 35.9 | 35.3 | 35.6 | 35.3 | 35.2 | 35.4 | 35.7 | 35.8 | 36.4 |  |
| Automotive and accessories dealers. | 43.8 | 43.7 | 43. 9 | 44.1 | 44.1 | 44.1 | 43.9 | 44.1 | 43.8 | 43.7 | 43.8 | 43.8 | 43.7 | 43.9 |  |
| Apparel and accessories stores.. Other retail trade: | 34.1 | 34.3 | 34.3 | 35.1 | 34.6 | 34.3 | 33.7 | 34.5 | 33.9 | 34.2 | 33.9 | 35.1 | 34.1 | 34.6 |  |
| Furniture and appliance stores. | $\begin{aligned} & 40.8 \\ & 41.8 \end{aligned}$ | 40.6 | 40.9 | 41.0 | 40.8 | 41.0 | 40.8 | 41.0 | 41.1 | 41.0 | 41.0 | 42.0 | $41.2$ | 41.4 |  |
| Lumber and hardware supply |  | 40.6 | 40.8 | 41.0 | 40.8 | 41.0 | 40.8 |  |  |  |  |  |  |  |  |  |
| stores-..--.-.-.-- |  | 42. | 42.1 | 42.7 | 42.6 | 42.5 | 42.3 | 42.3 | 41.4 | 41.2 | 41.1 | 42.1 | 42.0 | 42.3 | 42.1 |
| nance, insurance, and real esta Banks and trust companies | 37.3 | 37.4 | 37.1 | 37.3 | 37.4 | 37.3 | 37.3 | 37.4 | 37.4 | 37.4 | 37.8 | 37.6 |  | 37.4 |  |
| Security dealers and exchange |  |  |  |  |  |  |  |  |  |  |  |  | 37.3 |  | . 4 |
| Insurance carriers.. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Service and miscellaneous: <br> Hotels and lodging places: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hotels, year-round 6 | 39.8 | 39.9 | 39.7 | 40.2 | 40.0 | 40.0 | 39.9 | 39.6 | 40.0 | 39.7 | 40.1 | 40.0 | 40.2 | 40.2 | 40.0 |
| Personal services: |  |  |  |  |  |  |  |  |  |  |  |  |  | 20.2 | . |
| Cleaning and | 39.0 | 39.7 39.3 | 39.4 38.5 | 39.4 | 39.8 38.6 | 39.9 | 39.9 | 40.0 | 38.9 | 39.1 | 39.2 | 39.7 | 39.3 | 39.7 | 39.2 |
| Motion pictures: | 38.5 | 39.3 | 38.5 | 37.6 | 38.6 | 39.9 | 39.4 | 40.8 | 37.9 | 37.7 | 38.2 | 39.5 | 39.1 | 38.9 | 38.5 |
| Motion-picture production and distribution. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wholesale and retail trade: |  |  |  |  |  |  | Avers | Ou | arni |  |  |  |  |  |  |
|  | \$2.32 | \$2.33 | \$2. 33 | \$2. 31 | \$2. 32 | \$2.31 | \$2.30 | \$2. 29 | \$2. 29 | \$2. 27 | \$2. 27 | \$2. 27 | \$2. 27 | \$2. 24 | \$2.17 |
| Retail trade (except eating and drinking places) | 1.82 | 1.83 | 1.82 | 1.81 | 1.82 | 1.82 | 1.81 | 1.79 | 1.79 | 1.79 | 1.79 | +1.27 1.73 | $\$ 2.27$ 1.77 | $\$ 2.24$ 1.76 | 1.70 |
| General merchandise stores. | 1.44 | 1.45 | 1.45 | 1.44 | 1.45 | 1.45 | 1.45 | 1.42 | 1.43 | 1.43 | 1. 43 | 1.37 | 1.40 | 1.76 1.39 | 1.35 |
| Department stores and general mail-order houses |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| mail-order houses. | 1. 59 | 1.61 | 1.61 | 1. 60 | 1.61 | 1. 60 | 1.60 | 1. 58 | 1.57 | 1.57 | 1. 58 | 1. 52 | 1. 54 | 1. 54 | 1.49 |
| Food and liquor stores...--.-.....-- | 2.06 | 2.04 | 2. 03 | 2.01 | 2.01 | 2.01 | 2.00 | 1. 97 | 1.98 | 1.97 | 1.96 | 1.94 | 1.95 | 1.92 | 1.86 |
| Automotive and accessories dealers- | 2.04 | 2.05 | 2. 01 | 2.04 | 2.07 | 2.07 | 2.07 | 2.08 | 2.03 | 2.00 | 2.01 | 1.97 | 2.03 | 2.01 | 1.90 |
| A pparel and accessories stores Other retail trade: | 1. 54 | 1.54 | 1. 53 | 1.50 | 1.52 | 1.54 | 1.53 | 1. 55 | 1. 50 | 1.51 | 1.53 | 1. 52 | 1. 52 | 1.50 | 1.46 |
| Furniture and appliance stores- | 1.90 | 1.90 | 1.89 | 1.89 | 1.88 | 1.88 | 1.84 | 1.84 | 1.82 | 1.84 | 1.87 | 1.90 | 1.88 | 1.83 | 1.73 |
| Lumber and hardware supply <br> stores. $\qquad$ | 1.96 | 1.98 | 1.97 | 1.96 | 1.96 | 1.95 | 1.95 | 1.93 | 1.92 | 1.90 | 1.90 | 1. 90 | 1.91 | 1.89 | 1.83 |
| Finance, insurance, and real estate: |  |  |  |  |  |  |  | 1.83 | 1.52 | 1.00 | 1.00 | 1.80 | 1.91 | 1.85 | 83 |
| Banks and trust companies ${ }^{5}$ | 1.88 | 1.89 | 1.88 | 1.87 | 1.88 | 1.87 | 1.87 | 1.87 | 1.86 | 1.87 | 1.85 | 1.83 | 1.83 | 1.82 | 1.78 |
| Security dealers and exchanges |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Service and miscellaneous: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hotels and lodging places: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hotels, year-round 6 | 1.23 | 1.24 | 1.23 | 1. 22 | 1.22 | 1.22 | 1. 21 | 1. 20 | 1. 20 | 1.20 | 1. 20 | 1.21 | 1.20 | 1.18 | 1.13 |
| Personal services: |  |  |  |  |  |  |  | 1.20 | 1.20 | 1.20 | 1.20 | 1.21 | 1.20 | 1.18 | 1.1 |
| Laundries .-..-.-.-.-.-.-. | 1.23 | 1.23 | 1. 23 | 1.22 | 1.22 | 1.22 | 1. 22 | 1. 20 | 1. 20 | 1.20 | 1. 20 | 1. 19 | 1.18 | 1.17 | 1.13 |
| Cleaning and dyeing plants......... | 1. 41 | 1.43 | 1. 42 | 1.41 | 1.41 | 1.43 | 1.42 | 1. 42 | 1.39 | 1.39 | 1.39 | 1. 39 | 1.39 | 1.37 | 1.32 |
| Motion pictures: <br> Motion-picture production and distribution |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

${ }_{1}$ For comparability of data with those published in issues prior to August 1958 and coverage of these series, see footnote 1, table A-2.
In addition, hours and earnings data for anthracite mining have been revised from January 1953 and are not comparable with those published in Issues prior to August 1958.
For mining, manufacturing, laundries, and cleaning and dyeing plants, data refer to production and related workers; for contract construction, to construction workers; and for the remaining industries, unless otherwise noted, to nonsupervisory workers and working supervisors,

Preliminary
${ }^{3}$ Figures for Class I railroads (excluding switching and terminal companies) are based upon monthly data summarized in the $\mathbf{M}-300$ report by the Inter-
state Commerce Commission and relate to all employees who received pay during the month, except executives, officials, and staff assistants (ICO Group I).
Data relate to domestic nonsupervisory employees except messengers. A verage weekly earnings have been revised beginning with January 1958 and are not strictly comparable with data for earlier years. A verage weekly hours and average hourly earnings are new series, available from January 1958 ${ }^{6}$ 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 I railroads. (See footnote 3.)

TABLE C-2. Average overtime hours and average hourly earnings excluding overtime of production workers in manufacturing, by major industry group ${ }^{1}$

| Major industry group | 1960 |  |  |  |  |  |  |  |  |  |  | 1959 |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Nov. ${ }^{2}$ | Oct. | Sept. | Aug. | July | June | May | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | 1959 | 1958 |
|  | A verage overtime hours ${ }^{\text {s }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 2.2 | 2.5 | 2.5 | 2.4 | 2.4 | 2.5 | 2.4 | 2.1 | 2.5 | 2.6 | 2.8 | 2.7 | 2.6 | 2.7 | 2.0 |
| Durable goods. | 2.0 | 2.4 | 2. 5 | 2.3 | 2.3 | 2.4 | 2.4 | 2.1 | 2.5 | 2.7 | 2.9 | 2.7 | 2.5 | 2.7 | 1.9 2.0 |
| Ordnance and accessories. | 2.0 2.5 | 2.1 3.1 | 2.2 3.1 | 2.1 3.2 | 1.9 3.1 | 1.9 | 1.9 3.2 | 1.6 2.9 | 2.0 2.8 | 2.3 2.8 | 2.1 2.9 | 2.2 3.0 | 2.1 3.2 | 2.1 3.4 | 1.0 2.9 2.9 |
| Furniture and fixtures...- | 2.3 | 2.7 | 2.8 | 2.8 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.6 | 2.7 | 3.5 | 3.2 | 2. 9 | 2.1 |
| Stone, clay, and glass products | 2.9 | 3.1 | 3.1 | 3.2 | 3.1 | 3.1 | 3.1 | 2.8 | 2.7 | 2.8 | 2.9 | 3.0 | 3. 2 | 3.4 | 2.8 |
| Primary metal industries...-- | 1.2 | 1.3 | 1.6 | 1.4 | 1.7 | 1. 6 | 1.5 | 2.0 | 2.1 | 2.4 | 2.8 | 2.6 | 2.3 | 2.6 | 1.3 |
| Fabricated metal products | 2.0 | 2.6 | 2. 9 | 2.8 | 2.5 | 2.7 | 2.6 | 2.1 | 2.5 | 2.7 | 3.2 | 3.0 | 2.3 | 2. 9 | 2.1 |
| Machinery (except electrical) | 1.9 | 2.1 | 2.3 | 2.3 | 2.5 | 2.7 | 2.7 | 2.4 | 2. 8 | 2.9 | 2.8 | 2.9 2.4 | 2.5 2.2 | 2.7 | 1.7 1.5 |
| Electrical machinery...-....- | 1.8 | 2.1 | 2.1 | 1.9 | 1.6 | 1.8 | 1.7 | 1.2 | 1.9 | 2. 0 | 2.4 <br> 3.8 | 2.4 2.5 | 2.2 1.9 | 2.2 2.5 | 1.5 1.9 |
| Transportation equipment | 2.3 | 3.1 | 2.9 | 2.3 | 2.2 | 2.4 | 2.6 | 1.9 | 2.8 | 3. 2 | 3.8 | 2.5 | 1.9 | 2.5 | 1.9 |
| Instruments and related products.- | 2.0 | 2.2 | 2.2 | 2.2 | 2.2 | 2.0 | 2.0 | 1.7 | 2.3 | 2. 3 | 2.2 | 2.7 | 2.6 2.7 | 2.3 2.6 | 1.5 |
| Miscellaneous manufacturing.----- | 2.5 | 2.7 | 2.5 | 2.3 | 2.1 | 2.1 | 2.2 | 1.9 | 2.4 | 2.5 | 2.4 | 2.7 | 2.7 | 2.6 |  |
| Nondurable goods | 2.3 | 2.5 | 2.6 | 2. 5 | 2.6 | 2.5 | 2.5 | 2.2 | 2.4 | 2.5 |  | 2.7 | 2.7 |  | 2. 2 |
| Food and kindred products | 3.3 | 3.4 | 3.7 | 3.3 | 3.5 | 3.2 | 3.1 | 2.8 | 2.9 | 2.8 | 3. 3 | 3.4 | 3.6 | 3.3 |  |
| Tobacco manufactures. | 1.2 | 1.4 2.3 | 1.4 2.2 | 2. ${ }^{.9}$ | 1.2 | 1.2 2.9 | 1.0 2.9 |  | 3. ${ }^{5}$ | 3.6 |  |  | 1.0 3.2 |  | 1.3 |
| Textile-mill products.-.-------1--- | 2.2 | 2.3 | 2.2 | 2.6 | 2.6 | 2.9 | 2.9 | 2.5 | 3.0 | 3.0 | 3.0 | 3.2 | 3.2 | 3.1 | 2.1 |
| Apparel and other finished textile products. | 1.2 | 1.3 | 1.3 | 1.4 | 1.3 | 1.3 | 1.3 | 1.0 | 1.4 | 1.4 | 1.3 | 1.4 | 1.6 | 1.4 | 1.1 |
|  | 3.8 | 4.1 | 4.4 | 4.3 | 4.3 | 4.3 | 4.3 | 3.7 | 4.1 | 4.2 | 4.3 | 4.3 | 4.5 | 4.6 | 3. 9 |
| Printing and publishing- | 3.1 | 3.3 | 3.4 | 3.1 | 3.0 | 2.9 | 3.0 | 2.6 | 3. 0 | 2.8 | 2.9 | 3.6 | 3.1 | 3. 0 | 2.5 |
| Chemicals and allied products | 2.1 | 2.4 | 2.4 | 2.3 | 2.5 | 2.4 | 2.5 | 2.9 | 2.3 | 2.4 | 2.3 | 2.4 | 2.4 | 2. 5 | 2.0 |
| Products of petroleum and coal | 1.7 | 1.7 | 2.2 | 1.8 | 2.3 | 2. 1 | 1.6 | 1.7 | 1.4 | 1.5 | 1. 6 | 1.5 | 1.8 | 1.8 3.7 | 1.5 2.3 |
| Rubber products..-.- | 1.9 | 2.3 | 2. 3 | 2.3 | 3. 0 | 2.7 | 2.2 | 1.7 | 2.3 1.4 | 2.8 1.4 | 3.1 1.4 | 2.8 1.4 | 2.5 1.4 |  |  |
| Leather and leather products | 1.2 | 1.3 | 1.2 | 1.6 | 1.4 | 1.3 | 1.0 | . 8 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.1 |
|  | Average hourly earnings excluding overtime * |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Manufacturing | \$2. 24 | \$2. 23 | \$2. 23 | \$2. 21 | \$2. 22 | \$2. 22 | \$2. 22 | \$2. 22 | \$2. 22 | \$2. 21 | \$2. 21 | \$2. 20 | \$2. 16 | \$2.15 | \$2. 08 |
| Durable goods. | 2.39 | 2.39 | 2.39 | 2. 37 | 2. 38 | 2. 38 | 2.37 | 2. 38 | 2.38 | 2.37 | 2. 37 | 2.35 | 2. 31 | 2.30 2.49 | 2. 23 |
| Ordnance and accessories. | 2.62 <br> 1.94 | 2.61 <br> 1.98 | 2.60 2.03 | 2.57 1.99 | 2.57 1.99 | 2.57 1.99 | 2.55 1.95 | 2. 26 1.94 1.94 | 2.56 1.93 | 2.55 1.91 | 2.55 1.89 | 2.54 1.92 | 2.53 1.94 | 2.49 1.89 | 2.42 1.82 |
| Lumber and wood product | 1.81 | 1.98 | 1.81 | 1.80 | 1.81 1.81 | 1.81 | 1.80 | 1.80 | 1.81 | 1.79 | 1.79 | 1.78 | 1.76 | 1.76 | 1.73 |
| Stone, clay, and glass prod | 2.22 | 2.22 | 2.21 | 2.20 | 2.19 | 2.19 | 2. 19 | 2.19 | 2. 20 | 2.18 | 2.18 | 2.17 | 2. 16 | 2.13 | 2.04 |
| Primary metal industries | 2.75 | 2.75 | 2.75 | 2.75 | 2.75 | 2.76 | 2.77 | 2. 78 | 2.77 | 2.77 | 2. 78 | 2. 77 | 2. 70 | 2. 70 | 2. 61 |
| Fabricated metal products | 2. 40 | 2.39 | 2. 39 | 2.37 | 2.38 | 2.38 | 2.37 | 2. 36 | 2.35 | 2.35 | 2. 35 | 2. 33 | 2. 29 | 2.29 | 2. 21 |
| Machinery (except electrical) | 2. 53 | 2.51 | 2. 50 | 2. 49 | 2. 49 | 2. 49 | 2. 49 | ${ }_{2}^{2} 47$ | 2. 47 | 2. 47 | 2.46 | 2. 46 | 2. 45 | 2. 42 | 2. 33 |
| Electrical machinery | 2.28 | 2.25 | 2. 26 | 2.25 | 2. 26 | 2. 25 | 2. 24 | 2. 24 2.64 | 2. 23 2.64 | 2. 23 <br> 2.64 | 2. 22 2.64 | 2. 20 2. 64 | 2.18 2.60 | 2.16 2.58 | 2.11 |
| Transportation equipment.-.-.-..-- | 2.71 | ${ }_{2}^{2.71}$ | 2. ${ }_{\text {2. }} \mathbf{3 1}$ | 2.68 2.31 | 2.67 2.31 | 2. 66 2.30 | 2. 64 2. 29 1. | 2. 24.28 | 2.64 2.28 | 2.64 2.27 | 2.64 2.26 | 2. 24 2.25 | 2.60 <br> 2.24 | 2.58 2.22 | 2.47 2.15 |
| Instruments and related productsMiscellaneous manufacturing. | 2.33 1.91 | 2.31 1.89 | 2.30 1.89 | 2.31 1.88 | 2.31 1.89 | 2.30 1.89 | 2.29 1.89 | 2.88 1.89 | 1.88 | 2.89 1.89 | 1.89 | 1.88 1.8 | 1.84 | 2.84 1.84 | 1.80 |
| Nondurable goods. <br> Food and kindred products <br> Tobacco manufactures $\qquad$ <br> Textile-mill products. $\qquad$ <br> Apparel and other finished textile products <br> Paper and allied products <br> Printing and publishing <br> Chemicals and allied products $\qquad$ <br> Products of petroleum and coal. <br> Rubber products <br> Leather and leather products. |  | 2.03 | 2.02 | 2.01 | 2.02 | 2.01 | 2.01 | 2.01 | 2.00 | 1.99 | 1. 98 | 1. 97 | 1. 96 | 1. 94 | 1.89 |
|  | 2.12 | 2.09 | 2.05 | 2.07 | 2.09 | 2. 10 | 2.11 | 2.12 | 2.11 | 2. 10 | 2. 10 | 2.08 | 2.05 | 2.02 | 1.94 |
|  | 1.72 | 1.58 | 1.55 | 1. 69 | 1.79 | 1.79 | 1. 78 | 1.78 | 1.71 | 1. 69 | 1. 69 | 1. 68 | 1. 67 | 1.64 | 1. 57 |
|  | 1.58 | 1.58 | 1.57 | 1. 57 | 1. 57 | 1.58 | 1. 57 | 1.56 | 1.56 | 1. 54 | 1.54 | 1.53 | 1.53 | 1.52 | 1.47 |
|  | 1.56 | 1.56 | 1.55 | 1.54 | 1. 52 | 1.52 | 1.51 | 1. 50 | 1.53 | 1.52 | 1.51 | 1. 50 | 1.50 | 1.49 | 1.49 |
|  | 2.20 | 2.20 | 2.20 | 2.19 | 2.18 | 2.17 | 2. 15 | 2. 14 | 2.14 | 2.14 | 2.14 | 2.12 | 2.12 | 2.09 | 2. 02 |
|  | (5) | ${ }^{(5)}$ | ${ }^{(5)}$ | (5) | ${ }^{(5)}$ | (3) | ${ }^{(5)}$ | (8) | ${ }^{(5)}$ | (b) | ${ }^{(5)}$ | ${ }^{(3)}$ | ${ }^{\text {(5) }}$ | (8) |  |
|  | 2.48 | 2.46 | 2.47 | 2.47 | 2. 47 | 2.45 | 2.42 | 2. 40 | 2. 40 | 2. 40 | 2.39 | 2. 39 | 2. 37 | 2. 34 | 2.26 |
|  | 2.86 | 2.84 | 2.85 | 2. 83 | 2.85 | 2.84 | 2.84 2.45 2.4 | 2. 2. 42 1. | 2.85 2.41 2. | 2. 2.41 | 2.86 2.42 | 2. 8141 | 2. 84 2. 39 | 2. 21 2.36 | 2.69 2.28 |
|  | 2.48 | 2. 47 | 2.45 1 | 2.44 1.61 | 2.46 1.61 | 2.45 1.62 | 2.45 | 2. 1.62 | 2.41 1.61 | 1.60 | 2.82 1.60 | 1. 59 | 1. 59 | 1.58 | 1. 55 |
|  | 1.63 | 1.63 | 1.62 | 1.61 | 1.61 | 1.62 | 1.63 | 1.62 | 1.61 |  |  |  |  |  |  |

1 For comparability of data with those published in issues prior to August 1958, see footnote 1, table A-2.
${ }_{2}$ Preliminary.
${ }^{8}$ Covers premium overtime hours of production and related workers during the pay period ending nearest the 15th of the month. Overtime hours are those for which premiums were paid because the hours were in excess of the number of hours of either the straight-time workday or workweek. Weekend and holiday hours are included only if premium wage rates were paid. Hours
for which only shift differential, hazard, incentive, or other similar types of premlums were paid are excluded. These data are not avallable prior to 1956. 4 Derived by assuming that overtime hours are paid at the rate of time and one-half.
Sot avallable as 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-3. Indexes of aggregate weekly man-hours and payrolls in industrial and construction activities ${ }^{1}$
$[1947-49=100]$

| Activity | 1960 |  |  |  |  |  |  |  |  |  |  |  | 1959 | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dec. ${ }^{2}$ | Nov. ${ }^{2}$ | Oct. | Sept. | Aug. | July | June | May | Apr. | Mar. | Feb. | Jan. | Dec. | 1959 | 1958 |
|  | Man-hours |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 91.8 | 96.9 | 101.0 | 102.1 | 1024 | 101.3 | 102.3 | 100.8 | 98.4 | 97.4 | 98.4 | 99.5 | 102.4 | 100.7 | 94.3 |
| Mining | 59.0 | 59.9 | 62.6 | 62.9 | 64.9 | 63.8 | 66.8 | 66.2 | 66.5 | 64.9 | 63.8 | 64.0 | 67.3 | 65.4 | 67.9 |
| Contract constructio | 102. 0 | 121.8 | 138.3 | 139.3 | 144.9 | 142.9 | 135.5 | 126.3 | 114.3 | 94.9 | 98.5 | 101.6 | 118.9 | 123.4 | 118.2 |
| Manufacturing. | 92.5 | 95.8 | 98.2 | 99.4 | 98.8 | 97.8 | 99.9 | 99.4 | 98.3 | 99.9 | 100.8 | 101.6 | 102.4 | 99.8 | 92.6 |
| Durable goods. | 97.3 | 100.2 | 102.6 | 103.4 | 101. 7 | 102.4 | 106.1 | 106.5 | 105.8 | 108.1 | 109.3 | 110.3 | 109.8 | 105.6 | 95.9 |
| Ordnance and accessories | 327.8 | 325.1 | 315.7 | 322.2 | 311.7 | 313.0 | 319.7 | 326.3 | 325.9 | 336.4 | 332.3 | 332.1 | 334.7 | 325.3 | 303.0 |
| Lumber and wood products | 64.7 | 69.1 | 75.3 | 78.1 | 78,6 | 78.0 | 81.8 | 77.7 | 74.2 | 70.6 | 72.4 | 72.2 | 76.9 | 78.4 | 72.7 |
| Furniture and fixtures. | 102.4 | 104.7 | 109.4 | 110.0 | 110.6 | 106.2 | 108.7 | 107.5 | 108.0 | 105.7 | 109.2 | 109.3 | 113.5 | 108.7 | 197.2 |
| Stone, clay, and glass products | 93.2 | 99.2 | 102.2 | 103.0 | 104.9 | 103.8 | 105.9 | 104.6 | 102.4 | 100.1 | 101.3 | 101.2 | 105.0 | 104.6 | 894.7 |
| Primary metal industries. | 77.9 | 80.3 | 83.2 | 84.7 | 85. 4 | 88.0 | 92.9 | 95.2 | 99.0 | 103.1 | 104.3 | 106.1 | 105.2 | 91.1 | 83.7 |
| Fabricated metal products | 100.3 | 103.5 | 107.5 | 108. 2 | 106.8 | 105.3 | 109.2 | 108.5 | 106.2 | 109.8 | 111.3 | 112.3 | 110.6 | 108.7 | 101.1 |
| Machinery (except electrical) | 93.5 | 94.0 | 94.9 | 96.1 | 97.1 | 99.7 | 102.7 | 103.3 | 103.5 | 105.4 | 105.3 | 105.1 | 104.8 | 101.0 | 88.9 |
| Electrical machinery. | 132.1 | 134.7 | 131.9 | 137. 1 | 134.1 | 130.1 | 134.2 | 133.1 | 131.7 | 137.3 | 138.4 | 141.5 | 142.7 | 132.6 | 115.9 |
| Transportation equipment.--.-.--- | 112.7 | 115.5 | 117.8 | 113.9 | 102.4 | 110.9 | 114.1 | 119.8 | 117.7 | 123.8 | 127.0 | 130.1 | 119.2 | 120.4 | 111.6 |
| Instruments and related products.- | 113.1 | 116.0 | 116.4 | 116.3 | 118.1 | 116.3 | 119.4 | 118.8 | 118.7 | 121.0 | 119.8 | 120.6 | 123.5 | 117.1 | 105.4 |
| Miscellaneous manufacturing.....-- | 98.4 | 104.9 | 108.7 | 107.0 | 106.4 | 99.3 | 104.8 | 102.9 | 100.5 | 102.4 | 100.3 | 98.5 | 103.5 | 101.1 | 92.7 |
| Nondurable goods. | 86.9 | 90.5 | 93.0 | 94.6 | 95.3 | 92.3 | 92.5 | 90.9 | 89.4 | 90.1 | 90.5 | 91.2 | 93.6 | 93.0 | 88.7 |
| Food and kindred prod | 78.5 | 83.9 | 91.2 | 97.4 | 94.1 | 87.5 | 82.4 | 78.5 | 76.4 | 74.1 | 74.4 | 77.5 | 81.4 | 83.7 | 84.2 |
| Tobacco manufactures | 76.1 | 75. 9 | 94.8 | 97.2 | 76.4 | 64.2 | 66.3 | 64.5 | 61.8 | 61.6 | 68.4 | 74.6 | 79.6 | 77.1 | 77.7 |
| Textile-mill products | 66.1 | 68.2 | 68.7 | 68.5 | 71.8 | 70.9 | 73.4 | 72.9 | 71.8 | 71.7 | 72.5 | 72.9 | 74.6 | 74.4 | 69.2 |
| Apparel and other finished textile products. | 94.6 | 101.0 | 101.9 | 103.1 | 108.0 | 102.5 | 104. 7 | 104.2 | 100.9 | 106.4 | 107.1 | 104.6 | 107.0 | 105.1 | 96.8 |
| Paper and allied products..--------- | 105.6 | 109.3 | 111.5 | 112.3 | 112.6 | 110.9 | 113.0 | 112.0 | 110.2 | 110.3 | 110.2 | 111.6 | 112.9 | 112.7 | 108.0 |
| Printing and publishing. | 117.2 | 118.4 | 118.6 | 118.0 | 115. 8 | 114.7 | 115.1 | 115.0 | 113.4 | 114.7 | 113.4 | 113.7 | 117.5 | 112.8 | 109.0 |
| Ohemicals and allied products | 102.9 | 105.0 | 105.1 | 105.1 | 105.1 | 105.6 | 107.1 | 107.8 | 109.8 | 105.7 | 105.2 | 104.9 | 106.5 | 104.3 | 99.2 |
| Products of petroleum and coal...- | 78.0 | 79.5 | 80.7 | 82.3 | 82.7 | 84.2 | 84.7 | 83.6 | 83.6 | 82.4 | 82.7 | 82.1 | 83.1 | 84.1 | 84.2 |
|  | 93.8 | 96.5 | 99.0 | 97.1 | 98.3 | 97.7 | 100.8 | 98.7 | 96.6 | 102.9 | 104.9 | 106.3 | 106.5 | 103.5 | 92.0 |
| Leather and leather products......- | 82.8 | 86.1 | 84.2 | 85.0 | 93.0 | 91.2 | 90.1 | 84.2 | 82.6 | 89.7 | 90.2 | 91.9 | 92.1 | 92.2 | 86.0 |
|  | Payrolls |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mining |  | 96.4 | 101.6 | 101.6 | 104.5 | 103.3 | 108.4 | 107.8 | 108.7 | 106.5 | 104.4 | 105.4 | 110.5 | 105.0 | 104.9 |
| Contract construction |  | 227.8 | 258.4 | 259.4 | 267.9 | 262.8 | 246.9 | 230.5 | 207.9 | 176.1 | 180.2 | 185. 4 | 214.8 | 216.9 | 200.5 |
| Manufacturing | 161.9 | 165.9 | 170.5 | 172.5 | 169.2 | 169.0 | 172.5 | 171.5 | 168.8 | 172.6 | 173.9 | 175.5 | 175.4 | 167.2 | 148.7 |
| ${ }^{1}$ For comparability of data with those published in issues prior to August 1958, see footnote 1, table A-2. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

TABLE C-4. Gross and spendable average weekly earnings of production workers in manufacturing, in current and 1947-49 dollars ${ }^{1}$

| Item | 1960 |  |  |  |  |  |  |  |  |  |  | 1959 |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Nov. ${ }^{2}$ | Oct. | Sept. | Aug.' | July | June | May | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | 1959 | 1958 |
| Manufacturing | $\begin{array}{r} \$ 90.16 \\ 70.77 \end{array}$ | $\begin{array}{\|} \$ 91.31 \\ 71.73 \end{array}$ | $\begin{array}{\|r\|} \$ 91.08 \\ 71.83 \end{array}$ | $\begin{array}{r} \$ 90.35 \\ 71.37 \end{array}$ | $\begin{array}{r} \$ 91.14 \\ 71.99 \end{array}$ | $\begin{gathered} \$ 91.60 \\ 72.41 \end{gathered}$ | $\begin{array}{r} \$ 91.37 \\ 72.34 \end{array}$ | $\begin{array}{r} \$ 89.60 \\ 71.00 \end{array}$ | $\begin{array}{r} \$ 90.91 \\ 72.32 \end{array}$ | $\begin{array}{r} \$ 91.14 \\ 72.56 \end{array}$ | $\begin{array}{r} \$ 92.29 \\ 73.60 \end{array}$ | $\begin{array}{r} \$ 92.16 \\ 73.43 \end{array}$ | $\begin{array}{r} \$ 88.98 \\ 70.84 \end{array}$ | $\begin{array}{r} \$ 89.47 \\ 71.81 \end{array}$ | $\begin{array}{r} \$ 83.50 \\ 67.61 \end{array}$ |
| Gross average weekly earnings: Current dollars |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1947-49 dollars. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Spendable average weekly earnings: Worker with no dependents: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1947-49 dollars.. | 72. 23 | 73. 87 | 78.06 | 73.06 57.71 | 73. 67 58.19 | 74.03 | 73.85 | 72.48 | 73.49 | 73.67 | 74.56 | 74.92 | 72.45 | 72.83 | 68.46 |
| Worker with 3 dependents: |  |  |  |  |  | 58.52 | 58.47 | 57.43 | 58. 46 | 58.65 | 59, 46 | 59.70 | 57.68 | 58.45 | 55.43 |
| Current dollars. | 80.46 | 81.36 | 81.18 | 80.61 | 81. 23 | 81.59 | 81.41 | 80.01 | 81.05 | 81.23 | 82.14 | 82.50 | 79.97 |  |  |
| 1947-49 dollars. | 63.16 | 63.91 | 64.02 | 63.67 | 64.16 | 64. 50 | 64.46 | 63.40 | 64.48 | 64.67 | 65.50 | 65.74 | 63. 67 | 64.49 | 61.44 |

[^44][^45]
## D.-Consumer and Wholesale Prices

Table D-1. Consumer Price Index ${ }^{1}$-All-city average: All items, groups, subgroups, and special groups of items
$[1947-49=100]$

| Group | 1960 |  |  |  |  |  |  |  |  |  |  |  | 1959 | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | May | Apr. | Mar. | Feb. | Jan. | Dec. | 1960 | 1959 |
| All items. | 127.5 | 127.4 | 127.3 | 126.8 | 126.6 | 126.6 | 126.5 | 126.3 | 126.2 | 125.7 | 125.6 | 125.4 | 125.5 | 126.5 | 124.6 |
| Food ${ }^{2}$ | 121. 4 | 121.1 | 120.9 | 120.2 | 120.1 | 120.6 | 120.3 | 119.7 | 119.5 | 117.7 | 117.4 | 117.6 | 117.8 | 119.7 | 118.3 115.9 |
| Food at home | 118.7 | 118.4 | 118.2 | 117.4 | 117.4 137.7 | 117.9 137.5 | 117.7 136.1 | 117.0 | 116.7 | 114.7 135.5 | 114.4 135.2 | 114.7 134.8 | 115.0 134.5 | 116.9 136.8 | 115.9 134.2 |
| Cereals and bakery | 139.0 | 138.6 109.9 | 138.5 110.0 | 137.8 110.2 | 137.7 111.3 | 137.5 110.8 | 136.1 110.3 | 135.6 109.7 | 135.8 109.3 | 135 | 135.2 106.2 | 134.8 106.4 | 134.5 106.6 | 109.3 | 110.7 |
| Meats, poultry, and | 110.5 | 109.9 118.9 | 110.0 118.4 | 110.2 117.5 | 111.3 116.6 | 115.8 | 115.0 | 115.0 | 115.3 | 116.4 | 116. 5 | 116. 5 | 116.7 | 116.8 | 114.3 |
| Dairy products---- | 119.3 126.3 | 118.9 | 184.8 | 124.6 | 1127.3 | 134.4 | 136.1 | 132.9 | 129.9 | 125.0 | 125.9 | 125. 7 | 125. 5 | 128.3 | 125.1 |
| Other foods at home | 111.6 | 111.6 | 112.0 | 109.3 | 106.5 | 104.8 | 104.5 | 104.9 | 106.1 | 103.4 | 102.9 | 104.5 | 105.4 | 106.8 | 106.1 |
| Housing ${ }^{\text {4 }}$ | 132.3 | 132.1 | 132.2 | 132.0 | 131.5 | 131.3 | 131.3 | 131.2 | 131.4 | 131.3 | 131.2 | 130.7 | 130.4 | 131.5 | 129.2 |
| Housing | 142.8 | 142.7 | 142.5 | 142.1 | 141.9 | 141.8 | 141.6 | 141.4 | 141.4 | 141.2 | 141.0 | 140.9 | 140. 8 | 141.8 | 139.7 |
| Gas and electricity | 125.6 | 125. 7 | 125.7 | 125.7 | 124.9 | 124.8 132.9 | 124.7 132.3 | 124.7 | 124.4 | 124.1 137.2 | 124.0 139.0 | 123.2 139.0 | 122.7 137.3 | 124.8 135.6 | 119.9 |
| Sold fuels and fuel | 137.0 | 136.3 | 136.1 | 134.8 | 133.4 103.5 | 132.9 104.1 | 104.3 | 104.3 | 104.7 | 104.7 | 104.3 | 104.0 | 104.2 | 104.2 | 103.9 |
| Housefurnishings | 103.9 138.3 | 104.0 138.3 | 104.0 138.1 | 1038.0 | 103.5 137.6 | 137.4 | 137.3 | 137.2 | 137.0 | 136.9 | 136.3 | 135.9 | 135.5 | 137.4 | 134.3 |
| Appa | 110.6 | 110.7 | 111.0 | 110.6 | 109.3 | 109.1 | 108.9 | 108.9 | 108.9 | 108.8 | 108.4 | 107.9 | 109.2 | 109.4 | 107.9 |
| Men's and | 112.0 | 112.0 | 112.2 | 112.2 | 110.5 | 110.2 | 109.8 | 109.7 | 109.5 | 108.9 | 108.7 | 108.8 | 109.1 | 110.4 | 108.4 |
| Women's and | 101.1 | 101.4 | 101.8 | 101.1 | 99.7 | 99.4 | 99.1 | 99.4 | 99.6 | 99.6 | 99.3 | 98.0 | 100.3 | 130.9 | 99.5 135.2 |
| Footwear | 140.7 | 140.3 | 140.5 | 140.2 | 139.9 | 139.8 | 140.1 | 139.8 | 139.8 | 139.7 93.0 | 138.7 92.8 | 139.4 92.2 | 139.7 93.1 | 139.9 93.3 | 135.2 92.3 |
| Other apparel | 94.0 | 94.1 | 93.9 | 93.8 | 93.1 | 93.1 | 93.1 | 93.2 | 92.9 | 93.0 | 92.8 |  |  | 93.3 |  |
| Transportatio | 146.5 | 146.5 | 146.1 | 144.7 | 146.2 | 145.9 | 145.8 | 145. 6 | 146. 1 | 146. 5 | ${ }^{0} 147.5$ | ${ }^{\circ} 1477.6$ | 148.7 | 146.2 | 146.3 |
| Privat | 134.5 | 134.4 | 134.1 | 132.8 | 134.4 | 134.2 | 134.1 | 133.9 0 | 134.4 | 134.9 6198.0 | 0136.0 8 8 8 | 136.3 195.8 | ${ }_{6} 195.8$ | -199.3 | ${ }^{6} 192.7$ |
| Public | 202.9 | ${ }^{6} 202.9$ | ${ }^{6} 201.2$ | ${ }^{6} 200.3$ | ${ }^{6} 199.3$ | ${ }^{6} 198.9$ | ${ }^{6} 198.3$ |  |  |  | -197.9 | 195.8 |  |  |  |
| Medical car | 158.0 | 157.9 | 157.3 | 156.9 | 156.7 | 156.4 | 156.1 | 155.9 | 155.5 | 155.0 | 154.7 | 153.5 | 153.2 | 156.2 | 150.8 |
| Personal car | 133.7 | 133.9 | 134.0 | 133.9 | 133.8 | 133.4 | 133.2 | 133.2 | 132.9 | 132.7 | 132.6 | 132.7 | 132.9 | 133.3 | 131.2 |
| Reading and recreation | 122.3 | 122.5 | 121.9 | 122.1 | 121.9 | 121.6 | 121.1 | 121.4 | 121.1 | 120.9 | 120.6 | 120.3 | 120.4 | 121.5 | 118.6 |
| Other goods and services | 132.7 | 132.7 | 132.7 | 132.7 | 132.4 | 132.2 | 132.0 | 131.9 | 131.9 | 131.7 | 131.8 | 131.8 | 131.7 | 132.2 | 129.7 |
| Special groups: |  |  |  |  |  |  | 129.7 | 129.7 | 129.8 | 129.7 | 129.7 | 129.4 | 129.5 | 130.0 | 127.9 |
| All items less shelter | 125.0 | 125.0 | 124.8 | 124.3 | 124.1 | 124.2 | 124.0 | 123.8 | 123.7 | 123.1 | 123.0 | 122.9 | 123.1 | 124.0 | 122.2 |
| All commodities less food | 115.9 | 115.9 | 115.9 | 115.6 | 115.5 | 115.4 | 115.3 | 115.3 | 115.6 | 115.7 | 116.0 | 115.9 | 116.4 | 115.7 | 115.1 |
| All commodities | 118.4 | 118.3 | 118.2 | 117.7 | 117.6 | 117.7 | 117.6 | 117.3 | 117.4 | 116.7 | 116.7 | 116. 7 | 117.1 | 117.5 | 116.6 |
| Nondurables | 121.0 | 120.9 | 120.7 | 120.3 | 119.9 | 120.0 | 119.8 | 119.4 | 119.4 | 118.3 | 118.0 | 118.1 | 118.5 | 119.6 | 118.1 |
| Nondurables less food | 121.0 | 121.1 | 120.9 | 120.9 | 120.1 | 119.9 | 119.6 | 119.4 | 119.7 | 119.6 | 119.4 | 119.2 | 119.9 | 120.1 | 118.3 |
| Nondurables less food | 130.0 | 130.0 |  |  | 129.4 | 129.2 | 128.7 | 128.4 | 129.0 | 128.9 | 128.8 | 128.9 | 129.1 | 129.2 | 127.3 |
| Durables apparel.-.-. | 110.8 | 110.7 | 110.9 | 110.0 | 111.0 | 111.1 | 111.5 | 111.9 | 112.1 | 112.5 | -113.3 | -113.3 | 113.8 | 111.6 | 113.0 |
| Durables less cars. | 102.8 | 102.8 | 102.8 | 103.0 | 103.0 | 103.0 | 103.2 | 103.5 | 103.6 | 103.6 | 103.4 | 103.4 | 103.3 | 103.2 | 103.3 |
| All services ${ }^{\text {- }}$ | 151.4 | 151.3 | 151.2 | 150.8 | 150.3 | 150.0 | 149.7 | 149.6 | 149.4 | 149.2 | 148.9 | 148.2 | 147.8 | 150.0 | 145.8 |
| All services less rent | 153.6 | 153.6 | 153.4 | 153.0 | 152.5 | 152.1 | 151.8 | 151.7 | 151.5 | 151.3 | 150.9 | 150.1 | 149.7 | 152.1 | 147.5 |
| Household operation services, |  |  |  |  |  |  |  |  |  | 138.3 | 137.8 | 137.2 | 136.7 | 139.0 | 134.8 |
| gas, and electricity -.-....------- | 140.0 | 187.1 | 186.3 | 185.8 | 185.2 | 184.9 | 184.5 | 184.3 | 184.2 | 183.9 | 183.6 | 182.7 | 182.7 | 184.9 | 180.3 |
| Medical care services. | 165.3 | 165.1 | 164.3 | 163.6 | 163.3 | 163.0 | 162.5 | 162.4 | 161.9 | 161.3 | 160.8 | 159.5 | 159.2 | 162.8 | 156.3 |
| Other services. | 136.8 | 136.7 | 136.8 | 136.5 | 136.0 | 135.5 | 135.1 | 135.2 | 135.0 | 134.9 | 134.7 | 134.1 | 133.6 | 135.6 | 131.7 |

[^46](except shoe repairs), gasoline, motor oil, prescriptions and drugs, toilet goods, nondurable toys, newspapers, cigarettes, cigars, beer, and whiskey. ${ }^{8}$ Includes water beaters, central heating furnaces, kitchen sinks, sink faucets, porch flooring, household appliances, furniture and bedding, floor coverings, dinnerware, automobiles, tires, radio and television sets, durable toys, and sporting goods.
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, raflroad fares, professional medical services, hospital services, hospitalization and surgical insurance, barber and beauty shop services, television repairs, and motion picture admissions.

Table D-2. Consumer Price Index ${ }^{1}$-All items and food indexes, by city

| City | 1960 |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & 1959 \\ & \text { Dec. } \end{aligned}$ | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | May | Apr. | Mar. | Feb. | Jan. |  | 1959 | 1958 |
|  | All items |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| All-city average ${ }^{2}$---.--------- | 127.5 | 127.4 | 127.3 | 126.8 | 126.6 | 126.6 | 126. 5 | 126.3 | 126.2 | 125.7 | 125.6 | 125.4 | 125. 5 | 124.6 | 123.5 |
| Atlanta, Ga | 127.7 | $\left.{ }^{3}\right)$ | (8) | 127.9 | (3) | $\left.{ }^{8}\right)$ | 127.1 | ${ }^{(8)}$ | $\left.{ }^{3}\right)$ | 126.7 | (8) | ${ }^{(3)}$ | 126.4 | 125.4 | 124.5 |
| Baltimore, Md Boston, Mass. | 129.3 | (3) | ${ }^{(3)}$ | 128.7 | ${ }^{(3)}$ | (3) | 128.3 | (3) | (3) | 127.7 | (3) | (3) | 127. 2 | 126.8 | 124.5 |
| Chicago, Ill. | ${ }^{(3)} 130.6$ | ${ }^{(3)} 130.5$ | 129.1 130.7 | (8) 130.4 | ${ }^{(8)}$ 130.3 | 128.7 130.4 | ${ }^{(3)}$ | ${ }^{(8)}$ | 128.3 | ${ }^{(3)}$ | (8) | 126.4 | (8) | 125.8 | 124.8 |
| Oincinnati, Ohio | 125.0 | $\underset{(3)}{130.5}$ | $\underset{\text { (8) }}{130.7}$ | 130.4 124.8 | ${ }_{(8)}^{130.3}$ | $\underset{(3)}{130.4}$ | 130.1 124.6 | 129.6 | 129.5 | 129.2 | 129.1 | 128.9 | 129.0 | 128.1 | 127.0 |
| Detroit, Mich. | 125.8 | 127.9 125.7 | $\stackrel{3}{3}_{125.7}$ | (8) 125.4 | 127.4 | ${ }^{(8)} 125$ | $\mathrm{c}^{(8)}$ | 127.1 | ${ }^{(3)}$ | ${ }^{(8)}$ | 126.1 | ${ }^{(3)}$ | ${ }^{(3)}$ | 125.6 | 124.8 |
| Houston, Tex | ${ }_{(3)}{ }^{3}$ | 126. 4 | (3) | ${ }_{\text {(3) }}^{125} 4$ | 126.1 | ${ }_{\text {(3) }}^{125} 8$ | $\underset{\text { (3) }}{125.1}$ | 124.3 125.1 | $\underset{(8)}{124.2}$ | 123.9 | 123. 9 | 123.4 | 124.0 | 123.8 | 123.9 |
| Kansas City, Mo | (3) | ${ }^{(3)}$ | 128.2 | (3) | ${ }^{12} \mathbf{3}$ ) | 127.9 | (3) | ${ }_{(3)}^{125.1}$ | $\stackrel{\text { (8) }}{126.6}$ | (8) | ${ }_{(8)}^{125.6}$ | ${ }^{(8)}$ | (3) | 124. 6 | 123.6 |
| Los Angeles, Callf | 131.0 | 130.6 | 130.3 | 129.8 | 129.2 | 129.5 | 129.7 | 129.8 | 126.6 130.1 | 129.3 | ${ }_{4}{ }^{(8)} 128.8$ | 127.0 +129.1 | ${ }^{(3)} 128.9$ | 125.9 127.4 | 124.1 125.4 |
| Minneapolis, Minn. | (3) | $\left.{ }^{3}\right)$ | 128.5 | ${ }^{(8)}$ | (3) | 127.5 |  |  |  |  |  |  |  |  |  |
| New York, N.Y | 126.3 | 126. 5 | 126. 1 | 125.5 | 125.3 | 124.8 | 124.9 | 124.9 | 127.1 | (8) 124.5 | $\stackrel{3}{3}^{(24.4}$ | 126. 2 | ${ }^{(8)} 124$ | 125.6 122.8 | 124.3 |
| Philadelphia, Pa | 128.0 | 127.9 | 127. 7 | 127.2 | 126.8 | 124.8 126.9 | 126. 4 | 124.9 126.4 | 124.7 126.4 | 124.5 126.0 | 124.4 125.5 | 124.1 | 124.2 126.5 | 122.8 | 121.1 |
| Pittsburgh, Pa | $\left.{ }^{3}\right)$ | $\left.{ }^{3}\right)$ | 129.0 | ${ }^{(3)}$ | ${ }^{(3)}$ | 128.9 | (8) | (3) | 127.9 | (3) | ${ }_{(3)}^{125.5}$ | 125.5 126.6 | $\underset{(3)}{126.5}$ | 124.5 125.5 | 123.1 |
| Portland, Oreg | (3) | (3) | 127. 2 | (3) | (3) | 127.5 | (8) | (3) | 127.5 | (8) | (3) | +126.6 | (3) | 125.5 125.7 | 124.0 124.4 |
| St. Louis, Mo-...-- | 127.9 | ${ }^{(3)}$ | (3) | 127.4 | (3) | ${ }^{(8)}$ | 127.2 | $\left.{ }^{8}\right)$ | ${ }^{(2)}$ | 126.3 | (8) | (8) | 126.6 | 126. 3 | 124.7 |
| San Francisco, Calif. | 133.9 | ${ }^{(3)}$ | (3) | 133.0 | ${ }^{(3)}$ | ${ }^{(3)}$ | 132.4 | (8) | (8) | 131.6 | (3) | (3) | 131.8 | 130.0 | 127.5 |
| Seattle, Wash | (3) (3) | 123.9 130.5 | $(3)$ (3) | ${ }^{(3)}$ | 121.8 | (8) | $\left.{ }^{3}\right)$ | 122.1 | (3) | (8) | 121.4 | (3) | (3) | 120.8 | 120.2 |
| W ashlngton, D | (3) | 130.5 123.8 | (3) | $(3)$ $(3)$ | 129.8 | (3) | (8) | 129. 7 | (8) | (8) | 4 129.0 | (3) | (3) | 128.2 | 125.8 |
| Washlngton, D | ( | 123.8 | (3) | $\left.{ }^{3}\right)$ | 123.2 | (8) | ${ }^{(3)}$ | 123.1 | (3) | (3) | 121. 9 | (3) | (3) | 121.7 | 121.1 |
| Food |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| All-city average ${ }^{2}$ - | 121.4, 121.1 |  | 120.9 | 120.2 | 120.1 | 120.6 | 120.3 | 119.7 | 119.5 | 117.7 | 117.4 | 117.6 | 117.8 | 118.3 | 120.3 |
| Atlanta, Ga | 118.2 | 118.7 | 118.7 | 118.2 | 118.1 | 117.4 | 117.6 | 116.8 | 116.8 | 115.0 | 114.1 | 114.5 | 114.2 | 115. 7 | 118.0 |
| Baltimore, Mc | 121.2 | 120.7 | 121.0 | 120.1 | 120.7 | 121.2 | 121.2 | 120.5 | 119.7 | 118.2 | 116.7 | 116.5 | 117.4 | 118. 0 | 120.9 |
| Chicago, Ill. | 121.0 | 120.5 | 120.3 | 120.4 | 119.9 | 120.4 | 119.0 | 118.6 | 119.2 | 118.3 | 117.7 | 117.4 | 118.3 | 118.7 | 119.7 |
| Oincinnati, Ohlo..............-- | 119.1 | 118.7 | 118.6 | 118.1 | 118.4 | 119.3 | 118.8 | 117.2 | 116.7 | 115.1 | 114.4 | 115.2 | 114.6 | 115.8 | 117.3 |
|  | 122.2 | 121.9 | 122.6 | 121.3 | 120.8 | 121.9 | 121.5 | 120.4 | 120.4 | 117.8 | 117.8 | 117.7 | 118.2 | 118.8 | 122.1 |
| Cleveland, Ohio..............- | 116.8 | 117.1 | 117.0 | 116.2 | 116. 7 | 117.0 | $\begin{aligned} & 117.1 \\ & 120.0 \end{aligned}$ | 116.4 | 115.8 |  |  |  |  |  | 117.2 |
|  | 120.1 | 119.4 | 119.6 | 118.9 | 120. 0 | 120.6 |  | 116.4 119.0 | 115.8 119.1 | 113.4 116.5 | 112.9 115.7 | 113.1 | 113.4 116.3 | 114.1 117.5 |  |
| Houston, Tex.-- | 116.2 | 116.5 | 116.2 | 115.8 | 115.8 | 115.6 | 114.8 | 114.4 | 114.8 | 113.0 | 113.3 | 113.6 | 113.5 | 117.5 114.7 | 117.1 |
| Kansas City, Mo- | 114.8 | 114.5 | 113.9 | 113.1 | 112.9 | 113.9 | $\begin{aligned} & 114.0 \\ & 126.4 \end{aligned}$ | 112.7 | $112.4$ | $110.7$ | $110.4$ | $\begin{aligned} & 111.3 \\ & 125.2 \end{aligned}$ | $\begin{aligned} & 111.4 \\ & 123.6 \end{aligned}$ | $\begin{aligned} & 112.2 \\ & 123.5 \end{aligned}$ | 117.0 114.4 |
| Los Angeles, Calif | 128.1 | 127.3 | 127.0 | 126.5 | 125.5 | 126.6 |  | 126.1 | 126.8 | $124.4$ | $123.7$ |  |  |  | $\begin{aligned} & 114.4 \\ & 123.3 \end{aligned}$ |
| Minneapolls, Minn <br> New York, N.Y. | 119.7 | $\begin{aligned} & 119.2 \\ & 123.6 \end{aligned}$ | $\begin{aligned} & 119.7 \\ & 123.2 \end{aligned}$ | $\begin{aligned} & 118.6 \\ & 122.5 \end{aligned}$ | $\begin{aligned} & 118.7 \\ & 122.5 \end{aligned}$ | $\begin{array}{r} 1189 \\ 121.9 \end{array}$ | $\begin{aligned} & 119.3 \\ & 121.8 \end{aligned}$ | 118.1 | 118.6 | 116.6 | 116.5 | 117.0 | 117.3 |  | 118.6 |
|  | 122.8 |  |  |  |  |  |  | 121.8 | 121.4 | 116.6 120.7 |  |  |  | 118.0 120.3 |  |
| Philadelphia, Pa | 123.9 | 123.9 | 124. 0 | $\begin{aligned} & 125.1 \\ & 121.9 \\ & 121.1 \end{aligned}$ | 123.0 | 123.1 | 122.6 | 121. 7 | 121.2 | 120.0 | 119.1 | 119.5 | 120.1 | 120.9 | 120.9 123.1 |
| Pittsburgh, Pa | 122.2 | $\begin{aligned} & 122.4 \\ & 121.4 \end{aligned}$ | $\begin{aligned} & 122.6 \\ & 121.3 \end{aligned}$ |  | 121.0120.4 | 123.1121.7 | 122.1121.3 | 122.2120.4 | $\begin{aligned} & 121.0 \\ & 121.2 \end{aligned}$ | $\begin{aligned} & 118.4 \\ & 120.0 \end{aligned}$ | $\begin{aligned} & 118.6 \\ & 120.2 \end{aligned}$ | $\begin{aligned} & 118.7 \\ & 121.2 \end{aligned}$ | $\begin{aligned} & 119.1 \\ & 121.0 \end{aligned}$ | $\begin{aligned} & 119.8 \\ & 120.7 \end{aligned}$ | $\begin{aligned} & 121.8 \\ & 120.7 \end{aligned}$ |
| Portland, Oreg. | 122.2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| St. Louls, Mo..--- | 121.8 126.2 <br> 117.4 <br> 124.6 <br> 121.7 | $\begin{aligned} & 125.5 \\ & 117.0 \\ & 123.4 \\ & 121.2 \end{aligned}$ | $\begin{aligned} & 120.2 \\ & 125.0 \\ & 117.0 \\ & 123.3 \\ & 121.6 \end{aligned}$ | $\begin{aligned} & 118.9 \\ & 125.2 \\ & 115.9 \\ & 123.2 \\ & 120.8 \end{aligned}$ | $\begin{aligned} & 119.6 \\ & 124.0 \\ & 114.8 \\ & 123.1 \\ & 120.1 \end{aligned}$ | $\begin{aligned} & 119.9 \\ & 124.7 \\ & 115.7 \\ & 123.0 \\ & 120.9 \end{aligned}$ | $\begin{aligned} & 119.6 \\ & 124.2 \\ & 116.5 \\ & 122.6 \\ & 120.9 \end{aligned}$ | $\begin{aligned} & 118.5 \\ & 124.3 \\ & 115.8 \\ & 122.6 \\ & 120.4 \end{aligned}$ |  | $\begin{aligned} & 116.7 \\ & 122.7 \\ & 113.9 \\ & 120.9 \\ & 117.9 \end{aligned}$ |  | $\begin{aligned} & 116.2 \\ & 123.6 \\ & 113.5 \\ & 121.4 \\ & 117.3 \end{aligned}$ | $\begin{aligned} & 117.6 \\ & 123.1 \\ & 113.9 \\ & 121.1 \\ & 118.1 \end{aligned}$ | 118.7 121.2 <br> 122.6 123.1 <br> 115.4 118.4 <br> 120.8 121.3 <br> 119.0 121.6 |  |
| San Francisco, Calif. |  |  |  |  |  |  |  |  | $\begin{aligned} & 118.0 \\ & 124.6 \\ & 115.5 \\ & 122.8 \\ & 119.5 \end{aligned}$ |  | $\begin{aligned} & 117.5 \\ & 122.2 \\ & 113.0 \\ & 121.0 \\ & 117.2 \end{aligned}$ |  |  |  |  |  |
| Scranton, Pa, |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Seattle, Wash...- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Washington, D.C. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^47][^48]TABLE D-3. Indexes of wholesale prices, ${ }^{1}$ by group and subgroup of commodities
[1947-49 $=100$, unless otherwise specified]

| Commodity group | 1960 |  |  |  |  |  |  |  |  |  |  |  | $1959$ <br> Dec. | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dec. ${ }^{2}$ | Nov. | Oct. | Sept. | Aug. | July | June | May | Apr. | Mar. | Feb. | Jan. |  | 1959 | 1958 |
| All commodit | 119.5 | 119.6 | 119.6 | 119.2 | 119.2 | 119.7 | 119.5 | 119.7 | 120.0 | 120.0 | 119.3 | 119.3 | 118.9 | 119.5 | 119.2 |
| Farm products | 99.2 | 99.7 | 99.5 | 98.1 | 97.4 | 99.1 | 98.6 | 99.1 | 99.2 | 99.1 | 96.6 | 96.3 | 95.5 | 98.2 | 103.1 |
| m produ | 88.7 | 89.9 | 89.5 | 87.7 | 86.6 | 88.9 | 89.0 | 90.4 | 91.1 | 90.4 | 87.0 | 86.5 | 85.9 | 89.1 | 94.9 |
| Fresh and dried fruits and vegetab | 99.5 | 107.5 | 109.2 | 104.7 | 98.7 | 112.9 | 109.7 | 116.9 | 111. 5 | 104.4 | 100.5 | 104. 9 | 107. 9 | 102.7 | 112.0 |
| Grains. | 72.7 | 70.3 | 73.5 | 74.9 | 74.3 | 75. 5 | 77.5 | 77.8 | 79.4 | 78.2 | 76.7 | 77.2 | 76.1 | 77.3 | 79.5 |
| Livestock and li | 82.8 | 81.8 | 80.7 | 79.0 | 80.7 | 84.1 | 85.1 | 85.8 | 85.7 | 86.2 | 80.8 | 78.5 | 76.0 | 85.1 | 92.9 |
| Plant and anima | 90.7 | 90.8 | 90.8 | 92.1 | 92.2 | 96.4 | 96.7 | 96.6 | 96.3 | 96.0 | 96.1 | 95.9 | 95.7 | 98.2 | 101. 5 |
| Fluid mil | 102.1 | 102.3 | 101.5 | 99.8 | 97.0 | 95.5 | 93.3 | 92.7 | 95.5 | 97.9 | 99.0 | 99.3 | 98.3 | 94.4 | 94.6 |
| Eggs. | 87.7 | 108.1 | 98.9 | 85.5 | 76.4 | 65.4 | 64.2 | 69.6 | 80.2 | 75.8 | 58.4 | 56.9 | 62.8 | 65.6 | 81.7 |
| Hay, hayseeds | 74.1 | 72.5 | 72.2 | 72.3 | 73.7 | 73. 5 | 74.4 | 76.5 | 76.3 | 76.7 | 77.1 | 77.5 | 76.3 | 76.6 | 76.9 |
| Other farm products | 130.4 | 129.1 | 130.4 | 129.5 | 125.6 | 127.7 | 128.0 | 128.3 | 128.6 | 127.9 | 128.9 | 127.4 | 127.5 | 132.6 | 140.4 |
| Processed foods | 109.3 | 109.1 | 109.0 | 108.1 | 107.8 | 108. 9 | 107.6 | 107.3 | 106.8 | 107.3 | 105.7 | 105.6 | 104.7 | 107.0 | 110.9 |
| Cereal and bakery | 123.5 | 123.1 | 123.1 | 122.4 | 122.0 | 122.5 | 121.2 | 121.2 | 120.9 | 120.8 | 120.6 | 120.7 | 120.4 | 119.3 | 117.9 |
| Meats, poultry, and fish | 97.4 | 96.6 | 97.8 | 96.0 | 96.8 | 99.5 | 98.1 | 98.5 | 96.7 | 97.8 | 93.1 | 92.4 | 90.5 | 98.2 | 106.7 |
| Dairy products and ice cream | 122.0 | 121. 7 | 121.3 | 120.5 | 118.0 | 117. 3 | 116.0 | 114.9 | 115.6 | 117.7 | 118.4 | 118.8 | 118.1 | 114.3 | 112.7 |
| Canned and frozen fruits and vegetables. | 110.3 | ${ }^{3} 109.6$ | ${ }^{3} 108.9$ | ${ }^{3} 107.7$ | ${ }^{3} 106.6$ | ${ }^{3} 107.3$ | 106. 9 | 106.3 | 105.8 | 105.8 | 105.0 | 104.5 | 104. 6 | 109.0 | 109.7 |
| Sugar and confectionery. | 116.3 | ${ }^{3} 117.4$ | 117.1 | 117.9 | 116.9 | 117.2 | 114.3 | 114.3 | 114. 1 | 113.7 | 113.9 | 113.3 | 115.6 | 115.1 | 115. 6 |
| Packaged beverage mate | 140.9 | 14). 9 | 140.9 | 140.9 | 140.9 | 143. 5 | 145.2 | 145.2 | 145.2 | 145.2 | 145.2 | 145.2 | 145.2 | 146. 5 | 165. 7 |
| Animal fats and oils | 62.5 | ${ }^{3} 66.1$ | 62.0 | 60.0 | 66.0 | 62.1 | 56.9 | 56.0 | 57.6 | 53.1 | 49.4 | 48.7 | 50.1 | 54.6 | 72.0 |
| Crude vegetable oils | 52.4 | 53.1 | 49.9 | 48.7 | 51.6 | 50.3 | 50.3 | 48.7 | 47.5 | 45.2 | 45.3 | 46.0 | 45.0 | 53.1 | 60.1 |
| Refined vegetable oil | 61.2 | 59.8 | 57.4 | 55.2 | 56.8 | 55. 5 | 56.3 | 57.0 | 56.7 | 55.6 | 54.5 | 54.8 | 52.5 | 58.0 | 67.9 |
| Vegetable oil end pr | 77.1 | 76.1 | 75.2 | 74.7 | 73.3 | 72.7 | 72.7 | 71.5 | 71.5 | 71.5 | 71.2 | 71.2 | 71.1 | 74.0 | 82.8 |
| Other processed foo | 100.8 | 102.8 | 100.5 | 101.4 | 101.7 | 103.3 | 103.9 | 102.2 | 102.8 | 101.7 | 101.6 | 103.9 | 100.0 | 96.7 | 96.6 |
| All commodities excep | 124.6 | ${ }^{3} 124.6$ | 124.6 | 124.4 | 124.6 | 124.8 | 124.6 | 124.5 | 124.9 | 124.9 | 124.7 | 124.8 | 124.4 | 124.5 | 123.3 |
| All commodities except farm and food | 127.9 | 3127.9 | 128.0 | 127.9 | 128.2 | 128.2 | 128.2 | 128.2 | 128.7 | 128.6 | 128.7 | 128.8 | 128.6 | 128. 2 | 126.0 |
| Textile products and ap | 95.2 | 395.4 | 95.8 | 95.9 | 96.1 | 96.3 | 96.3 | 96.3 | 96.3 | 96.3 | 96.5 | 96.6 | 96.7 | 95.0 | 93.5 |
| Cotton products | 91.2 | 91.7 | 92.8 | 93.4 | 94.3 | 94.7 | 94.8 | 94.8 | 95.0 | 95.6 | 95.8 | 95.9 | 95.0 | 91.7 | 88.4 |
| Wool product | 100.8 | ${ }^{3} 101.3$ | 101.1 | 101.2 | 101.5 | 101.8 | 102.1 | 102.4 | 102.7 | 102.8 | 103.2 | 104.0 | 104.2 | 101.6 | 100.8 |
| Manmade fiber | 77.8 | ${ }^{3} 78.2$ | 78.5 | 78.6 | 78.9 | 79.6 | 79.6 | 79.7 | 79.4 | 79.4 | 79.8 | 79.4 | 81.3 | 81.1 | 80.2 |
| Silk products. | 125.7 | 125.9 | 128.5 | 128.4 | 126.8 | 123.3 | 121. 6 | 118.7 | 118.0 | 116. 6 | 119.5 | 122.0 | 121.7 | 113.5 | 113.5 |
| Apparel | 101.0 | 101.0 | 101.1 | 101.1 | 101.0 | 101.0 | 100.8 | 100.6 | 100.7 | 100.7 | 100.6 | 100.8 | 100.9 | 100.0 | 99.3 |
| Other textile produc | 92.6 | 92.1 | 91.3 | 85.7 | 84.6 | 81.9 | 85.1 | 86.8 | 82.5 | 80.5 | 79.8 | 79.3 | 79.4 | 76.8 | 75.2 |
| Hides, skins, leather, and leather products_ | 108.9 | 108.5 | 108.5 | 108.1 | 108.7 | 110.1 | 110.3 | 111.2 | 112.1 | 111.8 | 112.0 | 112.7 | 112.3 | 114.3 | 100.6 |
|  | 64.9 | 65. 8 | 64.1 | 62.3 | 63.6 | 68.0 | 67.1 | 72.9 | 73.5 | 72.0 | 69.8 | 73.7 | 73.8 | 90.7 | 100.6 |
| Leather | 99.4 | 97.1 | 98.1 | 97.5 | 98.9 | 102.2 | 103.0 | 103.5 | 104.7 | 102.8 | 104.8 | 105. 5 | 103.5 | 111.8 | 92. 3 |
| Footwe | 132.5 | 132.5 | 132.5 | 132.5 | 132.5 | 132.5 | 132.5 | 132.5 | 133.5 | 134.2 | 134.2 | 134.2 | 134.1 | 129.5 | 122.1 |
| Other lea | 104.2 | 104.2 | 104.0 | 103.9 | 104.7 | 105.6 | 106.4 | 106.7 | 107.3 | 107.3 | 107.2 | 108.0 | 107.8 | 109.0 | 97.5 |
| Fuel, power, and lig | 116.2 | 116.1 | 116.2 | 116.1 | 115.3 | 113.8 | 112.3 | 110.8 | 112.2 | 112.3 | 112.0 | 111.9 | 111.7 | 112.7 | 112.7 |
| Coal | 123.1 | 123.0 | 122.5 | 122.4 | 121.3 | 120.3 | 119.5 | 118.7 | 119.0 | 124.0 | 124.1 | 124.1 | 124.1 | 122.6 | 122.9 |
| Cok | 170.4 | 170.4 | 170.4 | 170.4 | 170.4 | 170.4 | 170.4 | 170.4 | 170.4 | 170.4 | 170.4 | 170.4 | 170.4 | 169.8 | 161.9 |
| Gas fuels | 120.3 | ${ }^{3} 120.2$ | 120.9 | 121.3 | 116.6 | 114.4 | 112.2 | 111.6 | 115.6 | 115.6 | 114.5 | 116.6 | 115.5 | 110.9 | 101.7 |
| Electric po | 102.3 | ${ }^{3} 102.4$ | 102.1 | 102.1 | 102.1 | 102.0 | 101.8 | 101.7 | 101.8 | 101.8 | 101.8 | 101.3 | 101.2 | 100.8 | 100.4 |
| Petroleum and pro | 120.8 | 120.6 | 121.0 | 120.7 | 120.0 | 117.9 | 116.0 | 113.6 | 115.4 | 115.0 | 114.6 | 114.4 | 114.3 | 116.6 | 117.7 |
| Chemicals an | 110.4 | 110.3 | 110.3 | 110.4 | 110.5 | 110.4 | 110.2 | 110.2 | 110.2 | 110.1 | 110.0 | 109.9 | 110.0 | 109.9 | 110.4 |
| Industrial chemi | 123.6 | 123.5 | 123.6 | 124.5 | 124.6 | 124.7 | 124.6 | 124.6 | 124.5 | 124.2 | 124.2 | 124.1 | 124.0 | 123.8 | 123.5 |
| Prepared paint | 129.7 | 128.4 | 128.4 | 128.4 | 128.4 | 128.4 | 128.3 | 128.3 | 128.3 | 128.3 | 128.3 | 128.3 | 128.3 | 128.3 | 128.3 |
| Paint materials | 104.4 | 104.8 | 104.5 | 104.6 | 105.0 | 103.8 | 103.2 | 103.0 | 102.9 | 102.8 | 103.0 | 103.0 | 103.1 | 101.9 | 103.6 |
| Drugs and pharm | 94.3 | 94.3 | 94.4 | 95.0 | 95.4 | 95.1 | 95.1 | 94.8 | 94.5 | 94.2 | 94.0 | 93.8 | 93.7 | 93.4 | 94.0 |
| Fats and ofls, ined | 48.5 | 48.9 | 47.8 | 47.7 | 48. 9 | 47.8 | 47.9 | 50.2 | 51.7 | 50.6 | 49.4 | 49.2 | 50.8 | 56.7 | 62.6 |
| Mixed fertilizer | 111.8 | 112.1 | 112.9 | 112.9 | 112.3 | 110.3 | 110.2 | 110.2 | 110.2 | 110.1 | 110.1 | 109.6 | 109.8 | 109.5 | 110.7 |
| Fertilizer materials | 111.9 | 3111.9 | ${ }^{3} 111.2$ | ${ }^{3} 108.3$ | ${ }^{3} 108.2$ | 3110.4 | 108.8 | 108.8 | 108.8 | 108.8 | 108.8 | 108.8 | 107.0 | 106.9 | 108.0 |
| Other chemicals and allied p | 107.3 | 107.4 | 107.3 | 106.7 | 106.7 | 106.4 | 106.4 | 106.4 | 106.4 | 106.5 | 106.5 | 106. 5 | 106.8 | 106.6 | 106.8 |
| Rubber and rubber | 141.8 | 143.6 | 144.7 | 144. 9 | 145.3 | 146. 9 | 146.7 | 146.3 | 144.7 | 144.7 | 144.6 | 143.1 | 142.0 | 144.5 | 145.0 |
| Crude rubber-.--- | 136.8 | 140.6 | 146.8 | 148.3 | 152.1 | 161.2 | 169.6 | 169.6 | 160.9 | 161.1 | 160.7 | 162.8 | 160.5 | 152.0 | 134.0 |
| Tires and tubes | 138.6 | 141.3 | 141.3 | 141.3 | 141.3 | 141.3 | 137.0 | 137.0 | 137.0 | 137.0 | 137.0 | 132.2 | 132.2 | 143.4 | 152.4 |
| Other rubber produ | 146.8 | 146.8 | 146.8 | 146.6 | 145.9 | 145.6 | 145.6 | 144.5 | 144.5 | 144.6 | 144.6 | 144.6 | 143.0 | 142.2 | 142.7 |
| Lumber and wood prod | 116.7 | ${ }^{3} 116.9$ | 117.7 | 118.7 | 119.6 | 121.5 | 122.4 | 123.7 | 124.3 | 124. 5 | 124.9 | 125.1 | 124.8 | 125.8 | 117.7 |
| Lumber | 115.2 | ${ }^{3} 115.1$ | 116.3 | 117.9 | 119.2 | 121.6 | 123.1 | 124.9 | 125. 7 | 125.9 | 126.1 | 126.1 | 125.9 | 127.1 | 118.0 |
| Millwo | 135.7 | 135.8 | 135.3 | 135.5 | 136.7 | 137.2 | 136.9 | 136.9 | 136.8 | 137.7 | 137.7 | 137.8 | 137.9 | 135.9 | 128.2 |
| Plywood | 95.1 | . 1 | 97.1 | 90.4 | 94.7 | 95.5 | 95.5 | 95.7 | 96.1 | 95.9 | 97.0 | 98.2 | 97.2 | 101.2 | 97.1 |
| alp, paper, an | 132.3 | 133.1 | 133.4 | 133.0 | 133.0 | 133.5 | 133.5 | 133.4 | 133.1 | 133.1 | 133.2 | 133.7 | 132.4 | 132.2 | 131.0 |
| Woodpulp | 114.5 | 121.2 | 121.2 | 121.2 | 121.2 | 121.2 | 121.2 | 121.2 | 121.2 | 121.2 | 121.2 | 121. 2 | 121.2 | 121.2 | 121. 2 |
| Wastepape | 67.8 | 77.4 | 77.4 | 77.4 | 77.4 | 82.3 | 82.3 | 83.2 | 88. 4 | 89.3 | 93.6 | 108.0 | 109.8 | 112.5 | 88.3 |
| Paper. | 145.7 | 145.7 | 145.7 | 145.4 | 145. 2 | 145.9 | 145.9 | 145.9 | 145. 1 | 144.8 | 144.5 | 144.5 | 144.3 | 143.4 | 142.3 |
|  | 132.4 | 132.4 | 135.9 | 135.9 | 135.9 | 135.9 | 135.9 | 135.9 | 135.9 | 135.9 | 135.9 | 135.9 | 135.9 | 136.1 | 136.2 |
| Converted paper and paperboard products | 131. 1 | 131.1 | 131.1 | 130.6 | 130.5 | 131.0 | 130.9 | 130.6 | 130.0 | 130.0 | 130.0 | 130.0 | 127.5 | 127.5 | 127.6 |
| Building paper and boar | 145.4 | 145.4 | 145.7 | 145.3 | 145.5 | 144.2 | 145.1 | 145. 1 | 145.1 | 146.5 | 147.6 | 147.6 | 147.6 | 146.4 | 143.2 |
| Metals and metal pro | 152.2 | ${ }^{3} 152.3$ | 152.8 | 153.5 | 153.6 | 153.4 | 153.8 | 154.2 | 154.5 | 154.5 | 155.3 | 155.5 | 155.2 | 153.6 | 150.4 |
| Iron and steel... | 168.6 | 168.5 | 168.9 | 169.7 | 169.9 | 169.5 | 169.9 | 170.4 | 170.5 | 170.5 | 171.6 | 172.4 | 172.2 | 172.0 | 168.8 |
| Nonferrous metals | 133.9 | ${ }^{3} 135.5$ | 137.1 | 138.4 | 138.7 | 138.6 | 138.9 | 140.0 | 140.5 | 140.8 | 142.6 | 142. 7 | 140.7 | 136.1 | 127.7 |
| Metal containers. | 153.6 | 153.6 | 153.6 | 153.6 | 153.6 | 153.6 | 153.9 | 154.8 | 154.8 | 154.8 | 154.8 | 152.9 | 152.9 | 153.7 | 155. 7 |
| Hardware. | 174.6 | 174.6 | 174.6 | 174.5 | 174.5 | 174.5 | 174.5 | 174. 2 | 174.0 | 173.8 | 173.4 | 173.4 | 173. 2 | 173.0 | 170.8 |
| Plumbing fixtures and brass | 130.8 | 130.8 | 130.8 | 131.5 | 131.5 | 131.3 | 131.3 | 132.7 | 132. 1 | 133.9 | 133.9 | 134.0 | 133.2 | 130.1 | 123.7 |
| Heating equipment- | 117.5 | 118.4 | 119.3 | 119.3 | 118.8 | 118.7 | 120.0 | 120.2 | 120.1 | 120.1 | 120.3 | 120.9 | 121.6 | 121.7 | 121.2 |
| Fabricated structural metal products-- | 133.9 | 133.9 | 134.0 | 134.2 | 134.7 | 134.6 | 134.9 | 134.9 | 135.3 | 135.8 | 135.4 | 135.4 | 135.4 | 133.4 | 133. 9 |
| Fabricated nonstructural metal products $\qquad$ | 148.6 | 146.7 | 146.2 | 146.2 | 146.2 | 146.0 | 146.0 | 146.1 | 146. 1 | 146.1 | 146.4 | 146.3 | 146.5 | 146.0 | 145.7 |

See footnotes at end of table.

TABLE D-3. Indexes of wholesale prices, ${ }^{1}$ by group and subgroup of commodities-Continued [1947-49 $=100$, unless otherwise specifiedl

| Commodity group | 1960 |  |  |  |  |  |  |  |  |  |  |  | $\begin{gathered} 1959 \\ \hline \text { Dec. } \end{gathered}$ | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dec. ${ }^{2}$ | Nov. | Oct. | Sept. | Aug. | July | June | May | Apr. | Mar. | Feb. | Jan. |  | 1959 | 1958 |
| Machinery and motive products.-.-.-.---- | 153.6 | 3153.5 | 152.8 | 151.3 | 153.2 | 153.2 | 153.4 | 153. 5 | 154.0 | 153.9 | 153.9 | 153.8 | 153.7 | 153.0 | 149.8 |
| Agricultural machinery and equipment- | 148.4 | ${ }^{3} 148.4$ | 146.7 | 146.2 | 146.1 | 146.0 | 145.9 | 145.7 | 145.6 | 145.3 | 145.3 | 144.3 | 144.0 | 143.4 | 139.1 |
| Construction machinery and equipment | 177.1 | 177.3 | 176.7 | 176.7 | 176.7 | 175.5 | 175.3 | 175.3 | 174.7 | 174.3 | 173.9 | 173.6 | 172.9 | 171.9 | 166.1 |
| Metalworking machinery and equipment $\qquad$ | 182.4 | ${ }^{3} 182.1$ | ${ }^{3} 181.2$ | ${ }^{8} 181.0$ | ${ }^{3} 180.1$ | 179.9 | 179.7 | 179.1 | 178.5 | 178.6 | 177.8 | 177.7 | 177.6 | 174.5 | 170.1 |
| General purpose machinery and equipment. | 166.0 | 166.3 | 166. 5 | 166.9 | 166.4 | 166.6 | 166.4 | 167.8 | 167.9 | 167.7 | 168.2 | 167.8 | 167.9 | 165.3 | 160.0 |
| Miscellaneous machinery | 150.7 | 150.7 | 150.4 | 150.2 | 150.2 | 150.1 | 150.2 | 150.0 | 150.1 | 149.9 | 149.6 | 149.7 | 149.8 | 149.4 | $148.1$ |
| Electrical machinery and equipment--- | 152. 6 | ${ }^{3} 152.6$ | 152.5 | 152.5 | 153.1 | 153.3 | 153.9 | 153.9 | 155.6 | 155.6 | 155.7 | 155.8 | 155.4 | 154.4 | $152.2$ |
|  | 142.2 | ${ }^{3} 142.0$ | 140.3 | 135.4 | 141.6 | 141.6 | 141.6 | 141.6 | 141.6 | 141.6 | 141.6 | 141.6 | 141.6 | 142.8 | 139.7 |
| Furniture and other household durables | 122. 5 | 122.6 | 122.7 | 122.8 | 122.9 | 123.1 | 123.0 | 123.2 | 123.5 | 123.7 | 123.5 | 123.4 | 123.2 | 123.4 | 123.2 |
| Household furniture......-. - - - - - - - | 125.7 | 125.7 | 125. 6 | 125.0 | 125.0 | 125.0 | 124.9 | 125.0 | 124.9 | 124.9 | 124.9 | 124.7 | 124. 2 | 124.1 | 123.0 |
| Commercial furnitu | 157.1 | 157.1 | 157.1 | 157.1 | 157.1 | 157.1 | 156.7 | 156.7 | 156.7 | 156.6 | 155.8 | 155.8 | 155.5 | 155.2 | 154.6 |
| Floor coverings | 130.2 | ${ }^{3} 130.2$ | 130.5 | 130.5 | 130.6 | 130.6 | 130.6 | $130.8$ | 130.8 | 130.6 | 129.6 | $129.6$ | 129.0 | $128.1$ | $127.8$ |
| Household appliances | 100.5 | 100.6 | 100.9 | 100.9 | 101.1 | 101.7 | 101.7 | 102.1 | 103.1 | 103.2 | 103.3 | 103.3 | 103.7 | 104.7 | 104.7 |
| Television, radio receivers, and phonographs. | 90.5 | 90.5 | 90.5 | 91.1 | 91.1 | 91.4 | 91.4 | 91.7 | 91.7 | 91.8 | 91.8 | 91.7 | 91.9 | 92.8 | 94.4 |
| Other household durable goods...-------------- | 156.6 | 156.6 | 156.8 | 157.6 | 157.6 | 157.6 | 157.4 | 157.4 | 157.3 | 158.3 | 158.1 | 157.8 | 156.6 | 156.4 | 155. 1 |
| Nonmetallic minerals-st | 137.9 | 137.9 | 138.1 | 138.0 | 137.8 | 137.8 | 137.8 | 137.9 | 138.3 | 138.2 | 138.2 | 138.4 | 137.8 | 137.7 | 136.0 |
| Flat glass | 132.4 | 132.4 | 132.4 | 132.4 | 130.2 | 130.2 | 130.2 | 130.2 | 135.3 | 135.3 | 135.3 | 135.3 | 135.3 | 135.3 | 135.4 |
| Concrete ingredien | 142.0 | 142.1 | 142.1 | 142.2 | 142.2 | 142.1 | 142.1 | 142.1 | 142.1 | $142.1$ | $142.0$ | $142.0$ | $140.4$ | $140.3$ | $\begin{aligned} & 139.0 \\ & \hline \end{aligned}$ |
| Concrete products. | 131.0 | 131.0 | 131.0 | 131.0 | 131.1 | 131.3 | 131.3 | 131.5 | 131.3 | 131.0 | 131.1 | 130.5 | 130.4 | 129.7 | 128.1 |
| Structural clay pro | 162.3 | ${ }^{3} 162.3$ | $162.2$ | 162.1 | 162.0 | 161.8 | 161.7 | 161. 7 | 161.5 | 161.5 | 161.5 | 161.3 | 160.7 | 160.2 | 156. 5 |
| Gypsum products | 133.2 | $133.2$ | $133.2$ | 133.2 | 133.2 | 133.2 | 133.2 | 133.2 | 133.2 | 133.2 | 133.1 | $133.1$ | 133.1 | 133.1 | 132.1 |
| Prepared asphalt roofing. | 106.6 | 106.6 | 106. 6 | 106. 6 | 106.6 | 106.6 | 106.6 | 106.6 | 106.6 134.4 | 107.6 | 107.6 | 113.6 | 113.6 | 116.4 | 112.8 |
| Other nonmetallic minerals..------------------ | 133.6 | ${ }^{3} 133.6$ | 135, 0 | 134.5 | 134.6 | 134.6 | 134.6 | 134.6 | 134.4 | 133.7 | 133.7 | 132.8 | 132.5 | 132.4 | 131.2 |
| Tobacco products and bottled beverages $\mathrm{S}^{-}$ | 132.1 | 132.0 | 132.0 | 132.0 | 132.0 | 131.8 | 131.7 | 131.7 | 131.7 | 131.7 | 131.7 | 131.7 | 131.7 | 131.4 | 128.2 |
|  | 130.8 | 130.8 | 130.8 | 130.8 | 130.8 | 130.8 | 130.8 | 130.8 | 130.8 | 130.8 | 130.8 | 130.8 | 130.7 | 130.5 | 129.6 |
| Alcoholic beverages. | 121.3 | 121.1 | 121.1 | 121.1 | 121.1 | 120.6 | 120.6 | 120.6 | 120.6 | 120.6 | 120.6 | 120.5 | 120.7 | 121.3 | 120.5 |
|  | 171.4 | 171.4 | 171.4 | 171.4 | 171.4 | 171.4 | 171.1 | 171.1 | 171.1 | 171.1 | 171.1 | 171.1 | 171.1 | 167.4 | 149.3 |
|  | 92.4 | 90.6 | 90.3 | 91.1 | 89.9 | 90.8 | 90.9 | 91.1 | 95.4 | 94.0 | 93.4 | 95.3 | 94.2 | 94.5 | 94.2 |
| Toys, sporting goods, small arms, and ammunition | 118.6 | 118.6 | 118.6 | 118.6 | 118.5 | 118.6 | 118.3 | 118.3 | 118.3 | 117.8 | 117.8 | 117.7 | 118.0 | 117.5 | 19.0 |
| Manufactured animal feeds. | 18.0 | 118.6 66.8 | 66.2 | 67.7 | 65.6 | 67.3 | 67.6 | 68.0 | $\begin{array}{r}75.6 \\ \hline\end{array}$ | 73.2 | 117.8 72.2 | 117.7 75.6 | 74.0 | 75.1 | 74.4 |
| Notions and accessories | 96.4 | 96.4 | 96.4 | 96.4 | 97.3 | 97.3 | 96.4 | 96.4 | 97.2 | 97.5 | 97.5 | 97.5 | 97.5 | 97.3 | 97.5 |
| Jewelry, watches, and photographic equipment | 111.0 | 110.9 | 110.9 | 110.9 | 110.9 | 110.7 | 110.2 | 110.5 | 110.5 | 110.6 | 110.6 | 110.6 | 109.5 | 108.3 | 107.6 |
| Other miscellaneous products....-------- | 132.3 | 132.1 | 132.6 | 132.5 | 132.3 | 132.5 | 132.6 | 132.5 | 132.1 | 131.6 | 131.5 | 131.9 | 131.9 | 132.2 | $132.2$ |

As of January 1958, new weights reflecting 1954 values were introduced into the index. Technical details furnished upon request to the Bureau.

This index was formerly tobacco manufactures and bottled beverages 3 Preliminary. 8 Revised

Tanuary $1958=100$.
TABLE D-4. Indexes of wholesale prices for special commodity groupings ${ }^{1}$
[1947-49=100]

| Commodity group | 1960 |  |  |  |  |  |  |  |  |  |  |  | 1959 | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dec. ${ }^{2}$ | Nov. | Oct. | Sept. | Alug. | July | June | May | Apr. | Mar. | Feb. | Jan. | Dec. | 1959 | 1958 |
| All foods | 107.3 | 108.8 | 108. 5 | 106. 6 | 105.4 | 106.9 | 105.5 | 106. 1 | 105.8 | 105.4 | 102.7 | 103.0 | 102.7 | 104.4 | 109. |
| All fish. | 133.2 | 131.5 | 129.4 | 128.1 | 124.4 | 129.9 | 126.5 | 126.6 | 123.3 | 123.4 | 121.8 | 121.9 | 122. 7 | 124.5 | 128.5 |
| All commodities except farm products | 124.6 | ${ }^{3} 124.6$ | 124.6 | 124.4 | 124.6 | 124.8 | 124.6 | 124.5 | 124.9 | 124.9 | 124.7 | 124.8 | 124.4 | 124.5 | 123. |
| Textile products, excluding hard fiber product | 90.0 | 90.5 | 91.2 | 91.6 | 92.2 | 92.7 | 92.8 | 92.8 | 92.9 | 93.2 | 93.5 | 93.5 | 93.7 | 91.4 | 89. |
| Refined petroleum products | 119.3 | 119.1 | 119.5 | 119.2 | 118.3 | 115.8 | 113.5 | 110.8 | 112.9 | 112.5 | 111.9 | 111.7 | 111.6 | 114.2 | 114.8 |
| East Coast petroleum | 111.4 | 111.4 | 112. 4 | 111.4 | 111.0 | 109.8 | 109.8 | 110.6 | 110.2 | 110.2 | 112.2 | 111.8 | 109.9 | 108.9 | 110. |
| Midcontinent petroleu | 125.2 | 124. 7 | 124. 7 | 124.7 | 123.2 | 118.5 | 114.4 | 106. 2 | 113.1 | 112.2 | 109. 3 | 107.7 | 109.4 | 115.7 | 114. |
| Gulf Coast petroleu | 122.9 | 122.9 | 122.9 | 122.9 | 122.9 | 121.0 | 118.1 | 118.1 | 117.8 | 117.3 | 118.8 | 119.4 | 118.5 | 118.4 | 117.7 |
| Pacific Coast petroleum | 105.5 | 105.5 | 107.3 | 106.0 | 104.1 | 105.1 | 106.6 | 108. 1 | 105.7 | 105.8 | 103.7 | 105.8 | 104.4 | 108. 2 | 117.3 |
| Bituminous coal, in domestic | 127.7 | 127.4 | 126. 2 | 126.1 | 124.4 | 122.0 | 121.0 | 119.2 | 119.2 | 127.8 | 127.8 | 127.8 | 127.8 | 124.9 | 123.0 |
| Soaps. | 107.6 | 107.6 | 107.6 | 107.6 | 107.6 | 107.6 | 107.6 | 107.6 | 107.6 | 107.6 | 107.6 | 107.6 | 109.7 | 109.5 | 108.1 |
| Synthetic detergents | 103.6 | 103.6 | 103.6 | 101.2 | 101.2 | 101.2 | 101.2 | 101.2 | 101. 2 | 101.2 | 101. 2 | 101.3 | 101.7 | 101.4 | 101.2 |
| Lumber and wood products, | 113.5 | ${ }^{3} 113.7$ | 114.8 | 116.0 | 116.8 | 118.9 | 120.2 | 121.7 | 122.5 | 122. 6 | 123.0 | 123.2 | 122.9 | 124.5 | 116.2 |
| Softwood lumber | 112.9 | ${ }^{3} 112.8$ | 114.1 | 116.0 | 117.6 | 120.3 | 122.1 | 124.5 | 125.6 | 126.0 | 126.4 | 126.5 | 126.4 | 128.1 | 117.8 |
| Pulp, paper and products, excluding bldg. pape | 132.0 | 132.8 | 133.1 | 132.7 | 132.7 | 133.3 | 133. 2 | 133.1 | 132.8 | 132.7 | 132.8 | 133.3 | 132.0 | 131.8 | 130.7 |
| Special metals and metal products.----- | 150.0 | ${ }^{3} 150.0$ | 149. 7 | 148.7 | 150.6 | 150.4 | 150.6 | 151.0 | 151.1 | 151.1 | 151.7 | 151.8 | 151.5 | 150.8 | 147.6 |
| Steel mill products ....-.-..-. | 187.6 | 187.6 | 187.6 | 187.6 | 187.6 | 187.7 | 188.1 | 188.3 | 188.3 | 188.3 | 188.3 | 188.3 | 188.3 | 188.2 | 185.1 |
| Machinery and equipmen | 159.7 | ${ }^{3} 159.7$ | 159, 3 | 159.4 | 159.4 | 159.4 | 159.6 | 159.8 | 160.5 | 160.4 | 160.4 | 160.3 | 160.1 | 158.5 | 155.2 |
| Agricultural machinery, includin | 150.5 | ${ }^{3} 150.5$ | 148.6 | 148.0 | 147.8 | 147.8 | 147.7 | 147.5 | 147.3 | 147.1 | 147.1 | 145.9 | 145.4 | 144.8 | 139.7 |
| Metalworking machinery | 189.7 | ${ }^{3} 189.4$ | ${ }^{3} 188.0$ | ${ }^{3} 187.7{ }^{3}$ | ${ }^{3} 186.5$ | ${ }^{3} 186.5$ | ${ }^{3} 186.5$ | 185.5 | 185.5 | 185.5 | 184.7 | 184.5 | 184.5 | 181.8 | 178.0 |
| Total tractors. | 158.9 | 158.9 | 157.4 | 156.9 | 156.9 | 155.9 | 155.8 | 155.8 | 155. 4 | 155. 2 | 154.9 | 155. 0 | 154.4 | 153.3 | 147.8 |
| Industrial valves | 201. 2 | ${ }^{3} 201.2$ | 202. 8 | 206.5 | 206.5 | 206.5 | 206.5 | 206.1 | 206.1 | 206.1 | 206.0 | 205.8 | 205. 7 | 196.9 | 178.7 |
| Industrial fittings | 121.7 | 121.7 | 122.4 | 122.5 | 121.9 | 125.4 | 125.4 | 144.6 | 145. 7 | 145.7 | 145.7 | 144.1 | 1144.1 | 139.0 | 137.3 |
| Antifriction bearings and components | 130.0 | 132.9 | 132.9 | 132.9 | 132.9 | 132.9 | 134.5 | 134.5 | 134.5 | 134.5 | 134.5 | 134.5 | 134.5 | 136.1 | 141.8 |
| Abrasive grinding wheels | 147.6 | 147.6 | 147.6 | 147.6 | 147.6 | 147.6 | 147.6 | 147.6 | 147.6 | 147.6 | 147.6 | 147.6 | 147.6 | 152.5 | 155.9 |
| Construction materials. | 130.0 | ${ }^{3} 130.3$ | 130.5 | 131.1 | 131.4 | 132.1 | 132. 9 | 133.9 | 134.3 | 134.5 | 135.0 | 135.2 | 134.9 | 134.6 | 130.5 |

[^49]Note: For a description of these serles, see Wholesale Prices and Price Indexes, 1958, BLS Bull, 1257 (1959).

Table D-5. Indexes of wholesale prices, ${ }^{1}$ by stage of processing and durability of product
$[1947-49=100]$

${ }^{1}$ See footnote 1, table D-8i
${ }^{2}$ Preliminary.
${ }^{2}$ Revised.

Note: For description of the serles by stage of processing, see New BLS Economic Sector Indexes of Wholesale Prices (in Monthly Labor Review, December 1955, pp. 1448-1453); and by durability of product and data beginning with 1947, see Wholesale Prices and Price Indexes, 1857, BLS Bull. 1235 (1958)

## E.-Work Stoppages

TABLE E-1. Work stoppages resulting from labor-management disputes ${ }^{1}$

| Month and year | Number of stoppages |  | Workers involved in stoppages |  | Man-days idle during month or year |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Beginning in month or year | In effect during month | Beginning in month or year | In effect during month | Number | Percent of estimated working time |
| 1935-39 (average) |  |  | 1,130, 000 |  | $16,900,000$$39,700,000$ | 0.27.46 |
| 1947-49 (average). | $\text { 2, } 573$ |  | $\begin{aligned} & 2,380,000 \\ & 3 \end{aligned}$ |  |  |  |
| 1945- |  |  |  |  | $38,000,000$ | .47 1.43 |
| 1946 | 4,985 |  | 4, 600, 000 |  | $\begin{array}{r} 116,000,000 \\ 34 \end{array}$ | 1.43.41 |
| 1947--- | 3, 693 |  | $2,170,000$$1,960,000$ |  |  |  |
| 1949 | 3,419 |  | $1,960,000$$3,030,000$ |  | $50,500,000$ | .37 .59 |
| 1950 | 4,843 |  | $2,410,000$ |  | 38, 800,000 | . 54 |
| 1951 | 4,7375,117 |  | $2,220,000$$3,540,000$ |  | $\begin{aligned} & 22,900,000 \\ & 59,100,000 \end{aligned}$ | . 23 |
| 1952 |  |  | . 57 |  |  |
| 1954 | 5,091 |  |  |  | 1, 530,000 |  | 28, 300, 000 | . 21 |
| 1955 | 3,4684,320 |  | 22,600,000 | . 21 |  |  |  |
| 1956. | 4,825 |  | $1,1,900,000$1,390000 |  | 33, 100, 000 | -. 29 |
| 1957. | 3, 673 |  |  |  | $16,500,000$ $23,900,000$ |  |
| 959: December | 112 | 285 | 23, 100 | 101, 000 | 1,430,000 | . 14 |
| 1960: January ${ }^{\text {8 }}$ | 200250 | 325 | 65,00070,000 | 140,000145,000 | 1,000,000 | . 11 |
| February ${ }^{2}$ |  | 400 |  |  | 1,500, 000 |  |
| March ${ }^{2}$ | 270 | 430 | 85, 000 | 140,000 |  | . 15 |
| April ${ }^{\text {a }}$ | 370400 | 530 | 110,000150,000 | 190,000225,000 | $1,500,000$$1,750,000$ | . 16 |
| May ${ }^{3}$ |  | 600 |  |  |  |  |
| June ${ }^{\text {a }}$ | 425325 | 650 | 190, 000 | 285, 000 | 2,750,000 | . 28 |
| July ${ }^{2}$ |  | 575 | 155, 000 | 250,000 | $2,150,000$$2,000,000$ | . 24 |
| August ${ }^{2}$ | 300 | 550 |  |  |  |  |
| September ${ }^{2}$ | 250 | 425 | 140,000120,000 | 210,000170,000 | 1, 750, 000 | . 19.19 |
| October ${ }^{2}$ |  | 450 |  |  | 1,750, 000 |  |
| November ${ }^{2}$ | $\begin{array}{r} 140 \\ 95 \end{array}$ | 375 300 | 70,000 | $\begin{array}{r} 110,000 \\ 80,000 \end{array}$ | $\begin{array}{r} 1,005,000 \\ 850,000 \end{array}$ | .11.09 |
| December ${ }^{2}$ | 95 | 30 |  |  |  |  |

${ }^{1}$ The data include all known strikes or lockouts involving 0 or more workers and lasting a full day or shift or longer. Figures on workers involved and man-days idle cover all workers made ide 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 idie as a result of material or service shortages.

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[^0]:    *Professor of Economics, Massachusetts Institute of Technology.
    1 Periods covered varied among countries according to availability of published information concerning strike experience. The rank designation of "low," "moderate," or "high" was necessarily arbitrary; the detailed report includes a discussion of the basis for such ranking. Wherever possible, the performance of the steel industry was ranked in a variety of comparable dimensions of strike activity (e.g., average duration, union membership and employee involvement ratios, union membership and employee loss ratios, average magnitude, etc.) in relation to the performance of other industries and/or the performance of "all industries" in the country. In addition, consideration was given to the relation of the strike experience of the steel industry in country X to the aggregate experience in the steel industries of all countries.

[^1]:    ${ }^{2}$ See Clark Kerr and Abraham Siegel, The Interindustry Propensity to Strike-An International Comparison, in A. Kornhauser, R. Dubin, A. M. Ross, editors, Industrial Conflict (New York, McGraw-Hill Book Co., Inc., 1954), pp. 189-212.

[^2]:    *Professor of Economics and Industrial Relations, University of Minnesota. ${ }_{1}$ The Facts About Non-Basic Steel (Non-Basic Steel Co-ordinating Committee, 1947), p. 12.
    ${ }^{2}$ George Seltzer, Pattern Bargaining and The United Steelworkers (in Journal of Political Economy, August 1951, pp. 319-331).
    ${ }^{3}$ A nonsteel unit is one which has a collective bargaining relationship with the USA but is not a primary steel producer.
    ${ }^{4}$ The key bargain is the current settlement of the basic steel industry which provides the basis for unionwide policy. In 1946, 1947, and 1948, the United States Steel agreement was taken to represent the key bargain; in 1949, the Bethlehem contract.
    ${ }^{5}$ Seltzer, op. cit., pp. 328-329.
    ${ }^{6}$ Ibid., p. 331.

[^3]:    ${ }^{7}$ In terms of membership, for example, it contains about 11 percent of the union's total and is at least twice as large as any other district. Industrially, it is sufficiently diversified to include the range of contexts in which the USA functions, and its membership is distributed between basic steel and nonsteel units in roughly the same proportion as for the union nationally.
    ${ }^{8}$ The relative distributions of basic steel and nonsteel USA membership in these areas reflect their contrasting industrial compositions. In 1959, for example, more than 80 percent of the membership of the Indiana Harbor subdistrict was employed in basic steel units; conversely, almost 95 percent of the West Side's membership was in nonsteel units.
    ${ }^{9}$ Local units are to be distinguished from interdistrict units. The latter involve multiplant companies (e.g., American Can), and their negotiations are usually conducted by a committee established by the international union. On the other hand, although the negotiations of the local units are ultimately reviewed by the international union, they are conducted in the first instance by a local union committee and its district staff representative. ${ }^{10} 1951$ did not involve a round of general wage adjustments, though it was in this period that the Wage Stabilization Board issued its General Wage Regulation 10 giving official cognizance to tandem or pattern adjustments.

[^4]:    ${ }^{11}$ See, for example, Collective Bargaining Negotiations and Contracts (Washington, Bureau of National Affairs, Inc.), p. 18: 69.

[^5]:    ${ }^{12}$ See Report of President's Steel Board of Inquiry, Oct. 19, 1959.
    ${ }^{13}$ The companies represented were Allegheny Ludlum, Armco, Bethlehem, Colorado Fuel \& Iron, Great Lakes Steel, Inland Steel, Jones \& Laughlin, Republic Steel, United States Steel, Wheeling Steel, and Youngstown Sheet \& Tube.

[^6]:    ${ }^{14}$ Section 2-B of the United States Steel agreement-the prototype clause in basic steel-defines local working conditions as ". . . specific practices or customs which reflect detailed application of the subject matter within the scope of wages, hours of work, or other conditions of employment and includes local agreements, written or oral on such matters."
    In addition, Section 2-B includes the following guideposts for the parties: (1) local working conditions shall not deprive an employee of his rights under the agreement; (2) local working conditions that provide benefits in excess of those established by the agreement shall remain in effect unless changed by mutual consent or unilaterally by the management in the event the "basis for the existence of the local working condition is changed or eliminated."
    ${ }^{15}$ See Report dated Oct. 19, 1959.
    ${ }^{16}$ For generally consistent findings regarding pattern bargaining in another context, see Harold M. Levinson, Pattern Bargaining: A Case Study of the Automobile Workers (in Quarterly Journal of Economics, May 1960, pp. 296-317).

[^7]:    ${ }^{1}$ Editor's Note: The recommendations presented here were made by the Long-Range Committee on January 13, 1961. For the duties of the LongRange Committee which were established in the 1959 agreement, see Monthly Labor Review, December 1959, pp. 1345-1346.

[^8]:    *Of the Division of Manpower and Employment Statistics, Bureau of Labor Statistics.
    ${ }^{1}$ The employment statistics in this article are based on the monthly survey of the labor force conducted by the Bureau of the Census for the Bureau of Labor Statistics. Data on income and education were collected as part of the annual program of Census Bureau supplements to that survey.

[^9]:    : Employment by occupation, age, and sex was first tabulated from the monthly labor force survey in 1951; therefore, changes discussed in this section are based on comparison of data for April of 1951 and 1960.

[^10]:    1 Percent not shown where base is less than $100,000$.

[^11]:    ${ }^{3}$ See Work Experience of the Population in 1959 (in Monthly Labor Review, December 1960, pp. 1272-1283).
    ${ }_{4}$ See Growth and Characteristics of the Part-Time Work Force (in Monthly Labor Review, November 1960, pp. 1166-1175).

[^12]:    ${ }^{1}$ Percent not shown where base is less than 100,000
    ${ }^{2}$ Not available.

[^13]:    ${ }^{5}$ See Educational Attainment of Workers, 1959 (in Monthly Labor Review,

[^14]:    ${ }_{1}^{1}$ Percent not shown where base is less than $200,000$.
    2 Less than 0.1 percent.

[^15]:    ${ }^{1}$ In the case of Steele v. Louisville and Nashville R.R. Co. (1944), the U.S. Supreme Court held that the union chosen by the majority must represent 'nonunion or minority union members of the craft without hostile discrimination, falrly, impartially, and in good faith."
    2 This is the "reasonable" period fixed by the Board for normal cases during which the existence of a collective agreement can prevent the holding of new elections.
    ${ }^{3}$ Section 8(a)(1).

[^16]:    - Chicopee Manufacturing Corp., 107 NLRB No. 31 (1953).
    ${ }^{5}$ Section 8(b) (1).

[^17]:    - Unless he has been dismissed for a good reason on the grounds of his illegal conduct during the strike. In one verdict, a judge declared workers to be guilty even though they had not taken part in acts of violence committed by the union but had failed to disassociate themselves publicly from them. ${ }^{7} 346$ U.S. 385, 488 (1953).
    ${ }^{8}$ A.F.L. v. Reilly (1944).

[^18]:    ${ }^{1}$ A more comprehensive account of this survey will be presented in forthcoming BLS Report 177, Wage Structure: Pressed or Blown Glass and Classware, May 1960.
    The study covered establishments employing 20 or more workers and primarily engaged in manufacturing (1) glass containers for commercial packing and bottling and for home canning and (2) other glass and glassware, pressed, blown, or shaped from glass produced in the same establishment. These are industries 3221 and 3229 (except textile glass fibers), respectively, as defined in the 1957 Standard Industrial Classification Manual prepared by the Bureau of the Budget.
    The straight-time hourly earnings presented in this article differ in concept from the gross average hourly earnings published in the Bureau's Monthly Hours and Earnings Series. Unlike the latter, the estimates presented here exclude premium pay for overtime and for work on weekends, holidays, and late shifts. In addition, establishments in this survey are weighted in accordance with their probability of selection from a regional-size class, and average earnings are calculated from the weighted data by summing individual hourly earnings and dividing by the number of such individuals. In the monthly series, the sum of the man-hour totals reported by establishments in the industry is divided into the reported payroll totals. The results from the monthly series give a greater weight to large establishments because of the nature of the sample. The monthly series, unlike this survey, includes glass textile fiber establishments and those of all sizes.
    ${ }^{2}$ The regions used in the study include New England-Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; Middle At-lantic-New Jersey, New York, and Pennsylvania; Border States-Delaware, District of Columbia, Kentucky, Maryland, Virginia, and West Virginia; Southeast-Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, and Tennessee; Southwest-Arkansas, Louisiana, Oklahoma, and Texas; Great Lakes-Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin; and Pacific-California, Nevada, Oregon, and Washington

[^19]:    ${ }^{3}$ Standard Metropolitan Statistical Areas, as defined by the U.S. Bureau of the Budget.

[^20]:    ${ }_{1}$ The studies were conducted between July 1959 and June 1960. Detailed findings are to be available in Wages and Related Benefits, 60 Labor Markets, 1959-60 (forthcoming BLS Bull. 1265-62).
    Six broad industry divisions were covered: Manufacturing; transportation, communications, and other public utilities; wholesale trade; retail trade; finance, insurance, and real estate; and selected service industries. Railroads were excluded in Baltimore, Buffalo, Cleveland, and Seattle. Municipally owned útilities were excluded, as were other government-owned establishments. Detailed area bulletins presenting areawide information for the six groups were listed on p. II of the July and September 1960 issues of the Monthly Labor Review.
    The estimates are based on data from approximately 9,300 establishments selected to represent 38,500 establishments employing 12 million workers. Coverage was limited to establishments with 51 or more workers except in 12 of the largest areas, where the minimum size was 101 employees in manufacturing, public utilities, and retail trade. For survey months for each area, see footnote 2, table 1.
    ${ }^{2}$ For areas surveyed, see table 4.

[^21]:    ${ }^{3}$ Distributions of workers by average hourly or weekly earnings are presented in the individual area bulletins.

[^22]:    "The minimum size of establishment "cutoff point" employed in the sur veys has the effect of excluding a larger proportion of establishments (and employments) in trade, finance, and service industries than in manufacturing or in public utilities.
    ${ }^{5}$ For an analysis of factors contributing to differences in earnings of men and women in the same job, see Job Pay Levels, Differentials, and Trends in 20 Labor Markets (in Monthly Labor Review, October 1959, pp. 1120-1127).
    ${ }^{6}$ Percentage increases are median area increases in the 20 areas surveyed in 1959. Years shown refer to fiscal years ending June 30 during which studies were conducted. The interval between studies is usually 12 months in each of the areas. The interval between studies was 15 months in Cleveland, 14 months in Newark and Jersey City, 13 months in Buffalo, Atlanta, Baltimore, Los Angeles-Long Beach, and Portland, Oreg., and 12 months in the other 13 areas.

    For methods and jobs used in compiling these data, see Area Wage Trends for Sclected Occupational Groups, 1952-55 (in Monthly Labor Reriew, November 1955, pp. 1251-1252).

[^23]:    ${ }^{7}$ These areas include Boston, New York City, Philadelphia, Atlanta, Dallas, Memphis, Chicago, Minneapolis-St. Paul, Los Angeles-Long Beach, Portland (Oreg.), and San Francisco-Oakland.

[^24]:    ${ }^{1}$ A more comprehensive account of this survey is presented in forthcoming BLS Report 180, W age Structure: Nonferrous Foundries, May 1960.

    The straight-time hourly earnings presented in this report differ in concept from the gross average hourly earnings published in the Bureau's monthly hours and earnings series. Unlike the latter, the estimates presented here exclude premium pay for overtime and for work on weekends, holidays, and late shifts. In addition, establishments in this survey are weighted in accordance with their probability of selection from a regionalsize class, and average earnings are calculated from the weighted data by summing individual hourly earnings and dividing by the number of such individuals. In the monthly series, the sum of the man-hour totals reported by establishments in the industry is divided into the reported payroll totals. The results from the monthly series give a greater weight to large establishments because of the nature of the sample.
    ${ }^{2}$ For definition of regions, see footnote 2, table 1.
    ${ }^{3}$ Chicago, Cleveland, Detroit, Los Angeles-Long Beach, Milwaukee, New York City, Newark and Jersey City, and Philadelphia.

    - The study covered nonferrous foundries (Industry Group 336 as defined in the Standard Industrial Classification Manual, 1957 edition, prepared by the U.S. Bureau of the Budget) employing eight or more workers at the time of reference of the universe data. Foundry departments of establishments producing castings for their own use were not included.
    ${ }^{5}$ Foundries and foundry departments of firms which used the castings in the manufacture of their finished products produced an additional 914 million pounds. See Current Industrial Reports, Series M 33-09 (U.S. Bureau of the Census). The separate establishments of these firms producing castings for interplant transfer were within the scope of the present occupational wage survey.

[^25]:    ${ }^{-}$Standard Metropolitan Statistical Areas as defined by the U.S. Bureau of the Budget.

[^26]:    ${ }^{1}$ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.
    ${ }_{2}$ For definition of regions, see footnote 2, table 1.

[^27]:    ${ }^{3}$ Includes data for regions in addition to those shown separately.
    4 Less than 0.05 percent.
    NOTE: Because of rounding, sums of individual items may not equal 100.

[^28]:    ${ }^{2}$ Excludes premium pay for overtime and for work on weekends, holidays, snd late shifts.
    2 For definition of regions, see footnote 2, table 1.

[^29]:    *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. ${ }^{1}$ Pittsburgh-Des Moines Steel Co. v. NLRB (C.A. 9, Nov. 15, 1960).
    ${ }^{2}$ Radio Officers Union v. NLRB, 347 U.S. 17 (1954). See also Monthly Labor Review, April 1954, pp. 432-434.
    ${ }^{3}$ Radio Officers Union $v . N L R B$, supra. In equating diminished group productivity with participation in a prolonged strike, the Board concluded that discrimination on the basis of lower group productivity was no different from discrimination on the basis of striking a protected activity.
    ${ }^{4}$ NLRB v. Mackay Radio and Telegraph Co. 304 U.S. 333 (1938); Local 200, International Brotherhood of Teamsters v. NLRB, 233 F. 2 d 233 (1956).

[^30]:    ${ }^{5}$ NLRB v. Lexington Electric Produzts Co. and Locals, International Brotherhood of Electrical Workers (C.A. 3, Sept. 29, 1960).
    ${ }^{0}$ See Monthly Labor Review, January 1960, p. 57.

[^31]:    7 Morrison-Knudson Co. v. NLRB, 276 F. 2d 63 (1960).
    ${ }^{8}$ In Communication Workers of America v. NLRB, 362 U.S. 479 (1960), the Court observed that the union was not found to have engaged in violations against the employees of any other employer other than the telephone company immediately involved, and that there was no significant evidence of a generalized scheme against all telephone employers.
    $\bullet$ NLRB v . International Longshoremen's and Warehousemen's Union, Local 10 (C.A. 9, Oct. 13, 1960).
    ${ }^{10}$ NLRB v. P. R. Mallory \& Co., 237 F. 2d, 437 (1946).

[^32]:    ${ }^{11}$ Novick v. Gouldsbery, 173 F. 2d 496 (1949).
    ${ }_{12}$ Pittsburgh Pipe and Coupling Co. v. Board of Review (Pa. Sup. Ct. W.D., Nov. 15, 1960).
    ${ }^{13}$ Bliley Electric Co. v. Unemployment Compensation Board of Review (Pa. Super. Ct., 45 A. 2d 898, 1946).
    ${ }^{14}$ Mee's Bakery, Inc. v. Unemployment Compensation Board of Review (Pa. Super. Ct., 56 A. 2d 386. 1948).

[^33]:    *Prepared in the Division of Wages and Industrial Relations, Bureau of Labor Statistics, on the basis of currently available published material.
    ${ }^{1}$ See Monthly Labor Review, November 1960, p. 1213.
    ${ }^{2}$ See Monthly Labor Review, December 1960, p. 1322.

[^34]:    ${ }^{3}$ See Monthly Labor Review, March 1959, p. 300.

    - See Monthly Labor Review, January 1961, p. 66.

[^35]:    ${ }^{5}$ See Monthly Labor Review, November 1960, pp. 1209-1210.
    ${ }^{6}$ See Monthly Labor Review, January 1961, p. 68.

[^36]:    ${ }^{1}$ This table is Included in the January, April, July, and October issues of the Review.
    Nore: The following applies, with a few exceptions, to the statistical series published in the Current Labor Statistles section: (1) The source is the U.S. Department of Labor, Bureau of Labor Statistics, (2) a description of each serles may be found in Techniques of Preparing Major BLS Statistical Series, BLS Bull. 1168 (1954), and (3) the scope of coverage is the United States without Alaska and Hawail. Exceptions are noted on the tables.

[^37]:    ${ }^{3}$ Unemployment as a percent of labor force.
    4 Includes persons who had a job or business but who did not work during the survey week because of illness, bad weather, vacation, or labor dispute. Prior to January 1957, also included were persons on layoff with definite Instructions to return to work within 30 days of layoff and persons who had new jobs to which they were scheduled to report within 30 days. Most of the persons in these groups have, since that time, been classified as unemployed.
    Note: For a description of these series, see Explanatory Notes (in Employment and Earnings, U.S. Department of Labor, Bureau of Labor Statistics current issues).

[^38]:    See footnotes at end of table.

[^39]:    ${ }^{1}$ Beginning with the August 1958 issue, figures for 1956-58 differ from those previously published because of the adjustment of the employment estimates to 1st quarter 1957 benchmark levels indicated by data from government social insurance programs. Statistics from 1957 forward are subject to 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 recelved pay for, any part of the pay period ending nearest the 15 th of the month. Therefore, persons who worked in more than 1 establishment during the reporting period are counted more than once. Proprietors, selfamployed persons, unpaid family workers, and domestic servants are excluded.

[^40]:    2 Preliminary.
    ${ }^{8}$ 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 Statisties 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.

[^41]:    See footnotes at end of table.

[^42]:    See footnotes at end of table

[^43]:    See footnotes at end of table.

[^44]:    ${ }^{1}$ See footnote 1, table C-3.
    Spendable a verage weekly earnings are obtained by deducting from gross average weekly earnings, Federal social security and income taxes for which the worker is liable. The amount of tax liability depends, of course, 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 primary value of the spendable series is that of measuring relative changes in disposable earnings for 2 types of income receivers.
    The computations of spendable earnings for both the worker with no dependents and the worker with 3 dependents are based upon the gross average

[^45]:    weekly earnings for all production workers in manufacturing without direct regard to marital status, family composition, or other sources of income.
    Gross and spendable average weekly earnings expressed in 1947-49 dollars indicate changes in the level of average weekly earnings after adjustment for changes in purchasing power as measured by the Bureau's Consumer Price Index.
    ${ }_{2}$ Preliminary.
    Note: For a description of these series, see The Calculation and Uses of the Spendable Earnings Series (in Monthly Labor Review, January 1959, pp. 50-54).

[^46]:    ${ }^{1}$ The Consumer Price Index measures the average change in prices of goods and services purchased by urban wage-earner and clerical-worker tamilies. 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.
    ${ }^{8}$ Includes eggs, fats and oils, sugar and sweets, beverages (nonalcoholic), and other miscellaneous foods.
    'In addition to subgroups shown here, total housing includes the purchase price of homes and other homeowner costs.

    - Includes yard goods, diapers, and miscellaneous items.
    - Revised.
    - Includes food, house paint, solld fuels, fuel oll, textlle housefurnishings, household paper, electric light bulbs, laundry soap and detergents, apparel

[^47]:    ${ }^{1}$ See footnote 1 , table $\mathrm{D}-1$. Indexes measure time-to-time changes in
    pricos of goods and services purchased by urban wage-earner and clericalWorker families. They do not indicate whether it costs more to live in one city than in another.

[^48]:    ${ }^{2}$ A verage of 46 cities.
    All items indexes are computed monthly for 5 cities and once every 3
    months on a rotating cycle for 15 other cities.
    ${ }^{4}$ Revised.

[^49]:    ${ }^{1}$ See footnote 1, table D-3.
    Preliminary.
    ${ }^{3}$ Revised.

