# Monthly Labor Review 

AUGUST 1963 VOL. 86 NO.

The 1963 ILO Conference
Employment of School-Age Youth
Job Mobility in 1961

## UNITED STATES DEPARTMENT OF LABOR

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# Monthly Labor Review 

Lawrence R. Klein, Editor-in-Chief<br>Mary S. Bedell, Executive Editor

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# The Labor Month in Review 

As the August 29 deadline for the railroads and the operating brotherhoods approached, whether there would be a strike, an agreement, or legislation on the work rules dispute in the railroad industry remained unclear.

In the face of a breakdown in collective bargaining, legislation was proposed by President Kennedy "after more than $31 \frac{1}{2}$ years of constant but fruitless attempts to achieve a peaceful settlement between the parties through every private and public means available."

In his message to the Congress on July 22, the President recommended that:
for a 2-year period during which both the parties and the public can better inform themselves on this problem and alternative approaches-interim work rules changes proposed by either party to which both parties cannot agree should be submitted for approval, disapproval, or modification to the Interstate Commerce Commission in accordance with the procedures and provisions of section 5 of the Interstate Commerce Act, the Commission being directed to use to advantage the work of the two previous panels which received evidence on these matters. At its discretion, the Commission may also appoint a Special Advisory Panel to assist it in the discharge of its functions. The Commission shall judge the effect of each proposed rule on the adequacy and safety of transportation service to the public and on the interests of both parties; and it shall, with the advice of the Secretary of Labor, require fair and equitable arrangements to protect the interests of the affected employees, giving proper weight to the protection provisions of section $5(2)$ (f) of the Interstate Commerce Act and those recommended by the Presidential Commission and Emergency Board reports. Emerging from the recommendations of these boards was the principle that, while many jobs would not be filled following the death, retirement, or voluntary transfer of the present occupants, every present employee with a significant attachment to the railroad industry would retain the right to his present employment or to comparable railroad employment at comparable pay. Provisions would also be made for rehiring priority, relocation expenses, displacement allowances, education and retraining grants, supplemental severance and retirement benefits, and other features.

Unlike compulsory arbitration, this method would preserve and prefer collective bargaining and give precedence to its solutions. But any strike or lockout designed to impose a rules change which has not been approved by the Commission or the parties, or to oppose one which has been approved, would be subject to the remedies of section 5(8) of the Interstate Commerce Act.

To give the Congress time to act on the ICC approach or other means of cooling or "shopping" the work rules hot boxes, the carriers postponed again the date for making the changes in work rules that they had first proposed in November 1959. In the initial hearings, before the House Commerce Committee, the railroads testified that legislation was the only peaceful way out of the dispute. The operating unions opposed the Presidential recommendations, equating them with compulsory arbitration, which they have steadily rejected in this dispute.
"Every private and public means available" to achieve settlement had, in the weeks just before the Administration's legislative proposal, included a procedure suggested by Secretary of Labor W. Willard Wirtz on July 5 calling for Assistant Secretary James J. Reynolds to assist the parties through a period of mediation, joint study of work rules, and, if necessary, arbitration. Neither this approach nor a request on July 9 by President Kennedy that the parties submit their dispute to Supreme Court Justice Arthur J. Goldberg for settlement was acceptable to the unions. Although there had been no mention of what techniques Justice Goldberg might use in peacemaking, in line with their stand on arbitration, the brotherhoods let it be known his assistance would not be welcome.

On July 10, the eve of the day the railroads had set for putting the new rules into effect and the unions had then set as their strike date, the President announced that the parties had agreed to a postponement until July 29. He asked a six-man subcommittee of his Advisory Committee on Labor-Management Policy to report to him by July 19 on the issues in dispute and the current positions of the parties which he would transmit to the Congress on July 22 with recommendations for legislation. Excerpts from the committee's report follow:

The carriers by their notices sought the right to remove all firemen (except in passenger service), contending that the work traditionally performed by firemen has almost entirely disappeared or could be performed by other employees. The brotherhoods contended that firemen are essential for safe and efficient operations as well as for relief of engineers and for training future engineers.

The Presidential Railroad Commission concluded that firemen 'are not so essential for the safe and efficient operation of road freight and yard diesels? ${ }^{?}$ that there should continue to be either a national rule or local rules requiring their assignment on all such diesels.' It recommended that firemen with less than 10 years' seniority be separated from service, with various provisions for severance pay,
retraining, and preferential hiring rights on other railroad jobs. Firemen with over 10 years' seniority were to be retrained with full job rights.

In its report, the Emergency Board concluded that there should be determination, by bargaining and by neutral proceedings, if necessary, of 'those situations, if any, which will continue to require the presence of a fireman in order to assure adequate safety, and to prevent placing an undue burden upon the remaining crew members.' The Board suggested negotiating a procedure whereby positions could be eliminated as they became vacant but which would permit the brotherhoods to question the elimination on the grounds of safety or undue burden. Disagreements would be settled by local negotiations, or, failing agreement, by a special referee procedure. All firemen-except those hired recently or those working only irregularly-were to continue in the employ of the carriers although firemen with less than 10 years' seniority could be transferred to other comparable jobs with an earnings guarantee. For those electing to withdraw from service, educational scholarships, retraining allowances, and separation allowances were recommended.

In the post-emergency Board negotiations, the brotherhoods made an offer to agree to a reduction in certain categories of jobs (on an attrition basis), which they said would include 5,500 such jobs of the approximately 32,000 firemen jobs in freight and yard service. The carriers rejected this offer for various reasons, among them that the conditions attached to it would reduce the number of jobs actually affected to only a few hundred.

Road and yard train service crews generally consist of one conductor and two brakemen. The carriers proposed a national rule to gain the 'unrestricted right' to determine appropriate crew consists; the brotherhoods sought a national rule establishing one conductor and two brakemen as a minimum crew in all instances.

The Presidential Railroad Commission concluded that a national rule establishing a procedure for determining undermanning or overmanning of train crews was justified.

The Emergency Board recommended the negotiation of national guidelines based upon safety, efficiency, and avoidance of undue burden, with any disputes concerning the application of these guidelines to be resolved by local bargaining and a special referee porcedure.

Based upon a proposal made by the Secretary of Labor on June 19, both parties have agreed in principle to a procedure for handling the problem. However, the brotherhoods proposed to limit its application to crew consist situations which deviate from the generally prevailing pattern of one conductor and two brakemen. The carriers indicated that the brotherhoods' modification would be acceptable if it did not apply to certain classes of service; they referred specifically to branch lines, secondary main lines, and main lines equipped with newly developed or automated control equipment.

Over the years a 'jurisdictional' distinction has developed with respect to the work to which road service and yard service crews are entitled. Three problems have been posed by this distinction: extending switching limits; road crews performing work in yards; and the discontinuing of yard engine assignments. The carriers sought the elimination of restrictions affecting their
operations in each of these areas. The brotherhoods maintained that any further combination of road and yard service should be prohibited unless sanctioned by local agreement.

The Commission found that present agreements concerning extending switching limits-agreements providing for arbitration-were working satisfactorily and should not be disturbed. However, it recommended that even where yard crews are on duty road crews should be permitted, subject to specific conditions to prevent abuse, to perform certain movement and switching operations in yards in connection with their own train. The Commission recommended that when a shift had less than 4 hours of yard engine assignment work for 10 consecutive days, it might be discontinued but that it must be restored according to the same formula.

The Emergency Board recommended the negotiation of a rule which would permit more flexible use of road and yard crews but which would preserve the basic distinctions reflected by separately existing seniority rights. Specific, negotiated rules to limit possible carrier abuse and to provide employee protection were also recommended. The brotherhoods continue to maintain that this issue should be handled locally, while the carriers feel minimum criteria should be developed as suggested by the Emergency Board.

The industry's pay structure is one of extreme complexity. Both parties sought to modernize the existing structure. In the aggregate, the carriers' proposals would have reduced their payrolls, the brotherhoods' proposals would have increased them.

The Commission found the present wage structure to contain 'widespread anomalies and inequities' together with 'unconscionable' disparities in hours on duty. A major revision of the wage structure was recommended and outlined in detail; continuous study by a standing joint committee was also proposed.

The Emergency Board proposed two modifications of the Commission's recommendations, a full 2 percent of current payroll be used to work out adjustments in the pay structure and provision be made to assure that 'incumbent employees will not be unduly (adversely) affected by the structural changes.'

The brotherhoods have indicated a willingness to discuss these issues. The carriers, having accepted the recommendations, take the view that further discussions on compensation issues cannot be undertaken until the firemen and other manning questions are resolved.
On the issues of manning self-propelled vehicles, interdivisional runs, protection for employees affected by technical change, mergers, consolidation, or similar change, the Committee reported that agreement might be reached once the foregoing issues are settled.
As this volume went to press, Secretary of Labor W. Willard Wirtz who had continued mediation attempts after submission of the proposed legislation, said that "Prospects of settlement. .. by bargaining depend on one side or the other making a new proposal."

# White-Collar Unionism in Western Europe 

> Editor's Note.-The article which follows is the second half of a paper dealing with the development of white-collar unions in Western Europe. The first part, which appeared in the July issue (pp. 765-771), covered the extent of white-collar unionism and analyzed the factors that have contributed to its growth in the postwar period.

Everett M. Kassalow*

## Structure of Nonmanual Unionism

The variety in thestructure of nonmanual unionism in Western Europe is considerable. Moreover, the forms of unionism and the bargaining patterns often differ from those we regard as normal in the United States, but not much more than do European manual union forms and practices. These differences, of course, reflect differences in the organization of the economy, traditions among employers (the previously noted greater role of employer associations as well as the absence of as many large corporate industrial units as in the United States), etc.

Austria and Germany. Even in those countries where most of the unionized white-collar employees have been organized within the central, traditional, once almost completely manualdominated labor federations, the forms of whitecollar unionism are quite varied. In Austria, for instance, the GAP is a separate affiliate of the Austrian Federation of Trade Unions and it covers white-collar workers throughout the private sector whether in banking, insurance, manufacturing, forestry, or what have you. On the other hand, within the German Federation of Trade Unions (DGB) the nonmanual employees are organized by the 16 basic industrial unions. Office and technical employees in the textile industry, for example, would be organized in the one textile union.

The DGB has unionized approximately 1.2 million white-collar employees in private and public employment. ${ }^{25}$ While many of them are in public employment, a few of the large industrial unions operating in the private sector
have made considerable progress in unionizing the white-collar workers in their jurisdictions. The giant German Metalworkers Union has a nonmanual membership of 147,000 and the Chemical, Paper and Ceramics Union has 50,000 nonmanual members. The DGB affiliate in the banking, commerce, and insurance field has 100,000 members.

Outside the DGB, there has existed since 1948 an independent union devoted to organizing white-collar workers across the board, i.e., in private and public employment, the Deutschen Angestellten Gewerkschaft (DAG) with a membership of over 460,000 . This union was born from the dissatisfaction of certain nonmanualworker groups within the DGB, with the major cause apparently being their resistance to the principle of making them part of the various industrial unions. ${ }^{26}$

There are, aside from the DGB and the DAG, several other organizations engaged in unionizing nonmanual employees in Germany. The most important of these is the Deutscher Beamtenbund, a union devoted to organizing only classified civil service employees. Its membership of around 660,000 is largely nonmanual.

[^0]Sweden. In some instances a separate federa-tion-separate, that is, from the traditional manual workers' federation-has unionized the bulk of the white-collar employees. In Sweden, the already-mentioned Swedish Central Organization of Salaried Employees (TCO) is the main center of white-collar unionization. Indeed, in Sweden even the professional employees-the so-called diploma or college graduate types-have organized a separate central federation.

The Swedish Federation of Trade Unions (LO), the manual workers' federation, has some nonmanual membership, including substantial numbers of lower level nonmanuals in commerce, in its Commercial Workers Union. ${ }^{27}$ LO also has organized a fair number of lower level nonmanuals in public employment, including many in communications. But LO seems never to have made a strong and concerted drive to organize nonmanuals generally. This, in turn, eventually helped pave the way for TCO, as a separate nonmanual federation.

The TCO is a combination of unions of a predominantly vertical or industrial character, along with a number of horizontal or craft unions. The largest TCO union is the Swedish Union of Clerical and Technical Employees in Industry, a vertical union which covers all types of office and in a few instances managerial employees in Swedish private industry outside of commerce or trade. This union has a 1963 membership of 135,000 , or around 30 percent of the entire TCO. On the other hand, the second largest union in the TCO is a craft type, the Swedish Union of Foremen and Supervisors, which takes in those categories of workers in private industries and numbers over 47,000 members. The Union of Commercial Employees in Sweden has jurisdiction over nonmanual workers in most of retail and wholesale trade. Other important craft unions in the TCO include the Swedish Nurses Association, the Swedish Union of Policemen, the Union of Noncommissioned Officers in the Defense Forces, and the Swedish Ship Officers Association.

SACO, the Swedish federation of professional or diploma employees' unions, has to a considerable extent grown up on the foundation of the country's various professional societies and associations. If one conceives of the American Pharmaceutical Association, the American Medical Association, or the Society of Archivists
explicitly taking on union and collective bargaining functions along with their professional tasks, he can begin to have a picture of SACO. In addition to promoting the professional interests of their members and their occupations, Swedish professional associations have gradually committed themselves "to safefuard the social and economic interests of the members" (from the constitution of the Swedish Medical Association). So far does the extent of union organization in Sweden go that the SACO includes one union that takes in clergymen. The great majority of these professionals, including doctors and clergymen, are employees of the state, and SACO's membership of 65,000 is concentrated primarily in public employment.

The recent establishment of a union covering doctors in the public hospitals to bargain with the City of New York is a somewhat similar development in our own country. Usually, of course, such professionals in the United States are selfemployed.

The Netherlands. In the Netherlands, where there are three main central labor movements-the Netherlands Federation of Trade Unions (the socialist-oriented NVV), the Netherlands Catholic Workers' Movement (Catholic-oriented KAB), and the National Federation of Christian Workers (Protestant-oriented CNV)-the forms of nonmanual unionism are even more varied. Thus in the NVV, the leading Dutch labor federation, by a clear-cut organizational decision at the end of World War II, nonmanual workers were slotted into their "appropriate" industrial unions; e.g., the nonmanuals in metal plants were "assigned" to the Metalworkers union. The NVV also established one central union, Mercurius, to cover all employees in commercial establishments as well as nonmanual workers who fall outside of the traditional industrial lines (for example, banks, insurance, private hospitals). The principle of organizing appropriate nonmanuals into their "industrial" unions has also been largely followed

[^1]by the CNV, but within the KAB, white-collar workers tend to be organized on craft lines.

Great Britain. The traditionally greater variety and overlapping in the forms of organization in British manual-worker unions tends to hold for nonmanual unionism. In describing the nonmanual affiliates of the British Trades Union Congress, the secretary of the TUC Nonmanual Workers Advisory Committee mentions three types of organization:

Horizontal: In which nonmanual employees irrespective of their industry are in the same union. Examples may be found in the Clerical and Administrative Workers' Union and the Association of Supervisory Staffs, Executives, and Technicians. The most successful union of this type is considered to be the Draughtsmen and Allied Technicians' Association.

Vertical: In which the clerical staffs may be in the same union as the manual workers whether skilled, semiskilled, or laborers, for example, National Union of Mineworkers and National Association of Theatrical and Kine Employees.

Occupational: In which nonmanual workers within an industry or service have separate unions-Transport Salaried Staffs Association, National Union of Bank Employees, Civil Service Clerical Association, etc. This type has by far the most nonmanual members in Britain. ${ }^{28}$

As an example of some of the overlapping, office employees in the nationalized coal industry are unionized in both the National Union of Mineworkers and the Clerical and Administrative Workers' Union, both affiliated to the TUC. ${ }^{29}$

One of the TUC's largest nonmanual-worker concentrations is in the Union of Shop, Distributive and Allied Workers (USDAW), which takes in both manual and nonmanual employees in the retail and wholesale trade field. In an earlier period much of USDAW's strength was based in the British co-op field. A number of the commercial employee union affiliates of predominantly manual-worker federations in Western Europe owe their origin, to an important extent, to traditional labor co-op ties. Unionization among the employees of cooperative stores and warehouses was (and is) almost an automatic affair.

[^2]Alongside of the TUC and its nonmanual affiliates, there are a number of important whitecollar independent unions in Great Britain. The largest of these is the National Association of Local Government Officers (NALGO), which has a membership in the neighborhood of $280,000 .{ }^{30}$ The National Union of Teachers, also an independent, has a membership of over 215,000. Several other independent unions, or staff associations as they are generally termed, are also operating in the national civil service.

Denmark. In Denmark, the unionized nonmanual employees are divided between the Danish Federation of Labor (LO), and a loosely organized, independent white-collar federation, the Federation of Civil Servants and Salaried Employees (FTF). Within the LO, three-fifths of whitecollar membership is concentrated in the Danish Union of Commercial and Clerical Employees (HK), with a membership of around 90,000 . HK is the second largest union in the LO and probably its fastest growing affiliate. HK takes in white collars in public as well as private employment, but over 70 percent of its members are in private employment and most of these are in trade. (Most of the public white-collar workers are in civil service unions, some in the LO and some in the FTF.)

The independent FTF is only a little more than 10 years old. It has a membership of around 125,000 , primarily in public employment. It includes a teachers union of around 20,000 , a nurses union of around 30,000 , and several important higher level civil service worker unions. The FTF has a thinly manned headquarters secretariat and has not yet developed into a federation comparable to the TCO in Sweden.

Some Danish white-collar workers are organized independently of both the FTF and the LO. A union of foremen and technicians, covering both public and private employment, numbers over 25,000. Most of these workers have moved up from a manual background; an early agreement by the LO with Danish employer associations not to take in foremen seems to account for the union's independent status.

Industrial Adaptation. Even where a single union covers all white-collar workers in the private sector, it commonly sets up divisions for
different industrial and/or occupational groups. Thus, the Austrian GAP, which covers the entire private white-collar sector, has six industry divisions: (1) Industry, including separate sections for metals, chemicals, construction, clothing, etc.; (2) commerce and trade; (3) banking; (4) private insurance; (5) social insurance (the Austrian social security system has a semipublic character and is not part of the general civil service system); and (6) agriculture and forestry.

The German DAG, which also covers the entire range of both public and private white-collar employment, organizes along similar functional lines, although it includes occupational groupings (technicians and foremen and supervisors) which the Austrian GAP has feared might encourage separatism. The DAG has the following sections: (1) Commercial and clerical; (2) banking; (3) insurance; (4) public service; (5) technicians; (6) mining; (7) shipping; and (8) foremen and supervisors. Each of these groups has its own full-time officers and staff and there are frequent meetings to decide on bargaining policy and the like.

Somewhat similar though less formal groupings can be observed in the British Clerical and Administrative Workers' Union. Thus, efforts are made to assist workers in the "engineering" (metal fabricating) industries or in coal to group together for bargaining.

## Union Organizing Tactics and Programs

Recognizing white-collar workers' tendency toward separatism in organization and the necessity to grant them some assurance of fuller representation, those manual workers' federations which are making serious efforts to urionize white-collar workers have tried to develop separate institutions or departments for them within the federation. Thus, the British TUC holds a separate annual conference for nonmanual affiliates and has a fulltime officer who works solely in the nonmanual field. ${ }^{31}$ The Dutch NVV, which is committed to to industrial unionism, has nevertheless established a special secretariat to coordinate all interunion nonmanual activities and problems. This secretariat attempts to present a clear white-collar view in NVV affairs, prepare special propaganda tracts to appeal to nonmanual workers, collect wage data on nonmanual occupations regardless
of industry and union, and so forth. In the German DGB, a top officer has responsibility for coordinating nonmanual worker activities and supervising a substantial white-collar section which undertakes studies on automation, collective bargaining, and vocational education as they affect nonmanual workers. This section has a staff of around 20 people in DGB headquarters.

Another approach to the unionization of nonmanuals was the proclamation by the Metalworkers affiliate of the DGB in the spring of 1959 of a "White-Collar Workers' Year," during which stepped-up organizing resulted in a white-collar membership gain of 13,945 .

Political Activities. Generally, nonmanual unionists tend to be less "political," or less apt to support or relate to the traditional labor-socialist party, than unionized manual workers. (The interest of nonmanuals in political issues as such, however, probably equals or exceeds that of the average manual worker.) In Great Britain, for example, where a union member may elect not to pay any union political levies, this practice of "contracting out" of such payments is more prevalent in nonmanual TUC affiliates. Moreover, a nonmanual union, even though part of the TUC, is a bit less likely to affiliate with the British Labor Party than is the average manual workers union; the National Union of Bank Employees is a good example. ${ }^{32}$

Both the Swedish TCO and the German DAG are neutral so far as political party ties are concerned, even though they take positions on specific political issues. Although the members of both these organizations clearly tend to be more conservative politically than manual unionists, some of their leaders come from or are personally sympathetic to the Socialist Party.

In Austria, the majority of the leaders of the nonmanual GAP may be personally committed and active Socialists, but they attribute the more successful unionization of nonmanuals since World

[^3]War II in part to the formal depoliticalization of the Austrian Federation of Trade Unions. ${ }^{33}$ This formal political nonpartisanship made it easier to take in all groups of the work force, including the Catholics who had been strong among the whitecollar groups in the pre-Dolfuss era.

Special White-Collar Appeals. It is difficult to generalize about tactics and propaganda, but there seems to be fair agreement among European union leaders that some significant changes in traditional union practices and appeals are necessary if white-collar employees are to be successfully organized. Thus, appeals must be more individually tailored than the general classsolidarity types of propaganda which were effective with manual unionists. Merit rating systems and individual types of adjustment are more acceptable to some groups of nonmanual employees than has been the case with nonmanuals.

It is, of course, possible to exaggerate the differences in the appeals of unionism as between manuals and nonmanuals. A leading Dutch sociologist has concluded that in today's Welfare State, all union members, manual as well as nonmanual, look to their unions with "less desire for all-round improvement than for individual advantages." ${ }^{34}$ That is, members appear more and more to be seeking a shift of union emphasis from collective to individual aspirations.

Probably white-collar worker aspirations help account for the special programs of vocational education which some European white-collar unions have developed. The German DAG, for example, runs a large number of permanent vocational educational training institutes designed to improve and upgrade the skills of partici-pants-members and nonmembers. The DGB sponsors competitive tests to determine individual excellence in selected white-collar activities (typing, shorthand, bookkeeping, etc.). These competitions are open to members and nonmembers, and the winners may even gain a trip to Paris!

[^4]The British National Union of Bank Employees runs successful jazz sessions for its younger members, while the Austrian GAP owns two schools which also serve as beautiful ski resorts in the winter.

These are examples of the way in which whitecollar unions are trying to "individualize" their membership appeal.

In a somewhat different vein are the impresive technical publications which the Draughtsmen's Union of Great Britain puts out for its members, and indeed for technicains in all British industry. It has issued dozens of studies on such subjects as The Fundamentals of Jig Design, Screw Propeller Design, and Horsepower of Leather Belts. The publications of this union have become standards in the technical field.

The important wage research which many white-collar unions have undertaken to meet the individual needs of their members will be discussed in connection with collective bargaining.
On a tactical level, the relatively large number of women among the white-collar work force is also compelling many European unions to rethink some of their appeals and programs. The 1962 annual convention of the British Trades Union Congress heard no fewer than "nine reports of importance primarily to women in unions. The reports covered such subjects as nurses' training, needlework competitions, and the selection of Sandra MacDonald of the Union of Post Office Workers as the 'Trades Union Teen-Age Personality Girl. ' ${ }^{35}$ (The fact that Dame Anne Godwin, general secretary of the Clerical and Administrative Workers' Union, was completing her term as president of the TUC may have helped to account for this emphasis upon women's affairs!)

## Collective Bargaining, Wages, and Strikes ${ }^{36}$

For the most part, bargaining structures and patterns for white-collar workers tend to follow those practiced in the manual-worker field. Where a high degree of centralization in bargaining has developed, as in Sweden, centralized patterns also tend to follow in white-collar union bargaining; in fact, the bargaining structure in the Swedish manufacturing sector is in some ways even more centralized for white-collar employees than for manuals. The two key white-collar unions, the Swedish Union of Clerical and Technical Employ-
ees in Industry (SIF) and the Swedish Foremen's Association (SAF), negotiate a central bargain for all white-collar employees in all manufacturing. By contrast, manual workers are bargained for on an industrywide basis, as metals, textiles, chemicals, etc.

In other countries where industrywide bargaining between national unions and associations has become the pattern, as in the British engineering industries, unions covering the clerks and draftsmen have also negotiated national agreements with the appropriate employers' associations. In Germany, in the private sector of the economy, the pattern of bargaining is largely set by the large industrial unions, many of which negotiate separately with industrywide employers' associations for the white-collar workers and the manual workers. Where plural unionism has been the prevailing practice, as in The Netherlands and France, it is common for more than one union to have representation rights in a given white-collar unit.

While it is difficult to generalize, it is my imimpression that, until now and with some exceptions, key economic bargaining power in almost every western European country rests with the manual unions and/or the manual federations (if there is a separate white-collar federation). Under these circumstances, the white-collar unions, so far as general economic movements are concerned, tend to be followers rather than leaders. Whether this is due primarily to the greater militance of the manual workers' unions, their longer experience, and their greater numerical strength is difficult to say. Strong demand for blue-collar workers in the postwar labor market, with its great emphasis upon the reconstruction and reequipment of European industry and the later expansion in consumer durable markets, also helps account for the manual unions' bargaining leadership.

Wage Structures. The stronger economic impact of the manual unions is in part accounted for by the special character of white-collar wage bargaining in the private sector. In nearly every country, one finds that white-collar wages are more individualized, or less standardized, than manual workers' wages.
At the extreme of this individualized approach is the Swedish SIF, which maintains:
. . . every employee should receive a salary equivalent to his proficiency, position, education, age, and years of service. No schedule of salary rates for employees exists in Swedish industry; instead, salaries are determined quite individually. This does not mean, however, that SIF is inactive when it comes to improving salary conditions for its members. Collective bargaining takes place each year in almost every company where the salaried employees are ${ }^{*}$ organized.
Under this system, each year (or 2 years as the case may be) a central bargain is made which specifically recognizes that additional individual increases (a significant percentage on the average) will be negotiated at each work place thereafter. These negotiations and adjustments are based upon individual merit, length of service, special skills, and so forth. If the plant-level negotiations do not produce agreement, the matter may be taken up in central negotiations. To back up the local negotiations, comprehensive salary surveys and classification studies are made by the unions; furnishing one's own salary data is a virtual condition of membership in the SIF. The union is thus able to guide the individual in negotiations by indicating to him what are the prevailing levels for given jobs in given areas, etc. In some ways, this comprehensive wage work gives the union a greater hold on membership interest than the manual-worker unions can command in negotiating general scales. ${ }^{38}$

The British Draughtsmen's union also makes extensive wage surveys to assist its members in negotiating at the local level. Recently the Draughtsmen installed an advanced electronic data-processing system to help keep up with its wage analyses. ${ }^{39}$

In the United States, where there is a relatively large concentration of engineering and technical personnel in private employment, although unionism has only barely begun among these employees, one can already discern a special emphasis upon wage research. The existence of individual merit systems, which result in individual as against uniform wage rates, makes the provision of such data a major service function for engineering

[^5]unionism. As white-collar unionism develops further in the United States, one can probably anticipate the growth of the wage research function in the unions that cater to white-collar employees. ${ }^{40}$

Returning to SIF's approach to wage bargaining, one should note that this union represents something of an extreme, even in Sweden, inasmuch as no general occupational scales are sought. In other Swedish white-collar bargaining (for example, in commerce as well as in government), there are standardized salary schedules-though again not as standardized as for manual work. ${ }^{41}$

While most European white-collar unions do not go as far as the SIF in accepting an individual salary structure, many accept and weigh in factors which individualize the salary schedule considerably. Frequently, only job minimums are negotiated across the board, and beyond this a variety of "individual" factors affect the employee's wage. For example, under Dutch collective agreements, a white-collar employee's salary depends not only upon what branch of industry he works in and what class of job he holds, but also on sex, age and/or seniority, and merit rating. The degree of union participation or control in the merit rating process varies widely. The use of individual merit rating, age factors, and male/female distinction are fairly widespread in European white-collar salary schemes.

Regular longevity increases are quite common for banking employees. In Great Britain, for instance, there is provision for regular wage increases (to some extent related to job advancement) between ages 17 and 31 . The National Union of Banking Employees has accepted this custom, though it seeks some changes in the progression pace, scale, etc.

As the economies of Western Europe increase their dynamism, some concern is emerging that the rigidities imposed by systems which depend

[^6]so considerably upon longevity make it difficult to recruit younger personnel into some jobs. Several banking and insurance company executives expressed this concern to me in recent years.

Strikes. Whether for reasons of outlook or tradition, strikes and strike action tend to be considerably less practiced or accepted among most unionized white-collar workers than among manuals. ${ }^{42}$ This holds true even in some cases where white-collar workers are organized in the same union as the blue; the German Metalworkers Union is a good example. No one in that union expects strike action on the part of white-collar workers even when the manual workers go out. Because of their predominantly manual-worker background, foremen and technicians may be a little closer to the manuals in their acceptance of strike action.

In Austria, on the other hand, there appears to be no significant distinction between the manuals and nonmanuals so far as strike techniques and policies are concerned. The situation in Great Britain seems to vary with the union; thus the Draughtsmen, with a strong sense of craft pride and a large number of members who have been apprenticed and upgraded from the manual ranks, appears to be as militant as any other union in the TUC. Unions like those covering bank employees and clerical workers seem, however, to lay less emphasis on strike action.

Where the nonmanuals are in a separate federation, as in Sweden, strike action becomes more complicated. The TCO refers to:
. . . the very difficult intermediary position occupied by salaried employees in the event of dispute. Theoretically, salaried employees in large industrial enterprises have the same right as manual workers to come out on strike. But the result of such a strike would be that the manual workers of the enterprise would immediately be plunged into unemployment and this, in many cases, rules out the possibility of strike action. Manual workers, on the other hand, need not have such inhibitions. The employers cannot lay off salaried employees in the event of a labor dispute; and it is stipulated in salaried employees' agreements that their wages cannot be reduced until a strike has been proceeding for at least 3 months-and even then not below 60 percent of the normal amount, a further condition being that working hours are reduced accordingly. Under their agreements, salaried employees are, in principle, neutral in the event of a labor dispute, nor are they obliged to carry out work causing a strike. ${ }^{43}$

Considerable emphasis must be given to the fact that under no circumstances are white-collar employees expected to perform the work of manuals who are on strike. In Great Britain, too, while the white-collar unions follow a policy of making no "common cause" with blue-collar strikes, they are careful to avoid any taking on of struck blue-collar work.

In a variety of forms, with some borrowing from the past experience of manual unions along with improvisation of new forms and policies, European white-collar workers are taking to unionism in increasing numbers. Underlying social, economic, and political forces in Western Europe, and the very successes of the white-
collar unions in the past decade, support the proposition that this latest wave of organization will continue to mount. Some of the same underlying forces, such as the accelerated growth in the white-collar occupations and the growing importance of collective representation in national social and economic decisionmaking are also operating to the same end in the United States. Recent successes of a number of U.S. whitecollar unions seem to foreshadow developments similar to those in Western Europe, although a more deeply rooted tradition of individualism, as well as differences in labor market conditions and labor law, may produce a somewhat slower pace of white-collar union growth in the United States.

## Special Labor Force Reports

Editor's Note.-The following two articles are parts of a series of reports on special labor force subjects. Recent articles in the series include Labor Force and Employment, 1960-62; Educational Attainment of Workers, March 1962; Multiple Jobholders in May 1962 (all in the May 1963 issue of the Monthly Labor Review); High School Graduates and Dropouts, 1962; and Economic Status of Nonwhite Workers, 1955-62 (both in the July 1963 issue). Offprints of all articles in the series, including in most cases additional detailed tables and an explanatory note, are available upon reguest to the Bureau or to any of its regional offices (listed on the inside front cover of this issue).

## Job Mobility in 1961

Gertrude Bancroft and Stuart Garfinkle*

American workers in the past have readily moved to new jobs and to areas where opportunities were bright. Some of these changes were voluntary, some due to the disappearance of old ways of making a living. In recent years, it has been argued that job mobility is on the decline and that workers are no longer mobile enough to accommodate to changing labor market demands, in part because of the holding power of seniority rights and fringe benefits.

The extent of job changing and the reasons for change were examined in a national survey covering the year 1961, which also provided the basis for comparison with a 1955 survey, the only previous one covering the entire labor force. During 1961, some 8 million workers- 10 percent of the number who worked-shifted from one employer to another, some within the same community, some to distant States. In 1955, about the same proportion changed jobs. There is no clear evidence, therefore, that this type of mobility has been significantly reduced.

The 8 million job changers in 1961 included persons who lost their jobs through layoff or
business failure, as well as those who changed jobs to improve their status or for various personal reasons.

About 40 percent of the job changers lost no time between jobs, and another 25 percent who did have to look for another job were at work again within 4 weeks. One-third of all the job shifts were made to improve status, one-third because a job was lost, and the remaining third for such reasons as the ending of a temporary job, illness, or other personal reasons. Thus, a substantial amount of job mobility was voluntary and involved no serious loss of working time.

The present study shows the amount and character of job mobility that occurred during 1961, a year when recovery from the 1960-61 recession began, but also a year when over 13 million persons who worked were unemployed at some time. The survey, conducted in February 1962 by the Bureau of the Census for the Bureau of Labor Statistics, was similar to one conducted by the Census Bureau for 1955. ${ }^{1}$ Besides identifying persons who changed employers during the year, the survey attempted to find out the reasons for job changes, the nature of each job, including earnings, and the amount of unemployment between jobs. This information was then related to the personal characteristics of the job changers.

[^7]This study of mobility uses two different types of measures of mobility but only one basic criterion for determining if a job change has taken place: If a person worked for two different employers at two different times, he is counted as having two different jobs. ${ }^{2}$ Persons who changed occupations but worked for the same employer are not considered job changers in this study. The mobility measures are: (1) a count of all persons who changed jobs at least once during the year and who never had two jobs at the same time-called "job changers"; (2) a count of all changes from one employer to another-called "job shifts." Since any person could have several different job shifts, the number of job shifts is greater than the number of job changers.

## Job Mobility in 1961 and 1955

The proportion of persons who changed jobs was about the same in 1955, when the employment situation was very good, and in 1961, a year of high unemployment. Eleven percent of the workers changed jobs in 1955 and 10 percent in 1961 (table 1). The overall rate for men was 11 percent in 1961 and 12.5 percent in 1955 ; the 1961 rate was lower in each age group except those 65 years and over, but the differences were small. For women, however, the overall rate was

Table 1. Rate of Job Changing, by Age and Sex, 1955 AND 1961
[Numbers in thousands]

| Age and sex | Worked in 1961 |  |  | Worked in 1955 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Persons who changed jobs one or more times |  | Total | Persons who changed jobs one or more times |  |
|  |  | Num- | Percent of total |  | $\underset{\text { Ner }}{\text { Num- }}$ | Percent of total |
| Total, 14 years and over. | 80,287 | 8,121 | 10.1 | 75,353 | 8,366 | 11.1 |
| Male, 14 years and over | 49, 854 | 5, 509 | 11.0 | 47, 624 | 5,940 | 12.5 |
| 14 to 17 years. | 2,926 | 261 | 8.9 | 2, 541 | 328 | 12.9 |
| 18 and 19 years | 1,946 | 457 | 23.5 | 1,618 | 444 | 27.4 |
| 20 to 24 years. | 4,507 | 1,101 | 24. 4 | 3,509 | 976 | 27.8 |
| 25 to 44 years | 21, 062 | 2,630 | 12.5 | 21, 516 | 2,825 | 13.1 |
| 45 to 64 years.... | 16, 512 | 960 | 5.8 | 15,331 3,109 | 1,262 | 8.2 |
| 65 years and over. | 2,901 | 100 | 3.4 | 3, 109 | 105 | 3.4 |
| Female, 14 years and over.- | 30, 433 | 2, 612 | 8. 6 | 27, 729 | 2,426 | 8.7 |
| 14 to 17 years.-------- | 2, 044 | 118 | 5.8 | 1, 663 | 179 | 10.8 |
| 18 and 19 years | 1,789 | 397 568 | 22.2 | 1,508 | 314 | 20.8 |
| 20 to 24 years. | 3,476 | 568 | 16.3 | 3,367 | 501 | 14.9 |
| 25 to 54 years | 17,995 | 1,348 | 7.5 | 16, 932 | 1,278 | 7.5 |
| 55 to 64 years. | 3,782 | 156 | 4.1 | 3,067 | 131 | 4.3 |
| 65 years and over | 1,347 | 25 | 1.9 | 1,192 | 23 | 1.9 |

Table 2. Job Shifts Per 100 Persons Who Worked, by Reason for Shift, Age, and Sex, 1955 and 1961

the same in both years and, in the 18 to 24 age group, slightly higher in 1961.

The chief difference between 1955 and 1961 was the increase in job changes following a job loss. Conversely, fewer job changes were made in 1961 for voluntary reasons or to improve a job situation, as the job shift rates presented in table 2 show. In 1955 , job shifts to improve status were much more important than those due to loss of job for both men and women under 45 . In 1961, these voluntary shifts occurred at about the same rate as the involuntary shifts for men, but for women they continued to exceed the job loss rates.

Job shifts, both voluntary and involuntary, were at peak rates in 1955 and 1961 in the age groups 18 to 24 years. The most dramatic change between 1955 and 1961 was the drop in the rate of voluntary job shifts for young men in this age group-from almost 19 per 100 employed to 14 per 100 . Job shifts because of loss of job rose, but only moderately-from 11 to 13 per 100 . This suggests that a reduction in the level of economic activity may have had its greatest effect in reducing voluntary job changing.

## Economic Status of Job Changers

Voluntary job mobility in the United States is often cited as a reason for the higher unemployment rates here than in other industrialized countries. But the 1961 study shows that voluntary

[^8]job changing was not a major factor in unemployment that year. Over 13 million persons who worked were unemployed at some time during 1961, but only 2 million, or 15 percent, were looking for work in connection with a voluntary job change (table 3). In 1955, when job opportunities were much greater, 23 percent of workers unemployed during the year were looking for work while voluntarily changing jobs. ${ }^{3}$

Unemployment rates are always highest for young people, in part because they lack the skills to command steady jobs and the seniority to protect them against layoffs. Another reason for their high rates, however, is that they are shopping for jobs as they start their work careers. Some 35 percent of the young people 18 to 24 years of age who both worked and looked for work in 1961 had some unemployment in connection with job changing (table 4). This compares with 29 percent of the unemployed workers 25 to 44 years and 20 percent for workers 45 to 64 years.

While some unemployment might be expected when a job change is made, about 60 percent of the persons who made only one job change during the year had no unemployment between jobs (table 5). Of those who made only one change and whose change was made to improve status, about 80 percent had no unemployment; of those changing for this reason who were unemployed, only 8 percent were out of work for 15 weeks or more. Job changers who lost their jobs had longer periods of unemployment; about one-fifth were unemployed for 15 weeks or more.

Job Changing by Color. Although job mobility rates for white and nonwhite workers are not

[^9]Table 3. Job Mobility of the Unemployed, 1955 and 1961
[Numbers in thousands]

| Mobility status of unemployed | 1961 |  | 1955 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\underset{\text { ber }}{\text { Num- }}$ | Percent | Num- ber | Percent |
| Total unemployed who worked during year. | 13, 420 | 100.0 | 9,814 | 100.0 |
| Did not change jobs during year | 9, 682 | 72.1 | 6,149 | 62.7 |
|  | 3,738 | 27.9 | 3,665 | 37.3 |
| Lost job-- | 1,783 | 13.3 | 1,448 | 14.8 |
| Changed jobs for other reasons | 1,955 | 14.6 | 2,217 | 22.6 |

Table 4. Job Mobility of the Unemployed, by Age, 1961

| [Numbers in thousands] |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mobility status of unemployed | Total | $\begin{aligned} & 14 \text { to } \\ & 17 \\ & \text { years } \end{aligned}$ | $\begin{gathered} 18 \text { and } \\ 19 \\ \text { years } \end{gathered}$ | $\begin{aligned} & 20 \text { to } \\ & 24 \\ & \text { years } \end{aligned}$ | 25 to 44 years | 45 to 64 years | 65 years and over |
| Total unemployed who worked during year-.. | 13, 420 | 583 | 1,212 | 2,187 | 5,649 | 3, 467 | 322 |
| Job changers. Percent | $\begin{array}{r} 3,738 \\ 27.9 \end{array}$ | $\begin{array}{r} 120 \\ 20.6 \end{array}$ | $\begin{array}{r} 424 \\ 35.0 \end{array}$ | $\begin{array}{r} 801 \\ 36.6 \end{array}$ | $\begin{array}{r} 1,654 \\ 29.3 \end{array}$ | 693 20.0 | 44 13.7 |

greatly different, nonwhite job changers have more difficulty locating other jobs (table 6). About 55 percent of nonwhite males who changed jobs were unemployed between jobs compared with about 45 percent of the white job changers. Similarly, some 60 percent of the nonwhite men had to look for 5 weeks or more before finding a second job compared with only 50 percent of the white men. Nonwhite women job changers were unemployed longer than white women, although the percent with unemployment was about the same.

Earnings of Male Job Changers. The most valid earning comparisons are for men who worked full time on their first and second jobs and earned between $\$ 40$ and $\$ 150$ a week on their first jobsabout 8 out of 10 in the full-time group. Onethird of these men earned more on their second job than on their first, and about one-half were in the same earnings group although there were substantial variations among the various earnings classes. Men whose earnings on their first job were relatively low were able to increase their earnings more readily than were those in the higher earnings groups. Fifty-eight percent of the males who earned $\$ 40$ to $\$ 59$ a week on their first job and had no unemployment between jobs earned more on their second job, compared with only 16 percent of those whose first job paid between $\$ 100$ and $\$ 150$ a week (table 7). Even among those who were unemployed between jobs and who presumably had a harder time finding a new job, about onefourth got better paying jobs, and one-half stayed in the same earnings group.

## Age Patterns of Mobility

The overall mobility rate for men reaches a peak in the age group 18 to $24 ; 1$ in 4 of those who worked during 1961 changed jobs at least once.

Table 5. Weeks of Unemployment for Persons Changing Jobs Only Once, by Reason for Change, 1961

| Reason | Percent with unem-ployment | Weeks of unemployment |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Total | 1 to 14 weeks | 15 weeks or more |
| Total | 39.9 | 100.0 | 86.6 | 13.4 |
| Job loss_- | 62.4 | 100.0 | 80.9 | 19.1 |
| Improvement in status... | 21.4 | 100.0 | 92.2 | 7.8 |
| Termination of temporary job.-.-- Other reasons | 43.2 45.6 | 100.0 100.0 | 92.3 88.9 | 7.7 |
|  | 45.6 | 100.0 | 88.9 | 11.1 |

${ }^{1}$ Includes illness, household and school responsibilities, fired, retired, other reasons, and reasons not reported.

Thereafter, the rate falls off rapidly. (See chart 1.) The proportion of job shifts that are made to improve status continues to rise through age 44 and slightly exceeds the proportion due to loss of job. After age 45, loss of job becomes a far more important reason for job shift. (See chart 2.)

For women, the overall mobility rate is at a peak among 18 - and 19 -year-old workers, 1 in 5 of whom changes jobs during the year. The proportion of job shifts made to improve status is fairly steady at about 30 percent from 18 up to age 55 . Except for job changers 55 years and over, loss of job is a less important reason for job shifting.

Pattern for men. The age pattern of mobility provides a revealing measure of work career development. Among boys 14 to 17 years old, about 1 out of 10 changed jobs one or more times during 1961. Jobseeking for these boys is not as serious a problem as it is for older men. Many are still in school and depend on parents for support. Of those who changed jobs, about 7 out of 10 changed jobs only once during the year. Many of these-about 4 out of 10 made the change directly from the first to the second employer, without any loss of working time. Even when boys did lose time in changing

Table 6. Weeks of Unemployment for Job Changers, by Color and Sex, 1961

| Duration of unemployment | Men |  | Women |  |
| :---: | :---: | :---: | :---: | :---: |
|  | White | Nonwhite | White | Nonwhite |
| Total job changers (thousands) | 4,884 | 625 | 2,335 | 277 |
| Percent with unemployment. | 46.2 | 55.4 | 43.1 | 46.6 |
| Total with unemployment | 100.0 | 100.0 | 100.0 | 100.0 |
| 1 to 4 weeks... | 50.2 | 37.3 | 61.1 | 48.8 |
| 5 weeks or more. | 49.8 | 62.7 | 38.9 | 51.2 |

jobs, about half did not look for work at all between jobs. Boys in these age groups are usually getting their first experience in the job market, and because school attendance is, by far, their most important activity, their jobs are usually part time and casual.

The work pattern of 18 - and 19 -year-old boys, most of whom are no longer in school, reflects a period of adjustment to the job market. About one-fourth of those who did any work during 1961 changed jobs during the year. Among the new entrants to the work force, many are not trained

Table 7. Earnings of Male Job Changers Who Worked Full Time on Both Jobs, by Unemployment Status, 1961
[Percent distribution]

| A verage weekly earnings on first job and unemployment status | Earnings on second job |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Total | Lower earnings group | Same earnings group |  |
| Total |  |  |  |  |
| Total ${ }^{1}$ | 100.0 | 18.2 | 48.5 | 33.3 |
| \$40 to \$59 | 100.0 | 8.7 | 44.6 | 46.7 |
| \$60 to \$79 | 100.0 | 16.3 | 41.4 | 42.3 |
| \$100 to \$149 | 100.0 | 24.8 23.6 | 43.1 | 34.1 |
| No Unemployment Between Jobs |  |  |  |  |
| Total | 100.0 | 13.7 | 46.4 | 39.9 |
| \$40 to \$59. | 100.0 | 5.7 | 36.6 | 57.6 |
| \$60 to \$79 | 100.0 | 13.0 | 36.0 | 51.0 |
| \$80 to \$99 | 100.0 | 19.9 | 38.3 | 41.8 |
| \$100 to \$149 | 100.0 | 17.1 | 67.3 | 15.6 |
| Some Unemployment Between Jobs |  |  |  |  |
| Total | 100.0 | 23.3 | 50.9 | 25.8 |
| \$40 to \$59 | 100.0 | 12.3 | 54.3 | 33.3 |
| \$60 to \$79 | 100.0 | 19.4 | 46.6 | 34.0 |
| \$80 to \$99 | 100.0 | 29.8 | 44.0 | 26.2 |
| \$100 to \$149. | 100.0 | 32.0 | 57.4 | 10.6 |

${ }^{1}$ All persons whose weekly earnings on their first job were less than $\$ 40$ were grouped into one category, Similarly, all persons in the $\$ 150$ or more category on their first job were grouped together. As a result, it was imposable to tabulate the number whose earnings might have been in a lower or higher category on their second job, and therefore no totals can be shown for sill job changers.
in a skill and thus have little to offer prospective employers. Consequently, they may find it necessary to make several job changes looking for a job which will provide adequate pay and opportunity for advancement. Relatively few boys marry and begin to raise families at this age and so they are able to change jobs even if it means a fairly sustained period of unemployment. Many of the job changes among boys, however, are not voluntary. Newly hired persons are often the first to be laid off in employment cutbacks; those
with relatively little education are usually unskilled workers who are particularly subject to layoffs.

The work patterns of 20 - to 24 -year-old men are generally similar to those of the 18 - and 19 -yearolds, although there are some differences. Of the older group, about 85 percent who lost time between jobs looked for work, compared with only 75 percent of the 18 - and 19 -year-olds. The 20 - to 24 -year-olds also made more job changes during the year. Greater mobility may reflect increased social pressures and family responsibilities as well as better knowledge of the labor market.

Job changing decreases from a peak among men 20 to 24 years old; by the time men reach their late fifties, mobility declines to a small fraction of the level of the early twenties. Among men 55 to 64, only 1 out of 25 changed jobs in 1961. Seniority

[^10]rights and the accumulation of fringe benefits probably hold men of 55 or over on the job. ${ }^{4}$ Moreover, the difficulties of making advantageous job changes at this age and the problems of finding a new job discourage job changing. A high proportion of older men lose worktime during job changes and they tend to be unemployed between jobs for a somewhat longer time than younger men. At this age also, loss of jobs becomes more important as a reason for job changing. Fifty-six percent of all job changes made by men 55 to 64 years old are made because they lost their jobs, compared with 41 percent among men 25 to 54 years old. Undoubtedly some of the reduction in mobility in the 55 -to-64-age group is associated with the fact that many older men leave the work force if they lose their jobs. They are not counted among job changers simply because they cannot or do not find employment.
Job changing among men 65 years old and older is less frequent than among any other age group,

## Chart 1. Job Changing in 1961

[Job changers as percent of persons with work experience]

but there is evidence that many of these older workers are working in temporary jobs to supplement retirement income. Among men 65 years old and over, about 2 out of 10 job changes were caused by the termination of a temporary job compared with less than 1 out of 10 among men 25 to 54 years old.

Pattern for Women. Only about 8.5 percent of all women who worked during 1961 changed jobs compared with 11 percent of men, and fewer of them changed jobs more than once during the year. There were, nevertheless, many similar tendencies in the career patterns of men and women as reflected in job mobility data. Frequent job changes characterize the beginning of a work career for women. These data also seem to reflect the typical labor force entry patterns of young persons, many of whom are still in school. Vacation and part-time after-school jobs are com-
mon, and job changes are frequently associated with the termination of a summer or other vacation job.

Almost 1 out of 4 girls 18 and 19 years old who worked in 1961 changed jobs during the year. The most important reason for changing was to get a better job. About 7 out of 10 who changed jobs during the year made only one change and about one-third lost no work time in changing jobs. Those who looked for work between their first and second job spent a relatively short time in their job hunt- 7 out of 10 had a new job within 4 weeks.

Studies of job mobility of this type measure only short-range job changes. Other significant job changes among women over 20 years of age are separated by a period of years, since they leave their jobs to raise families and reenter the work force after their children become less dependent. The annual rates of job changing shown in this

Chart 2. Reasons for Leavins Jobs
[Percent distribution of changes, by reason]


Job Loss $\times$
Improvement
Termination of Temporary Job $\triangle$

Table 8. Mobility Rates and Reasons for Job Changes, by Occupation and Sex, 1961

| Major occupation group of longest job | Job changers |  |  | Job shifts |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rate of job changing (percent of persons who worked in 1961) | Percent who looked for work |  | Total | Reason for job shift (percent distribution) |  |  |  |
|  |  | $\begin{aligned} & 1 \text { to } 4 \\ & \text { weeks } \end{aligned}$ | 5 weeks or more |  | Lost job | Improvement in status | Termination of temporary job | Other ${ }^{1}$ |
| Jobs left by men. | 11.0 | 22.9 | 24.3 | 100.0 | 37.5 | 33.7 | 10.9 | 18.0 |
| Professional, technical, and kindred workers Farmers and | $\begin{aligned} & 8.5 \\ & 1.9 \\ & 4.7 \end{aligned}$ | 17.4 | $\begin{gathered} 11.9 \\ { }_{(2)}^{17} 7 \end{gathered}$ | $100.0$ <br> ${ }^{2}$ ) | 25.0 | 42.4 | 11.1 | 21.5 |
| Managers, officials, and proprietors, except farm |  | 17.0 |  |  | 34.5 | 39.643.8 | 6.4 | 19.4 |
| Clerical and kindred workers.---------- | 9.113.0 | 24.4 | 23.2 | 100.0 | $18.1$ |  | 14.8 | 23.319 |
| Sales workers_............-.............. |  | 24.3 | 26.2 | 100.0 |  | 54.8 28.3 | 8.2 |  |
| Craftsmen, foremen, and kindred workers | 13.3 | 24.8 28.0 |  | 100.0 100.0 | 56.2 39.4 | 37.0 | 6.8 | 16.8 |
| Private household workers.--..- | ${ }^{(2)} 12.1$ |  | ${ }^{(2)}$ | ${ }_{(2)} 100$ |  |  | 12.5 |  |
| Service workers, except private household |  | 17.4 | $\begin{aligned} & 35.0 \\ & 18.5 \\ & 31.0 \end{aligned}$ | $\begin{aligned} & 100.0 \\ & 100.0 \\ & 100.0 \end{aligned}$ | 21.8 | 36.7 |  | 29.0 |
| Farm laborers and foremen. | 15.216.4 | 16.8 |  |  | $\begin{aligned} & 15.0 \\ & 47.3 \end{aligned}$ | $\begin{aligned} & 21.0 \\ & 23.8 \end{aligned}$ | $\begin{array}{r} 47.6 \\ 8.8 \end{array}$ | 16.420.0 |
| Laborers, except farm and mine |  | 23.3 |  |  |  |  |  |  |
| Jobs left by women. | 8.6 | 26.0 | 17.5 | 100.0 | 20.6 | 30.0 | 17.1 | 32.2 |
| Professional, technical, and kindred workers | $\begin{aligned} & 8.3 \\ & 1.9 \\ & 5.5 \end{aligned}$ | 19.7 | 11.2 | 100.0 | 16.8 | 23.3 | 23.6 | 36.3 |
| Managers, officials, and proprietors, except farm |  | (2) | $\begin{gathered} (2) \\ 17.0 \\ 14.7 \end{gathered}$ | ${ }^{(2)}$ | -----1.--- | $3 .-\cdots$37.0 | 15.022.0 | 35.020.9 |
| Clerical and kindred workers...---- | 10.1 | 29.7 |  | 100.0 |  |  |  |  |
| Sales workers.-- | 8.6 | 33.2 |  |  | 20.2 |  |  |  |
| Craftsmen, foremen, and kindred worker | 4.48.8 | (2) |  | $\begin{aligned} & 100.0 \\ & (2) \\ & 100.0 \end{aligned}$ |  |  |  | $\begin{aligned} & 27.9 \\ & 30.5 \\ & 42.4 \\ & 10.1 \end{aligned}$ |
| Operatives and kindred workers. |  | 22.4 | 24.9 |  | 35.6 | 27.1 | 9.5 |  |
| Private household workers.-.-.-........ | 3.6 | 20.5 | 23.0 | 100.0 | 25.8 | 32.9 | 10.8 |  |
| Service workers, except private household Farm laborers and foremen. | $\begin{array}{r} 12.0 \\ 5.3 \end{array}$ |  | ${ }_{(2)}^{18.8}$ | 100.0 | 17.1 | 31.1 9.7 | 9.4 72.9 |  |
| Laborers, except farm and mine. | 10.6 |  | (2) | ${ }_{(2)} 100$ |  | 9.7 |  |  |

${ }^{1}$ Includes illness, household or school responsibilities, fired, retired, and reason not reported.
study, nevertheless, provide valuable information about job mobility of women. The decline in the tendency for women to change jobs as they grow older parallels that for men. The fact that the most important single reason for job changing in 1961 among women 20 to 54 was to get a better one contrasts with the situation among men, where loss of job became a more important reason for changing jobs than improvement in status after age 35 . Some of this difference is associated with differences in the economic pressures on men and women. For example, women who lose their jobs can often leave the job market if a satisfactory reemployment opportunity does not turn up. Some women also take a longer time to look for a new job. A study covering job changes in 1 year does not include any women who lost their jobs during the year without finding new jobs during that year; for this reason, these data probably understate the mobility rate for women.

## Mobility by Occupation and Industry

Job mobility information for the various occupation groups gives another dimension to knowledge of the nature of work in the occupations.
${ }^{2}$ Percent not shown where base is less than 100,000 .

Except among construction workers, who are a special group, job shifts tend to be most frequent in those occupations which require little training and education. In contrast, jobs which require much training are usually more stable and the number of these jobs is expanding. Furthermore, as the trained employee acquires experience on the job he steadily becomes more valuable to his employer.

Occupations of Job Changers. Professional and technical work is one of the most rapidly expanding occupational fields. About 9 percent of the men whose longest job in 1961 was in these occupations changed jobs during the year. Of all the job changes made by male professional and technical workers, about 40 percent were made to improve status and only 25 percent because of job loss (table 8). Only 30 percent of the men in this occupation group who changed jobs were unemployed between jobs compared with almost 50 percent of all men who changed jobs.

About 5 percent of the men whose longest job was in the "manager, official, and proprietor" group changed jobs in 1961. This low rate of change among the managerial group probably
results from several circumstances. One is that men in this occupational group are older than in most other groups and therefore less prone to change jobs; another is that this group is a sort of occupational elite in which status and job satisfaction are quite high. Improvement in status was the most important reason for changing jobs among the male managerial group. Nevertheless, one-third of the job shifts were made because a job was lost, and one-third of the job changers had some unemployment between jobs.

The two largest major occupation groups of men-craftsmen and operatives-have many similar mobility characteristics. About 13 percent of the men in each of these occupations changed jobs during 1961. More of the job shifts of craftsmen in 1961 were related to job losses, how-ever- 57 percent compared with only 39 percent for operatives. A large proportion of craftsmen are employed in the construction industry where employment for many workers requires moving from one job to another as some projects end and others begin.

Although job changing is generally less common among women than among men, this is not true for professional workers. In this occupation
group, where a large investment in training and the availability of relatively high paying jobs leads to a high degree of attachment to the work force, about 8 percent of all women changed jobs in 1961-about the same as among men in the professions.

A much lower proportion of the job shifts by women professional workers was made to improve status than among men. A higher proportion of shifts by professional women, largely teachers and nurses, were made because of the termination of a temporary job.

An occupation group with a higher mobility rate for women than for men was that of clerical workers-the largest major field of employment for women. Improvement in status was the most important reason for leaving jobs among women in clerical work. Undoubtedly the large number of alternative job opportunities for women in this occupation group was important in this connection.

Patterns of Industry Mobility. Many of the considerations which affect job mobility among workers employed in the various industries have already been discussed. Some aspects of job

Table 9. Mobility Rates and Reasons for Job Changes, by Industry and Sex, 1961

| Major industry group and class of worker of longest job | Job changers |  |  | Job shifts |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rate of job changing (percent of persons who worked in 1961) | Percent who looked for work |  | Total | Reason for job shift (percent distribution) |  |  |  |
|  |  | $\begin{aligned} & 1 \text { to } 4 \\ & \text { weeks } \end{aligned}$ | 5 weeks or more |  | Lost job | Improvement in status | Termination of temporary job | Other ${ }^{1}$ |
| Jobs left by men. | 11.0 | 22.9 | 24.3 | 100.0 | 37.5 | 33.7 | 10.9 | 18.0 |
| Agriculture | 9.1 | 16.9 | 18.7 |  | 16.9 | 23.7 | 43.7 | 15.6 |
| Nonagricultural industries | 11.3 | 23.5 | 24.8 | 100.0 | 39.6 | 34.7 | 7.5 | 18.2 |
| Wage and salary workers....-..... Forestry, | 12.3 15.9 | 24.0 | 25.3 39.1 | 100.0 100.0 | 39.3 41.4 | 34.8 28.0 | 7.5 13.0 | 18.4 |
| Construction...-- | 25.0 | 25.2 | 25.7 | 100.0 | 66.0 | 17.4 | 4.6 | 12.0 |
| Manufacturing. | 9.7 | 25.6 | 26.1 | 100.0 | 41.9 | 36.8 | 3.7 | 17.6 |
| Transportation and public utilities | 8.2 | 24.2 | 27.3 | 100.0 | 33.7 | 33.5 | 9.1 | 23.7 |
| Wholesale and retail trade. | 14.2 | 26.1 | 23.4 | 100.0 | 26.7 | 43.9 | 7.3 | 22.1 |
| Service..... | 12.1 | 19.8 | 23.4 | 100.0 | 19.1 | 46.3 | 13.4 | 21.3 |
| Public administration... | 6.6 | 14.4 | 24.9 | 100.0 | 25.0 | 31.5 | 20.6 | 23.0 |
| Self-employed and unpaid family workers | 4.3 | 13.9 | 16.7 | 100.0 | 47.8 | 32.0 | 7.6 | 12.7 |
| Jobs left by women. | 8.6 | 26.0 | 17.5 | 100.0 | 20.6 | 30.0 | 17.1 | 32.2 |
| Agriculture.. | 5.2 | 14.3 | 8.0 | 100.0 | 9.9 | 9.0 | 68.9 | 12.2 |
|  | 8.8 9.4 | 26.5 26.9 | 18.0 18.2 | 100.0 |  |  |  |  |
| Wage and salary workers.-.-.... Forestry, fisheries, and mining |  |  | ${ }^{(2)}$ |  |  |  |  |  |
|  | (2) 8 | ${ }^{(2)}$ | ${ }^{(2)}$ | ${ }^{(2)}$ |  |  |  |  |
| Manufacturing. | 8.5 | 25.1 | 26.2 | 100.0 | 35.3 | 29.6 | 7.2 | 28.0 |
| Transportation and public utilities. | 9.0 | ${ }^{(2)}$ | ${ }^{2}$ ) | 100.0 | 12.7 | 14.2 | 17.9 | 55.2 |
| Wholesale and retail trade.- | 11.9 | 28.5 | 21.4 | 100.0 | 19.7 | 33.6 | 14.2 | 32.5 |
| Service. | 8.7 | 26.0 | 13.4 | 100.0 | 15.9 | 33.4 | 15.1 | 35.5 |
| Public administration. | 6.8 |  | ${ }_{(2)}^{(2)}$ | 100.0 | 13.8 | 21.1 | 36.7 | 28.4 |
| Self-employed and unpaid family workers | 3.6 | (2) | (2) | 100.0 | 34.3 | 21.3 | 23.1 | 21.3 |

[^11]Table 10. Pattern of Job Shifts, by Occupation Group of Job Left and Sex, 1961
[Percent distribution]

| Major occupation group of job left and sex | Number ${ }^{1}$(thousands) | Pattern of job shift |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Same occupation and industry | Same occupation, different industry | Same industry, different occupation | Different occupation and industry |
| Job shifts by men. | 7,539 | 100.0 | 33.5 | 17.6 | 10.0 | 38.9 |
| Professional, technical, and kindred workers | 497 | 100.0 | 41.6 | 23.1 | 5.8 | 29.4 |
| Farmers and farm managers.--............ | 50 |  |  |  |  |  |
| Managers, officials, and proprietors, except farm | 360 381 | 100.0 100.0 | 26.5 16.3 | 12.0 16.0 | 18.7 | 42.7 50.7 |
| Sales workers.................. | 532 | 100.0 | 28.6 | 16.9 | 12.2 | 42.2 |
| Craftsmen, foremen, and kindred workers | 1,654 | 100.0 | 53.1 | 14.5 | 8.8 | 23.6 |
| Operatives and kindred workers. | 1,753 | 100.0 | 25.3 | 25.1 | 10.1 | 39.5 |
| Private household workers-....-.......- | ${ }^{5}$ | (2) |  |  |  |  |
| Service workers, except private household | 609 | 100.0 | 30.9 | 17.3 |  |  |
| Farm laborers and foremen...-.-...--- | 515 1,184 | 100.0 | 45.7 22.3 | 19.3 | 6.0 9.5 | 48.2 49.0 |
| Laborers, except farm and mine. | 1,184 | 100.0 | 22.3 | 19.3 | 9.5 | 49.0 |
| Job shifts by women | 3,329 | 100.0 | 34.7 | 21.3 | 9.9 | 34.2 |
| Professional, technical, and kindred workers. | 314 | 100.0 | 66.0 | 9.2 | 3.8 | 21.0 |
| Farmers and farm managers-...-...-............. | 76 |  |  |  |  |  |
| Clerical and kindred workers............. | 1,076 | 100.0 | 23.9 | 46.5 | 7.3 | 22.2 |
| Sales workers........ | 327 | 100.0 | 29.0 | 4.0 | 22.0 | 45.1 |
| Craftsmen, foremen, and kindred workers | 24 | ${ }^{(2)}$ |  |  |  |  |
| Operatives and kindred workers....-.-. | 485 | 100.0 | 43.6 |  |  | 83.3 |
| Private household workers..............- | 176 693 | 100.0 100.0 | 7.3 40.1 | 3.4 12.1 | 2.2 13.7 | 87.1 34.1 |
| Service workers, except private household Farm laborers and foremen............ | 693 130 | 100.0 100.0 | 40.1 55.5 | 12.1 | 13.7 1.6 | 43.1 |
| Laborers, except farm and mine. | 28 | ${ }^{(2)}$ |  |  |  |  |

${ }_{2}$ Percent not shown where base is less than $\mathbf{1 0 0 , 0 0 0}$.
changing, however, are specific to the individual industries.

The construction industry, for example, had the highest rate of job changing of all the industry groups. About 1 out of 4 male construction workers changed jobs during 1961 (table 9). Some 55 percent of the construction workers who changed jobs in 1961 made more than one job change during the year compared with only 37 percent of all workers. Most of these job changers found their new jobs in the construction industry, even though about two-thirds of all job changes resulted from job losses. This pattern of frequent job changing with strong attachment to the industry is unique to construction where jobs are often of short duration, but where relatively high wage rates prevail. Workers who change jobs in construction tend to be older than job changers in other industries. Many older job changers may stay in the industry because they are unable to find suitable alternative job opportunities in another, more stable industry.

In 1961, more men were employed in manufacturing industries than in any other major industry group. About 1 out of 10 workers in this industry changed jobs during the year. Loss of a job was the most important reason for job shifting in this industry; 42 percent of the
job changes were made for this reason, as compared with 37.5 percent for all workers.

At 14 percent, the rate of job changing in wholesale and retail trade is exceeded only among construction workers and agricultural wage and salary workers. Improvement in status was the most important reason for changing; over twofifths of all changes were made for that reason.

Women employed in trade had the highest rate of job changing among the major industry groups. Over half of the changes made by these women were to jobs in the same major industry group. The most important reason for changing jobs was for improvement in status-about 1 out of 3 .

Stability of Occupation and Industry. A worker's attachment to his occupation is somewhat more stable than to the industry in which he works, according to the 1961 study. Comparison of the occupation and industry group of each job shows that 51 percent of the job shifts made by men and 56 percent of those made by women involved no change in major occupation group (table 10). Only 44 percent of the shifts made by men and women involved no change in industry. Perhaps because men find a wider range of occupations than women, the proportion of job shifts involving

Table 11. Percent of Job Shifts to Same Occupation and Industry Group, by Industry Group of Job Left and Sex, 1955 and 1961

| Major industry group of job left and sex | Same occupation group |  | Same industry group |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1961 | 1955 | 1961 | 1955 |
| Job shifts by men | 51.0 | 45.8 | 43.5 | 34.1 |
| Agriculture | 43.0 | 31.6 | 45.9 | 26.2 |
| Nonagricultural industries ${ }^{1}$ | 51.9 | 47.9 | 43.3 | 35.2 |
| Wage and salary workers | 52.9 | 48.5 | 43. 7 | 36. 2 |
| Construction... | ${ }^{68.3}$ | 61.3 | 63. 2 | 46.9 |
| Manufacturing | 50.7 | 46.1 | 37.5 | 33.5 |
| Durable goods. | 52.9 | 47. 0 | 41.8 | 38.1 |
| Nondurable goods. | 47.1 | 44.0 | 30.4 | 23.5 |
| Transportation and public utilities | 48.4 | 44. 4 | 34.0 | 21.0 |
| Wholesale and retail | 45.2 | 43.1 | 43.5 | 41.6 |
| Service and finance | 48.7 | 42.5 | 30.5 | 26.9 |
| Public administration | 39.9 | 45.6 | 24.2 | 19.5 |
| Job shifts by women | 56.0 | 50.4 | 44.5 | 39.6 |
| Agriculture | 54.5 | 47.5 | 54.5 | 41.1 |
| Nonagricultural industries ${ }^{1}$ | 56.0 | 50.6 | 44.1 | 39.4 |
| Wage and salary workers | 56.7 | 51.3 | 44. 3 | 39.9 |
| Manufacturing | 66.4 | 57.2 | 42.4 | 39.9 |
| Durable goods. | 73.4 | 58.2 | 35.6 | 42.7 |
| Nondurable goods | 62.1 | 56, 3 | 46.5 | 37.5 |
| Wholesale and retail trade | 48.0 | 46. 9 | 56.7 | 51.3 |
| Service and finance. | 76.8 | 49.7 | 35.9 | 32.7 |
| Public administration | ${ }^{(2)}$ | 64.1 | ${ }^{(2)}$ | 22.3 |

${ }^{1}$ Includes wage and salary workers in industries not shown separately as well as self-employed and family workers.
2 Percent not shown where base is less than 100,000 .
changes in both occupation and industry was higher for men than for women- 39 versus 34 percent.

Professional men and craftsmen had the highest degree of occupational stability, as might be expected from their investment in training and the current demand for workers with specific skills. Managers and proprietors, on the other hand, were more likely to shift to other occupational groups, chiefly clerical and sales, when they changed jobs. It would appear that opportunities for other jobs as managers and proprietors are not so readily available. Clerical workers and nonfarm laborers also tend to move to other occupational groups but there was no particular pattern in their job shifts.

Women in professional and technical occupations, like men, have a strong occupational attachment; 75 percent of their job shifts were to other professional and technical jobs. But women who are clerical workers (including stenographers and secretaries) also tend to stay in the
same group when they change jobs even though their industrial mobility is high. About 70 percent of the clerical job shifts involved no change in occupation but about the same proportion involved a shift to another major industry group. Job shifts by sales workers and private household workers were frequently to other occupation and industry groups; sales workers often shifted to clerical work, and private household workers to other types of service jobs in commercial establishments.

Although it gives no certain evidence of a permanent decline in the general mobility of the labor force since 1955, the 1961 study shows a definite increase in the occupational and industrial stability of job changers (table 11). Shifts were more likely to be to jobs in the same occupation or industry in 1961 than in 1955. It is not clear whether the increasing stability reflects a fundamental change in workers' attitudes or simply the difference between two phases of the business cycle. Both studies show that job shifts made to improve status are more likely to involve a change in occupation and industry than are those made because jobs have been lost. As we have seen, job shifting to a better job was more frequent in 1955 than in 1961.

Ideally, a country's labor force should adjust smoothly to changing needs for skills and changing locations of demand for workers. With a minimum of frictional loss, workers then could and would shift from declining areas, industries, and occupations to those that are growing. In practice, however, the specific interests of employers and workers may not coincide with the interests of the economy as a whole. Just how much mobility is desirable and what types of job shifts lead to the optimum pattern are questions that cannot be answered with present knowledge. Perhaps if most job shifts were voluntary, and all workers who lost their jobs found equally good or better ones in a short period of time, the operation of the labor market could be considered highly satisfactory.

# Employment of School-Age Youth, October 1962 

Carl Rosenfeld*

Unemployment among young persons under 25 years of age continued to be a pressing economic and social problem in October 1962, even though the total was somewhat below the peak level reached a year earlier. As a result of the general improvement in economic activity, unemployment in this age group decreased 150,000 over the year to 1.2 million, with all the decline occurring among persons no longer enrolled in school. About 875,000 of the jobless were not in school. A 10-percent expansion in the number of working students to 3.6 million brought total employment of the 14 to 24 age group to 11.8 million. Over the year, an increase in the number of persons in these ages enrolled in school led to the rise in employment, as there was no change in the labor force participation rate or in the number and proportion unemployed. On the other hand, the stability in the total number of nonstudents in the labor force mirrored the stability in the population of that age group.

The information in this article on employment and unemployment among young people in and out of school is derived from supplemental ques-
tions to the monthly survey of the labor force conducted by the Bureau of the Census in October 1962 for the Bureau of Labor Statistics. ${ }^{1}$

## Unemployment

Of the 1.2 million young persons 14 to 24 years old who were looking for work in October 1962, 300,000 were still enrolled in school; the remainder had either quit school or graduated from high school or college (table 1).

Unemployment was much more prevalent in October among school dropouts than among young persons who had graduated at least from high school. One-third of the nonstudents under 25 years of age in the labor force had not completed high school, but they comprised a much greater proportion, one-half, of all the unemployed in the age group. ${ }^{2}$

[^12]Table 1. Employment Status of Students and Nonstudents 14 to 24 Years Old, by Age and Sex, October 1960-62
[Numbers in thousands]

| Employment status | $1962{ }^{1}$ |  |  |  |  |  | 1961 |  | 1960 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 14 to 17 years |  |  | 18 to 24 years |  |  | 14 to 17 years | 18 to 24 years | 14 to 17 years | 18 to 24 years |
|  | Both sexes | Male | Female | Both sexes | Male | Female |  |  |  |  |
| Total noninstitutional population.------------ | 12,811 | 6,492 | 6,319 | 17, 570 | 8,788 | 8,782 | 12,280 | 17,158 | 11,389 | 16,392 |
| Enrolled in school. |  | 6, 032 | 5,708 | 3,869 | 2,389 | 1,480 | 11,163 | 3,419 | 10, 242 | 3,167 |
|  | 1,787 20.2 | 1,437 23.8 1,5 | 840 16.5 | 1,495 38.6 | 1,044 43.7 | $\begin{array}{r}451 \\ 30.5 \\ \hline\end{array}$ | 2,252 20.2 | 1,299 38.0 | 2,227 21.7 | 1,167 36.7 |
|  | 2,187 | 1,317 | 870 | 1,375 | 965 | 410 | 2, 042 | 1,213 | 2, 601 | 1,089 |
| Agriculture-- | 404 | , 298 | 106 | 159 | 54 | 5 | + 462 | 77 1,136 | - 521 | 45 1,044 |
| Nonagricultural industries | 1,783 | 1,091 | 764 | 1,316 | 911 | 405 | 1,580 | 1,136 | 1,540 | 1, 044 |
| Unemployed Unemployment rate ${ }^{3}$.. | 190 8.0 | 120 8.4 | 70 7.4 | 120 8.0 | 79 7.6 | 41 9.1 | 210 9.3 | 86 6.6 | 166 7.5 | 74 6.4 |
| Not enrolled in school. | 1,071 | 460 | 611 | 13,701 | 6,399 | 7,302 | 1,117 | 13,739 | 1,147 | 13,225 |
| Armed Forces...-- | 51 | 51 |  | 1,417 | 1,399 | 18 | 62 | 1,329 | 49 | 1,329 |
| Civilian labor force. | 539 | 304 | 235 | 8,610 | 4,767 | 3,843 | 616 | 8,614 | 680 | 8,233 |
| Labor force participation rate ${ }^{2}$ | 52.8 | 74.3 | 38.5 | 70.1 | 95.3 | 52.8 | 58.4 | 69.4 | 61.9 | 69.2 |
|  | 451 | 258 | 193 | 7,824 | 4,358 | 3,466 | 489 | 7,710 | 549 | 7,468 |
| Agriculture-.-.-.-.-.--- | 102 | 86 172 | 16 | 548 7,276 | 438 3,920 | 110 3,356 | 141 <br> 348 | 657 7,053 | 1408 | 6,786 |
|  | 88 | 46 | 42 | 786 | 409 | 377 | 127 | 904 | 131 | 765 |
| Unemployment rate ${ }^{3}$ | 16.3 | 15.1 | 17.9 | 9.1 | 8.6 | 9.8 | 20.6 | 10.5 | 19.3 | 9.3 |

[^13]${ }^{2}$ Percent of civilian noninstitutional population in the labor force.
${ }^{2}$ Percent of civilian labor force who were unemployed.

Table 2. Unemployment Rates for Persons 18 to 24 Years Old, ${ }^{1}$ by Color, Sex, and Years of School Completed, March 1962

|  | [Percent of | civilian la | force] |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Color and sex | Years of school completed |  |  |  |  |
|  | Elementary school |  | High school |  | College |
|  | $\begin{aligned} & \text { Less than } \\ & 8 \text { years } \end{aligned}$ | 8 years | $\begin{aligned} & 1 \text { to } 3 \\ & \text { vears } \end{aligned}$ | 4 years or more | $\begin{aligned} & 1 \text { year } \\ & \text { or more } \end{aligned}$ |
| Whit ${ }^{\text {Total }}$ | 20.4 | 19.5 | 17.6 | 9.8 | 5.5 |
| Nonwhite--. | 18.5 | 32.7 | 16.7 | -17.4 | ${ }_{12.0}^{5.1}$ |
| Male | 18.4 | 19.2 | 16.7 | 10.2 | 6.0 |
| Female.. | 27.4 | 20.4 | 19.3 | 9.4 | 5.0 |

${ }^{1}$ Includes students and nonstudents.
Recent data on educational attainment of workers indicate that among persons 18 to 24 years old in March 1962 (students and nonstudents), 1 of every 10 high school graduates in the labor force was unemployed-half the proportion of those who had completed 8 years or less of schooling, but twice the rate of those who had completed 1 or more years of college (table 2).

As a result of a rise in both the number in the labor force and in the unemployment rate, unemployment among youths 14 to 24 years old not in school was half again as large in October 1962 as in the same month in 1957 (table 3). Since 1957, unemployment has increased at about the same rate among students and nonstudents; and in both October of 1957 and 1962, the rate for nonstudents was about 1.5 percentage points greater than for students.

Unemployment rates have increased more sharply for full-time college students than for high school or elementary school students since 1959, the first year for which data by type of school attended are available (table 4). The rate for persons attending college full time rose by 39 percent and for elementary or high school students by 13 percent between 1959 and 1962. There is evidence that college students are finding it more difficult now than a few years ago to obtain the part-time jobs most of them seek. Prolonged unemployment or repeated spells of joblessness could leave some students financially unable to continue their education at a time when the American economy demands more persons with a college or technical education.

High unemployment rates among young persons may become even higher in the next few years if the rate of economic growth doesn't increase enough to create more jobs for millions expected to reach working age in the 1960's. As a result of the large number of births in the late 1940's, the 14 - to 24 -year-old group in the labor force may increase by about 3.3 million between 1962 and 1967, about double the growth between 1957 and 1962.

During the coming years, job-finding problems of unemployed youth who are poorly educated or inadequately trained will be aggravated by a continuation of technological developments. In the past decade, there has been a decline in job openings which have low education or skill requirements and an increase in those which require a technical or college education. Employment of farm laborers will probably decline during the 1960's and the number of nonfarm laborers will remain unchanged, thus narrowing the opportunities for the very types of jobs which disadvantaged youths are most likely to hold when starting their work careers. And they will be foreclosed from the expanding occupations which require relatively high levels of education, training, and skill-professionals, technicians, clerical workers, and building-trades craftsmen, mechanics, repairmen, and other skilled workers.

## Employment and Hours

Stability in the number of employed nonstudents and the increase in students over the year reflected changes in the population of the 14 - to

Table 3. Employment and Unemployment of Students and Nonstudents 14 to 24 Years Old, October 195762
[Numbers in thousands]

| Employment status | 1962 | 1961 | 1960 | 1959 | 1958 | 1957 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Enrolled in School <br> Tmployed |  |  |  |  |  |  |
| Employed <br> Unemployed: | 3, 562 | 3,255 | 3,150 | 3,145 | 2,886 | 2,983 |
| Number- | 310 | 296 | 240 | 228 | 230 | 178 |
| bor force.............. | 8.0 | 8.3 | 7.1 | 6.8 | 7.4 | 5.6 |
| Not Enroiled in School Employed. | 8,275 | 8,199 | 8,017 | 7,702 | 7,368 | 7,399 |
| nemployed: <br> Number. | 874 | 1,031 | 896 | 828 | 928 | 576 |
| bor force | 9.6 | 11.2 | 10.1 | 9.7 | 11.2 | 7.2 |

Table 4. Unemployment Rates ${ }^{1}$ of Students and Nonstudents 14 to 24 Years Old, by Type of School and Age, October 1959-62

| School enrollment status, type of school, and age | 1962 | 1961 | 1960 | 1959 |
| :---: | :---: | :---: | :---: | :---: |
| Enrolled in school ${ }^{2}$. | 8.0 | 8. 3 | 7.1 | 6.8 |
| Elementary or high school 2 | 8.6 | 9.5 | 7.7 | 7.6 |
| 14 and 15 years.. | 5.2 | 5.9 | 3.2 | 3.6 |
| 16 and 17 years. | 10.4 | 12.6 | 10.2 | 9.4 |
| 18 and 19 years. | 13.4 | 10.5 | 12.7 | 12.9 |
| College, full time ${ }^{2}$ | 8.6 | 7.3 | 6.8 | 6.2 |
| 18 and 19 years. | 8.8 | 9.7 | 7.3 | 6.8 |
| 20 and 21 years | 10.2 | 7.2 | 2.0 | 3.5 |
| 22 to 24 years.. | 5.7 | 1. 6 | 8.8 | 8.5 |
| Collere, part time ${ }^{23}$ | 3.5 | 2.7 |  | 4.1 |
| 20 to 24 years.-. | 2.7 | 1.8 | 2.1 | 4.1 |
| Not enrolled in school. | 9.6 | 11.2 |  |  |
| 14 and 15 years. | ${ }^{(4)}$ | ${ }^{(4)}$ | (4) | ${ }^{(4)}$ |
| 16 and 17 years. | 16. 8 | 20.9 | 18.6 | 21.4 |
| 18 and 19 years. | 12.6 | 14.9 | 14.8 | 14.2 |
| 20 and 21 years. | 9.4 | 10.5 | 9.3 | 9.5 |
| 22 to 24 years. | 7.0 | 8.0 | 6.2 | 5.7 |

${ }^{1}$ Percent of civilian labor force who were unemployed.
${ }_{2}$ Includes data not shown separately.
${ }_{3}$ Students taking 12 hours or more of college courses during the average school week were classified as full-time students.
${ }^{4}$ Percent not shown where base is less than 100,000 .
24 -year-old group rather than in their proportions in the labor force. The 1 million rise between October of 1961 and 1962 in the number of students was accompanied by a substantial expansion $(300,000)$ in the number employed (table 5). All the employment gain occurred among students age 16 to 24 . Among young persons who had completed their schooling, population and employment remained relatively stable.

Persons who attend school full time and also work are usually unable to hold full-time jobs. The survey revealed that among the employed students in October, 9 of 10 elementary and high school pupils and 8 of 10 attending college full time usually worked at part-time jobs in nonfarm industries. Since almost all young persons out of school are available for full-time work, they averaged more hours during the survey week than did students.

|  | Average hours worked, October 1962 |  |
| :---: | :---: | :---: |
|  | Students | Nonstudents |
| Agriculture_ | 26 | 46 |
| Nonagricultural industries_ | 16 | 40 |

There has been no significant change in the past few years in the average number of hours worked by the two groups of young persons in farm and nonfarm industries. Substantially longer hours in agriculture result in part from the timing of the survey during the busy fall harvest season.

## Out of School Youth 16 to 21 Years Old

Persons 16 to 21 years old and not in school are an increasing proportion of our labor force, and changes in the occupational structure of the economy in the postwar period have tended to diminish the job opportunities available to them. A total of 5.3 million of these young persons were working or looking for jobs in October 1962. About 94 percent of the male nonstudents 18 to 21 years old were in the labor market at that time, only slightly below the 98 percent for men in the most active group of 35 to 44 years. Among boys 16 to 17 years old who had left school, only 3 out of 4 were working or looking for work (table 6); most of the others in this group were not even looking for work at the time of the survey. Women are most likely to be in the labor market after leaving school and before they have assumed family responsibilities. Among women 18 to 21 years old, 6 out of 10 were in the labor force, a much greater proportion than among women in the central age groups.

Unemployment is generally greatest among young persons who have been in the job market for a comparatively short period of time, and particularly among those who are least educated,

Table 5. Population, ${ }^{1}$ Percent in Labor Force, and Employment of Persons 14 to 24 Years Old, by Age and School Enrollment, October 1961 and 1962
[Numbers in thousands]

| Age | 1962 |  |  | 1961 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Population ${ }^{1}$ | Percent in labor force | Em-ployment | Population ${ }^{1}$ | Percent in labor force | Em-ployment |
| Total, 14 to 24 years. $\qquad$ | Enrolled in school |  |  |  |  |  |
|  | 15,609 | 24.8 | 3,562 | 14,582 | 24.4 | 3,255 |
| 14 and 15 years | 6,998 | 15.2 | 1,009 | 6,621 | 15.9 | 994 |
| 16 and 17 years. | 4,742 | 27.7 | 1,178 | 4,542 | 26.3 | 1,048 |
| 18 and 19 years. | 2,144 | 29.2 | 563 | 1,952 | 31.6 | 559 |
| 20 to 24 years.. | 1,725 | 50.4 | 812 | 1,467 | 46.5 | 654 |
| Total, 14 to 24 years $\qquad$ | Not enrolled in school |  |  |  |  |  |
|  | 13,304 | 68.8 | 8,275 | 13,465 | 68.5 | 8,199 |
| 14 and 15 years. | 140 | 27.1 | 34 | 160 | 32.5 | 43 |
| 16 and 17 years.........- | 880 | 56.9 | 417 | 895 | 63.0 | 446 |
| 18 and 19 years.........- | 2,985 | 73.5 | 1,918 | 3,187 | 71.8 | 1,948 |
| 20 to 24 years........- | 9,299 | 69.0 | 5,906 | 9,223 | 68.6 | 5,762 |

${ }^{1}$ Civilian noninstitutional population.

Table 6. Civilian Noninstitutional Population, Labor Force, and Labor Force Participation Rates ${ }^{1}$ for Persons 16 to 21 Years Old Not Enrolled in School, by Age and Sex, October 1959-62
[Numbers in thousands]

${ }^{1}$ Percent of civilian noninstitutional population in the labor force.
least trained, and most inexperienced. Youths 16 to 21 years old and out of school comprised only 7 percent of the labor force in October 1962, but the 600,000 who were jobless accounted for 18 percent of the unemployed.

The number of unemployed out of school youth between the ages of 16 and 21 rose by 100,000 between October 1959 and the same month in 1961 when the effects of the $1960-61$ recession were still apparent, but by October 1962, it had declined to the level of 3 years earlier.

The unemployment rate for this group was 11.4 percent in October, three times as high as for persons 25 years and over. The incidence of joblessness is consistently about twice as high for those 16 to 17 years old as for those 20 and 21 years old (table 7). The difference in rates between these two groups reflects the higher average educational attainment of the older youths (many of whom had graduated from college or a technical institution) and the additional years of work experience and maturity acquired since leaving school. Almost all the jobless young men were single ( 8 out of 9 ), but among the women only one-half were unmarried.

Employment of nonstudents 16 to 21 years old rose by about one-half million between 1959 and

1962 to a total of 4.7 million (table 8), reflecting trends both in size of population and in labor force participation. Employment gains were confined to those 18 to 21 years of age, equally divided

Table 7. Unemployment of Persons 16 to 21 Years Old Not Enrolled in School, by Age and Sex, October 1959-62

| Age and sex | Number unemployed (in thousands) |  |  |  | Unemployment rate ${ }^{1}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1962 | 1961 | 1960 | 1959 | 1962 | 1961 | 1960 | 1959 |
| Вотн Sexes | 601 | 708 | 652 | 607 | 11.4 | 13.5 | 12.7 | 12.9 |
| Total, 16 to 21 years. |  |  |  |  |  |  |  |  |
| 16 and 17 years | ${ }_{240}^{277}$ | $\begin{aligned} & 118 \\ & \begin{array}{l} 340 \\ 250 \end{array} \end{aligned}$ | $\begin{aligned} & 117 \\ & 315 \\ & 220 \end{aligned}$ | $\begin{aligned} & \begin{array}{l} 212 \\ 279 \\ 207 \end{array} \end{aligned}$ | $\begin{gathered} 16.8 \\ 12.6 \\ 9.4 \end{gathered}$ | $\begin{aligned} & 20.9 \\ & 14.9 \\ & 10.5 \end{aligned}$ | $\begin{array}{r} 18.6 \\ 14.8 \\ 9.3 \end{array}$ | 21.414.29.5 |
| 18 and 19 years |  |  |  |  |  |  |  |  |
| 20 and 21 years. |  |  |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |  |  |
| Total, 16 to 21 | 297 | 379 | 379 | 357 | 10.9 | 13.8 | 13.6 | 14.2 |
| 16 and 17 years | $\begin{array}{r} 42 \\ 138 \\ 117 \end{array}$ | $\begin{array}{r} 69 \\ 170 \\ 140 \end{array}$ | $\begin{gathered} 65 \\ \begin{array}{c} 67 \\ 137 \end{array} \end{gathered}$ | $\begin{gathered} 86 \\ 154 \\ 154 \\ 117 \end{gathered}$ | $\begin{array}{r} 15.1 \\ 13.0 \\ 8.5 \end{array}$ | $\begin{aligned} & 21.5 \\ & 15.2 \\ & 10.6 \end{aligned}$ | $\begin{aligned} & 18.3 \\ & 16.5 \\ & 10.0 \end{aligned}$ | 15.715.110.1 |
| 18 and 19 y years--.- |  |  |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |  |  |
| Total, 16 to 21 | 304 | 329 | 273 | 250 | 12.0 | 13.2 | 11.7 | 11.4 |
| and 17 years | $\begin{gathered} 42 \\ 139 \\ 123 \end{gathered}$ | $\begin{array}{r} 49 \\ 170 \\ 110 \end{array}$ | $\begin{gathered} 52 \\ 138 \\ 83 \end{gathered}$ | $\begin{gathered} 35 \\ 125 \\ 90 \end{gathered}$ | 18.812.310.4 | 20.214.510.3 | $\begin{array}{r} 19.0 \\ 13.0 \\ 8.4 \end{array}$ | 15.2 <br> 13.1 <br> 8.8 |
| 18 and 19 years. |  |  |  |  |  |  |  |  |
| 20 and 21 years--------- |  |  |  |  |  |  |  |  |

[^14]Table 8. Employment of Persons 16 to 21 Years Old Not Enrolled in School, by Age and Sex, October 1959-62

| Age and sex | 1962 | 1961 | 1960 | 1959 |
| :---: | :---: | :---: | :---: | :---: |
| Both Sexes |  |  |  |  |
| Total, 16 to 21 years | 4,658 | 4,531 | 4,471 | 4,107 |
| 16 and 17 years. | 417 | 446 | 512 | 444 |
| 18 and 19 years. | 1,918 | 1,948 | 1,820 | 1,691 |
| 20 and 21 years. | 2,323 | 2,137 | 2,139 | 1,972 |
| Male |  |  |  |  |
| Total, 16 to 21 years. | 2, 424 | 2,376 | 2,418 | 2,155 |
| 16 and 17 years_ | 236 | 252 | 291 | 249 |
| 18 and 19 years. | 927 | 945 | 898 | 865 |
| 20 and 21 years | 1,261 | 1,179 | 1,229 | 1,041 |
| Female |  |  |  |  |
| Total, 16 to 21 years | 2,234 | 2,155 | 2,053 | 1,952 |
| 16 and 17 years. | 181 | 194 | 221 | 195 |
| 18 and 19 years | 991 | 1,003 | 922 | 826 |
| 20 and 21 years. | 1,062 | 958 | 910 | 931 |

between men and women. Farm employment is more common among young men not in school than among those 25 years and over and is most common among boys 16 and 17 years old (table 9 ). Among adult men, 9 percent worked in agriculture in October 1962 compared with 15 percent of those 16 to 21 years and 30 percent of the boys 16 and 17 years. Few women held farm jobs, and there was no sharp difference in the proportions of women younger or older than 25 years engaged in farm work ( 3 and 5 percent).

Among young men employed in nonfarm industries, a greater proportion worked in manufacturing, 38 percent, than any other industry, and another 27 percent were employed in trade. Female workers in the same age groups were more heavily concentrated than the men in one industry. The service industries (including finance and private household) accounted for 44 percent of the young women employed in nonagricultural industries, and an equal proportion was in manufacturing and trade.

Part-time employment was less prevalent among young wage and salary workers not in school than among all wage and salary workers in October. Out of school youths comprise a lower proportion of all those working only part of a regular workweek, since such data include a large number of students and working mothers who are available only for part-time jobs. Among those 16 to 21 years old employed in nonfarm industries, 10
percent reported that they usually worked part time on their jobs (table 10), but among all workers the rate was 13 percent. Part-time work is much more prevalent among persons employed in agriculture, with 23 percent of the youths and 30 percent of all workers so employed. The incidence of part-time work was several times greater among $16-$ and 17 -year-old boys in nonfarm jobs than among those 20 and 21 years old, 19 percent and 4 percent, respectively. Since many employers do not hire workers under the age of 18 because of legal restrictions, or educational or other requirements, the only jobs readily available to young boys are part-time openings common in retail trade and service industries.

Workers 16 to 21 years old are most likely to be employed in occupations that differ materially from those of older persons (table 11). Half the young women were typists, stenographers, or other kinds of clerical workers, and they were

Table 9. Major Industry Group and Class of Worker of Employed Persons 16 to 21 Years Old, Not Enrolled in School, by Age and Sex, October 1962 [Percent distribution]

| Major industry ${ }_{\text {group, }}^{\text {gro }}$ and sex ass of worker, | $\begin{aligned} & \text { Total, } \\ & 16 \text { to } \\ & 21 \\ & \text { years } \end{aligned}$ | $\begin{gathered} 16 \text { and } \\ 17 \\ \text { years } \end{gathered}$ | $\begin{gathered} 18 \text { and } \\ 19 \\ \text { years } \end{gathered}$ | $\begin{aligned} & 20 \text { and } \\ & 21 \\ & \text { years } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Male |  |  |  |  |
| All industry groups. | 100.0 | 100.0 | 100.0 | 100.0 |
| Agriculture $\qquad$ <br> Nonagricultural industries $\qquad$ | $\begin{array}{r} 15.0 \\ 85.0 \end{array}$ | 30.1 | 18.3 | 9.8 |
|  |  | 69.9 | 81.7 | 90.2 |
| Nonagricultural industries_.-------- | 100.0 | 100.0 | 100.0 | 100.0 |
| Wage and salary workers | 98.512.1 | 97.610.9 | 99.2 | 98.2 |
| Construction-- |  |  | 39.8 | 12.437.8 |
|  | 37.7 | 27.9 |  |  |
| Wholesale and retail trad | 26.9 | 32.118.2 | 26.914.4 | 13.9 ${ }^{26.1}$ |
| Service industries. | 14.4 |  |  |  |
| All other industries ${ }^{1}$ <br> Selfemployed and unpaid family workers. | 7.4 | 8.5 | 6.2 | 8.0 |
|  | 1.5 | 2.4 | . 8 | 1.8 |
| Female |  |  |  |  |
| All industry groups |  |  | 100.0 | 100.0 | 100.0 | 100.0 |
|  | 3.496.6 | 7.792.3 | 3.796.3 | 2.497.6 |
|  |  |  |  |  |
| Nonagricultural indust | 100.0 | 100.0 | 100.0 | 100.0 |
| Wage and salary workers | $\begin{aligned} & 98.1 \\ & 21.7 \\ & 21.9 \\ & 44.2 \\ & 10.2 \end{aligned}$ | $\begin{array}{r} 100.0 \\ 21.6 \\ 29.3 \\ 41.9 \\ 7.2 \end{array}$ | $\begin{aligned} & 98.5 \\ & 20.3 \\ & 24.1 \\ & 43.8 \\ & 10.3 \end{aligned}$ | 97.323.118.744.910.6 |
| Manufacturing |  |  |  |  |
| Wholesale and retail trade |  |  |  |  |
| Service industries.------------------- |  |  |  |  |
| All other industries ${ }^{2}$ <br> Self-employed and unpaid family workers |  |  |  |  |
|  | 1.9 |  | 1.5 | 2.7 |

[^15]Selected Occupation Groups of Employed and Unemployed Men, October 1962

almost twice as likely to hold such jobs as women 25 years and over. Since not many had acquired the experience or education usually associated with professional and managerial occupations,
these positions were reported by relatively few of the young men and women.

The higher rate of unemployment for young men than for older persons reflects to a large

Table 10. Full-Time and Part-Time Status of Wage and Salary Workers 16 to 21 Years Old Not Enrolled in School, by Industry Group, Age, and Sex, October 1962
[Percent distribution]

| Age and sex | All industry groups |  |  | Agriculture |  |  | Nonagricultural industries |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Full time | Part time | Total | Full time | Part time | Total | Full time | Part time |
| Both Sexes |  |  |  |  |  |  |  |  |  |
| Total, 16 to 21 years. | 100.0 | 89.6 | 10.4 | 100.0 | 77.0 | 23.0 | 100.0 | 90.4 | 9.6 |
| 16 and 17 years. | 100.0 | 79.1 | 20.9 |  |  |  | 100.0 | 81.0 |  |
| 18 and 19 years. | 100.0 | 88.1 | 11.9 | 100.0 | 76.0 | 24.0 | 100.0 | 89.0 | 11.0 |
| 20 and 21 years.. | 100.0 | 92.7 | 7.3 |  | ---------- | -...------- | 100.0 | 93.0 | 7.0 |
| Male |  |  |  |  |  |  |  |  |  |
| Total, 16 to 21 years | 100.0 | 92.0 | 8.0 | 100.0 | 82.2 | 17.8 | 100.0 | 93.0 | 7.0 |
| 16 and 17 years.. | 100.0 | 80.3 | 19.7 |  |  |  | 100.0 | 81.5 |  |
| 18 and 19 years | 100.0 | 89.8 | 10.2 | 100.0 | 79.1 | 20.9 | 100.0 | 91.4 | 8.6 |
| 20 and 21 years. | 100.0 | 95.7 | 4.3 |  |  |  | 100.0 | 95.9 | 4.1 |
| Female |  |  |  |  |  |  |  |  |  |
| Total, 16 to 21 years. | 100.0 | 87.0 | 13.0 | (1) |  |  | 100.0 | 87.8 | 12.2 |
| 16 and 17 years.- | 100.0 | 77.8 | 22.2 |  |  |  |  |  |  |
| 18 and 19 years.. | 100.0 | 86.5 | 13.5 | (1) |  |  | 100.0 | 87.1 | 12.9 |
| 20 and 21 years.... | 100.0 | 89.1 | 10.9 | (1) |  |  | 100.0 | 89.7 | 10.3 |

[^16]Table 11. Major Occupation of Employed Persons 16 to 21 Years Old Not in School and Persons 25 Years Old and Over, by Sex, October 1962
[Percent distribution]

| Major occupation group | Male |  | Female |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $16-21$ years | 25 years and over | $\begin{aligned} & \text { 16-21 } \\ & \text { years } \end{aligned}$ |  |
| Total employed. | 100.0 | 100.0 | 100.0 | 100.0 |
| Professional, office, and sales workers.-....- | 20.4 | 39.8 | 59.9 | 53.4 |
|  | 4.1 | 12.5 | 5.1 | 13.2 |
| Managers, officials, and proprietors, except farm | 2.5 | 15.6 | . 9 | 5.7 |
| Clerical and kindred workers | 9.0 | 6.5 | 48.8 | 27.2 |
| Sales workers. | 4.7 | 5.2 | 5.1 | 7.3 |
| Manual workers. | 60.4 | 45. 6 | 14.5 | 17.8 |
| Craftsmen, foremen, and kindred workers- | 10.2 | 20.6 | 1.6 | 1.2 |
| Operatives and kindred workers.---..--- | 34.0 | 18.6 | 13.6 | 16.3 |
| Laborers, except farm and mine...........-- | 16.2 6.2 | 6.5 6.3 | 22.3 | 23.9 |
| Private household | . 2 | . 1 | 7.0 | 8.3 |
| Service workers except private household. | 6.0 | 6.2 | 15.3 | 15.6 |
| Farmers and farm laborers....-.-............- | 13.1 | 8.2 | 3.4 | 4.9 |

Note: Because of rounding, sums of individual items may not equal totals.
degree the kinds of work they do when employed. One-half the boys 16 to 21 years old were operatives or laborers in October 1962, compared with one-fourth of the older men, and these are the types of work which have the highest rates of joblessness. (See chart.) Occupations with the lowest incidence of joblessness (professional workers, managers, and sales workers) were held by only 11 percent of the young men, a proportion only one-third as large as for older men. During the rest of the decade, the greatest increase in employment is projected for occupations in which unemployment rates are now below average and which have higher education and training requirements. Unemployment among young men can be materially reduced if they obtain skills to qualify them for those jobs in which work is to be most steady.

We have met today to consider the recent Report of your Committee on Youth Employment. We view this report as representing a valuable approach to the critical problem of unemployment among youth. We urge that it be given the most immediate and serious attention by all segments of the society.

The report shows that an alarming percentage of today's youth are not prepared for the labor market needs now and in the future. Even with an improved rate of economic growth significant manpower training problems will remain. It is important that there be recognition by management, labor, and the public generally of the need to invest in the education and training of youth today for the effectiveness of the labor force tomorrow. This is particularly significant at this time, because the next decade will be marked by a rapid increase in the number and proportion of young people in our labor force.

This committee notes particularly that, in the face of an increasing supply of young workers, there is in fact a decrease in job opportunities for new intrants to the labor force at traditional levels of skill, ability, and experience.

Despite their deep interest in this situation, management and labor cannot resolve this problem alone. It calls for review by those at all levels of government, and particularly by State and local authorities, of their policies and practices affecting the availability of employment opportunities to youth.

[^17]
# The International Labor Conference of 1963 

Lawrence R. Klein

The 47 Th session of the International Labor Conference was to have been "a hymn to Africa," as Henry Hauck, French Government delegate remarked, more in rue than remonstrance, during a plenary session. That the hymn did not become a dirge for the International Labor Organization could be attributed largely to the resolute action and leadership of the United States ${ }^{1}$ and the Western bloc delegations.

In many ways the Conference, held in Geneva June 5-26, 1963, was highly unusual: The President of the Conference resigned midway through the meeting; 31 African and 5 Arab countries withdrew from participation; the credentials of the South African worker delegate were rejected by the Conference; plenary meetings were suspended for several days while the Conference coped with the impending walkout of the 36 countries; there was a vigorous effort by the Russian and Eastern bloc delegates to terminate the Conference forthwith; there were noisy and at times undisciplined demonstrations in support of extra-legal expulsion of South Africa (for that nation's policy of apartheid); the ILO DirectorGeneral made an extraordinary and eloquent address pleading, in the face of some vociferous declarations to the contrary, for a procedure of due process and constitutional demeanor.

Nevertheless, the Conference recovered in good order and completed its seven-point agenda, including adoption of a budget and action on the reports of its technical committees.

## The African Situation

Even though the enduring worth of the ILO shone through in all its tripartite signficance in the work
of the technical committees of the Conference, much of the time, energy, and debate of the plenary sittings was devoted to the hiatus caused by the African-Arab walkout. The defection of the 36 delegations cannot be dismissed solely on the grounds of political immaturity aided and abetted by Soviet-dominated delegations eager and willing to exploit the issue (in painfully obvious fact, they were so aided). The action reflected more the impatience and compulsions of newly won nationalism and African-Arab unity reacting to resentment against the presence of a delegation from the Republic of South Africa, which has an official policy of apartheid. The resentment was heightened because South Africa had ignored the request of a 1961 Conference resolution to withdraw from the ILO until it had abandoned its policy of racial separation. (The ILO constitution has no provision for the expulsion of member states.)

African nations most certainly captured the attention of the Conference, first by their presence and then by their absence and the manner of their leaving.

There were 31 African nations (not counting South Africa) represented out of a total of 102 delegations seated in the Conference. Joseph M. Johnson, Minister of Labor in Nigeria, was elected president without opposition. Five African governments (to the exclusion, for the first time, of any European government) and a total of three African employer and worker delegates were elected to the Governing Body of ILO, which had been enlarged from 40 to 48 to accommodate representation of the newly emerging nations.

It was the chairman's recognition, on June 12, of William F. Hamilton, employer delegate from

[^18]South Africa, to take his turn on the list of speakers waiting to address a plenary session that precipitated the turmoil that wracked the Conference. A point of order was raised over the legality of the South African presence. The legal adviser of the Conference ruled that since no objection to the South African employers' participation had been lodged with the Credentials Committee, the delegation was properly seated.

Sergei A. Slipchenko, government delegate from the Ukrainian S.S.R. and a Conference vice president, who in the absence of the president was chairman for the session, thereupon allowed, in almost cavalier disregard of parliamentary procedure, a series of 14 "points of order." These, in fact, were political speeches raising no procedural issue. The session was ultimately adjourned with the South African delegate still waiting to speak.

At the next plenary session, on June 14, the disturbed situation continued. Mr. Johnson, the president, declined to preside because of his role in efforts to oust South Africa, and vice president Rudolph Faupl, United States worker delegate, was in the chair. In response to a point of order again challenging Mr. Hamilton's right to speak, the chair ruled that under the ILO Constitution any accredited delegate was entitled to speak, stating that this ruling was the unanimous opinion of the Conference officers. (See pp. 921-922.) Thereupon the African delegations and others, including worker delegations from most countries, left their seats, and some delegates demonstrated at the rear of the hall while Mr. Hamilton made his speech.

Plenary sessions were suspended until June 18, when Mr. Johnson announced that he had resigned the presidency and that the African nations would participate no further in the 47 th Conference. (Ultimately the 31 African and 5 Arab countries withdrew formally from the Conference.) Director-General David A. Morse then made the address, reproduced on pages $920-$ 924 , in which he clarified the legal and moral issues and charted a course around the impasse.

In matter of fact, all delegations except the South African condemned apartheid and sympathized with the Africans. The basic issue was whether the ILO constitution and due process or political and emotional considerations would prevail. The African position in its most extreme
form was expressed by Sikhé Camara, Government delegate from Guinea: "You can do what you like with the constitution, but we will not allow ourselves to be bound by law." Counterposed was the statement of Assistant Secretary of Labor George L-P Weaver, U.S. Government delegate: ". . . one of the speakers made a statement that we are not bound by the law; The implications are that we are the law, We must establish, if we hope for continuity of the work in which we are engaged, a society of laws, not of men - and I speak as one who was part of a group that has deliberately used the law as an instrument . . . of social precision in terms of rectifying age-old injustices . . . ."

The contretemps thus faced was not eased by efforts of the Soviet bloc, which first supported abandonment of constitutional law and then sought adjournment of the Conference until the end of the year. Nor was it helped by Mr. Slipchenko's exercise of veto power on resolutions introduced to take positive and constitutional proceedings to bar South Africa from the ILO in the future. (No urgent resolution may be put before a plenary session without the unanimous approval of the Conference officers.)

However, the happy choice of Erik Dreyer, government delegate from Denmark, as the new president gave the Conference a skilled, resolute, and shrewd parliamentarian. This fact, plus the work of the United States and other democratic nations in keeping the Soviet delegations on the defensive, put the Conference back on keel and on course.
Later on, the delegates approved a minority report of the Credentials Committee which unseated the South African worker delegate, Johan H. Liebenberg, on grounds chiefly that he came from an unrepresentative organization. The vote was 135 (including the U.S. Government and worker delegates) to 3 (the two South African Government delegates and Mr. Liebenberg), with 57 abstentions (all of them employer and government delegates).

Following the Conference, the Governing Body approved a proposal of the Director-General to exclude South Africa from all ILO meetings except the Conference and to seek jointly with the United Nations an "appropriate solution of the problem posed by the membership of South Africa [in both organizations] so long as that country continued
its present policy." ${ }^{2}$ The African members did not boycott the meeting of the Governing Body.

## Routine Conference Business

When it opened, the Conference was the largest in the history of the ILO, with 102 of the 108 member states represented. Delegates and technical advisers totaled nearly 1,100 . Most states had full tripartite representation. Six states were new members of ILO. ${ }^{3}$

All officers for the session were unanimously elected: Messrs. Johnson, Dreyer, Slipchenko, and Faupl, as well as T. H. Robinson of Canada, who was employers' vice president.

The triennial elections to the Governing Body held on June 13, filled 14 of the 24 government seats ( 10 are held permanently by the 10 countries of chief industrial importance ${ }^{4}$ ), 12 employer, and 12 worker places-including the 8 African representatives mentioned earlier. Richard Wagner and Mr. Faupl, the United States employers' and workers' delegates, were elected. Elections take place in separate government, employer, and worker meetings rather than in plenary session.

Assistant Secretary of Labor Weaver, in addition to leading the United States delegation, was chairman of the Selection Committee, which serves as a steering committee for the session.

Because of the absence of the African delegations, election of the African Advisory Committee, first constituted in 1961, was postponed until the 1964 Conference, with membership to run for 2 instead of 3 years.

A gross expenditure budget of $\$ 16,977,000$ was approved. It represented an increase of about 16 percent over that of the preceding year. Communist bloc nations unsuccessfully voted to defer consideration of the budget, pending outcome of their moves to adjourn the Conference, because of the absence of the African delegations. ${ }^{5}$

## Technical Committee Reports

Three new international instruments-a convention and a recommendation concerned with the guarding of machinery and a recommendation relating to termination of a worker's employment by the employer-were adopted. Two other items proposing new international labor standards-
hygiene in shops and offices and benefit payments in cases of industrial injury and occupational disease-were reviewed by the Conference and will appear as agenda items in 1964 for a final decision.

Guarding of Machinery. The 70-member Committee on Guarding of Machinery proposed a convention (adopted in plenary session by a vote of 201 to 0 with 1 abstention) which requires prohibition by national law (or equally effective measures) of the sale, rent, exhibition, or transfer (for domestic use or for export) of new or used power-driven machines which do not have adequate safety guards. It also prohibits the operation of unguarded machinery by workers. A maximum 3 -year exemption from portions of the convention is possible. Ratifying nations must provide penalties for violations.

A recommendation, approved 204 to 0 with 1 abstention, extends the prohibitions applied in the convention to the manufacture of machinery, and provides that in the list of prohibitions account should be taken of dangerous working parts. It also suggests that machine construction should if possible eliminate or safeguard danger points.

Ironically, these instruments, the first of their kind among ILO standards, were proposed in 1959 by Ghana, one of the African nations which left

[^19]the Conference, to protect workers in developing countries from unsafe imported equipment.

Termination of Employment. A recommendation governing the dismissal of workers and the rights of those who are dismissed was approved by the Conference by a vote of 196 to 14 , with 10 abstentions, on submission by the 177 -member Committee on Termination of Employment. The standards proscribe firing of workers for capricious reasons and specifically mention union activity, good faith filing of a complaint, and race, sex, religion, political opinion, nationality, or social origin as invalid grounds for dismissal. Workers who are to be dismissed should be given due notice, or pay in lieu of notice, and should have the right of appeal to a neutral body which would have reinstatement authority if it finds an unjustified dismissal took place. Income should be protected by unemployment insurance, severance pay, or a combination of such benefits, depending on national laws, collective agreements, and employer personnel practices. Serious misconduct by a worker would render him ineligible for notice and benefits, but he would not lose hearing rights.

The employer, however, would have unrestricted right to determine the size of his work force. Consultation with workers' representatives on specific appropriate matters is urged prior to reduction of work force, and public authorities should be consulted if the reduction is of such a magnitude as to have an economic effect beyond the work place. Selection of workers for dismissal should be by the familiar criteria of seniority, age, skill, and occupation.
The recommendation exempts from its provisions casual, part-time, and probationary workers, and public employees to the extent that constitutional provisions in the country might preclude their coverage.

The recommendation states that effect may be achieved "through national laws or regulations, collective agreements, work rules, arbitration awards, or court decisions, or in such other manner consistent with national practice . . . ." H. M. Douty, U.S. Government adviser, reporting for the Committee, noted that the instrument "represents a pioneer effort by the ILO to develop standards in this area of vital concern to both workers and employers. The area is characterized by many
difficult and subtle problems and contains numerous implications for managerial and worker behavior, for productivity, and for industrial peace."

Hygiene in Shops and Offices. The report of the 90 -member Committee on Hygiene in Shops and Offices goes on the agenda of the 1964 Conference in the form of a proposed recommendation and convention. Included in the recommendation are specific elements of sanitation and health in work places, such as proper ventilation, toilets, first aid facilities, light and heat, and protective equipment. In general, the convention provisions conform with the items contemplated by the recommendation.

Social Security. To modernize earlier conventions (Nos. 12, 17, 18, and 42), the report of the 141member Committee on Social Security looks toward adoption next year of a convention and recommendation in the fields of industrial injuries and occupational diseases. The plenary session was divided in its approval of the proposals, with the employer delegations generally favoring a recommendation alone. The convention would require that employees receive medical care benefits and cash compensation for loss of earning capacity caused by work injury or specified occupational diseases, and would permit certain coverage exemptions if the number excepted did not exceed 10 percent of all employees. A committee of experts will review and improve the list of occupational diseases appended to the report, which represent the minimum coverage required by the convention. Both the convention and the recommendation will be placed on the 1964 agenda.
Richard P. Doherty, United States employer adviser, in opposing the proposed convention, argued that a recommendation would offer greater flexibility. He also took exception to the "allembracing" coverage provided by the convention. Speaking for the employer group, he emphasized that the document was not "totally bad," but "on balance it has gone so far that it is not a practical document." He thought such an instrument should be "compatible with the economic capacity of a country, and also compatible with the administrative competency that has developed in that country."

## Application of Conventions

Despite the political maneuvering which at times appears to preoccupy the annual meetings, the basic but unspectacular work of the ILO-at the Conferences and by the staff-is the drawing up and approving of international labor standards. Each year the Conference sets up a special committee to review the record of the constituent nations on the ratification of conventions and, perhaps more important, the extent to which convention provisions are actually applied by ratifying countries. A Committee of Experts reports to this special Committee on the Application of Conventions and Recommendations, which at the 47 th Conference numbered 101 members.

Although the report of the Committee was adopted by the Conference without dissent, there was sharp debate during Committee meetings and at the plenary sessions. One focus of attention was a special report on the performance of the member states on Convention 111 on discrimination in respect of employment, which was the basis for the Committee's recommendation that the Conference urgently appeal to all nonratifying countries "to give prompt consideration to the possibility of ratification." Another concerned the ILO's operations in supervising the implementation of conventions, a task which the Committee reported had become more complex as the number of ratifications has grown and the ILO membership has expanded to include countries with widely different economic and social systems.

On the latter question, the Soviet point of view in the Committee was that the Committee of Experts was biased and that it should be restrained by specific procedural rules. The U.S.S.R. Government representative challenged-as a "nonobjective interpretation . . . which distorted"a finding by a majority of the Committee of Experts that Soviet legislation was not in conformity with the convention guaranteeing freedom of association and the right to organize. The majority view was that the Committee of Experts was a quasi-judicial body whose "impartiality, objectivity, integrity, and professional competence was beyond question," and that the experts should not be fettered by procedural rules, since their objectivity was best guaranteed by the personal quality of the individuals.

Mr. Weaver, in discussing the report in the Conference Committee, emphasized that "discrimination in one form or another is to be found in every country, no matter how high its ideals or how perfect its constitutional and legislative protections might be." He forthrightly described the efforts of the United States Government to end discrimination against Negroes, and pointed to the use of Federal authority at Oxford, Miss., "to put into effect the right of one man to attend the university of his State." He stressed that in the United States there is no attempt to "hide our problems; they are there for everyone to see, and we invite the whole world to observe and evaluate our efforts to solve them."

The reporter of the Committee, in presenting its report, stressed that the ILO should satisfy itself that ratified standards are "implemented not only in law but in practice." He also stressed labor inspection "as a means of promoting practical application."

Representative James Roosevelt, United States Government adviser, in a speech to the plenary session, warned that the "imposition of arbitrary rules could only serve to degrade" the experts. "I speak for the entire United States Government delegation when I say that . . . adoption of this report . . . will help assure that the principles and purposes which first attracted you and us, and the African nations, to the ILO remain unsullied by political adventuring and expediency."

The contention of the Communist countries that Socialist states should be regarded in a different light in respect to freedom of association (i.e., trade union rights) was sharply attacked in the Conference debate on the report. W. D. H. Fréchette, Canadian employer adviser, stated:

This whole controversy hinges around the contention of certain countries that ILO standards should be interpreted in different ways depending upon the economic and social structure of the countries concerned. This idea of a double standard is categorically rejected by your committee.
P. Schade Poulsen, employer adviser from Denmark, chided the Communist position thus:

[^20]Attack on Soviet practices in the light of ILO convention requirements was pressed by Bert Seidman, United States worker adviser. He pointed out that "year after year" the Committee of Experts had reported "flagrant violation" of the convention on the right to organize, and in the current report could only state that "no new element has been adduced which would invalidate the conclusions reached by the Committee in previous years, i.e., that the legislation of the U.S.S.R. contains a number of provisions which are or are liable to be contrary to the rights and guarantees laid down in the convention."
Mr . Seidman also challenged the practice of anti-Semitism in the Soviet Union and scored the position of "countries which, while they maintain discrimination within their own borders, brazenly deny it exists. These same countries hypocritically assume the most righteous pose in denouncing discrimination in other countries."
Ernest M. Hyde-Clarke, United Kingdom employer adviser, on the same track, responded to a Bulgarian's reference to Alabama: " . . if matters are going to be brought up such as Alabamathough I am in no position to defend what happens there-it is my duty to bring up in return what happened in Bulgaria last year and earlier this year among many of my Ghanaian and Nigerian friends who were studying there but who could not continue to remain there because of discrimination and the lack of freedom of association."

## The Director-General's Report

Ordinarily, the report of the Director-General is concerned with a single topic of importance in the labor field. This year, it examined the program and structure of the ILO and directed the attention of the Conference toward the major labor and social problems on which the organization should concentrate its efforts and toward the structural and procedural changes which might best facilitate program achievement.

Debate on the report was extensive (169 speakers participated) and often political in character. The lack of unanimity between and within delegations was indicative of the independent roles the government, employer, and worker groups play on the ILO tripartite stage.

However, it is possible to point to a few items on which there was reiterated comment.

These included technical aid for African and other developing countries; realism in writing and applying conventions; worker opposition to direct ILO participation in trade union development, organization, and education; better organized Conferences with more time for discussion; and regional meetings. The Communist nations pressed constantly for more representation on the Governing Body and for direct participation of the Communist-controlled World Federation of Trade Unions in the Conferences. They also desired transfer of certain powers from the Governing Body to the Conference. Speaking for the United States Government, Mr. Weaver saw "no reason for disturbing" the "effective working relationship between the Governing Body and the . . . Conference." He also rejected a proposal in the report that some of the functions of the Credentials Committee be assumed by an independent quasi-judicial body. This suggestion was generally opposed.

The independent role of employer and worker groups was stressed as the essence of the principle of tripartitism. Richard Wagner, United States employer delegate, in a challenge to the Communist position on the human freedom intrinsic in tripartitism, said that the "forthright position of the ILO on these . . . principles is well known, and it is high time that nations which do not conform . . . should either withdraw from this organization or be relegated to the status of observers."
In the traditional reply to the discussion of the report, Mr. Morse announced that because of the absence of the African delegations during most of the session, he would carry his report over to the 48th session, adding some "guidelines."

He thought stress in next year's discussion might be placed on the section of his report dealing with trade unions and labor relations in the developing countries, incomes policy, the relation of standards setting to an expanding and diverse membership, and the possibility of regional meetings to observe the feasibility and practicality of conventions in developing countries. Periodicity of Conferences and their relation to regional meetings or conferences should be explored.

## Summaries of Studies and Reports

# The ILO Director-General's Speech on the South African Question 

Editor's Note.-This article is an excerpt from a speech by David A. Morse, Director-General of the International Labor Office, at the 47 th International Labor Conference in Geneva on June 18, 1963. A report on the Conference appears on pp. 914-919 of this issue.

I have, during 15 years, come to this rostrum to defend many interests in maintaining the universality and the strength of our Organization. Today, I come again in what is perhaps my most difficult intervention, but one which must be made. I owe it to my member states to set the record straight and to give you the objective facts in the situation, because we are now part of the historical process, and it is important, in the writing of history, that the truth be stated so that those who follow us can benefit from our own experiences.

I rise to speak because I was told yesterday by a committee officially designated to represent the African group that they had not yet prepared an agreed declaration and that before they made a declaration they would inform the Secretary-General-the Director-General of this Organiza-tion-who, after all, is the trustee of its constitution and its welfare. I have not yet been so informed, and I am surprised that my first notice is your statement this morning, Mr. Johnson.

Secondly, I must put the record straight. Mr. Johnson has resigned as President of the Conference, and, of course, it will be necessary to elect a new President.

This Conference and this Organization have been living through very difficult days. The situation has developed since last Wednesday, when a protest was made by the African delegates concerning the right of the employers' delegate from the Republic of South Africa to speak in the discussion on the Director-General's Report. It continued last Friday when, as you know, on the ruling of the chair, the employers' delegate from

South Africa made his statement and a number of delegates thereupon left the hall and, as you know, there was a considerable and noisy demonstration.

Since then plenary sittings of the Conference have been suspended. There have been a series of discussions and negotiations outside this hall in an attempt to find a way out of the impasse in which the Conference found itself. These were initiated by me, because of my responsibility as Secretary-General of the Conference and on the specific authority given to me by the Selection Committee of the Conference last Wednesday evening to carry out consultations with a view to a resolution of the difficulty. These consultations have, in an atmosphere of tension, been accompanied by various rumours.

First let me say that fundamental issues touching the very structure of civilization and human dignity are involved in this situation. There is the issue of discrimination, of a racial policy which has been condemned by a resolution adopted, without opposition, by this Conference in 1961. Also there is the issue of freedom of speech for duly accredited delegates-even for those who may hold condemned opinions.

It has been suggested that the ILO and its executive officers have approached this problem from too legalistic and procedural a standpoint and have not considered it from its moral aspects. I must be the first to dispel this idea. The ILO has always been alive to the moral aspect. Indeed, that is the foundation of its law. The ILO alone, among all the international organizations, has been persistent and able to give substance to the principles enunciated in the Universal Declaration of Human Rights, through a number of binding international conventions in the human rights field, dealing with freedom of association, abolition of forced labor, and the elimination of discrimination in employment.

Furthermore, the Governing Body has established a standing committee that will deal on a practical basis with the issue of discrimination. Also, the ILO has been dealing-more persistently, I submit, than any other international organiza-
tion-with the basic issues of human rights and discrimination which are involved in the South African question. And may I remind you that it has been dealing with them as moral issues, not legalistic issues, and in practical ways.

I make this clear so as to stress that the ILO, its officers, and its Director-General have not approached and cannot approach this question in a narrow, limited, procedural way. Nevertheless I say at the same time that the Organization cannot afford to compromise its constitutional position by ill-considered action. The basic constitutional law of this Organization is the mandate it has received. And from whom has it received this mandate? It has received it from the sovereign states which make up the ILO-all of you here who represent your governments. If this is violated, the very existence of the ILO as an international organization is violated, and it is through. Any breach of this constitutional law would open the way for arbitrary, vicious rule which today may be turned against one party but tomorrow will be turned against another party.

I, as Director-General, I tell you this, will never, never be a consenting party to any actionany supposed solution to a difficulty-which would undermine the foundations of law and of confidence on which the ILO rests.

Accordingly I considered it my duty-my solemn duty-to point out to the African delegates courses of action which would be legally possible and which might at the same time be substantially more effective means of pursuing their legitimate aims than either the sort of demonstration we had last Friday or their total withdrawal from the work of the Conference.

One of my difficulties during this phase was in maintaining contact with the African delegations. They were meeting-the Government, employer, and worker delegates from Africa together-at various times during Saturday, Sunday, and yesterday. Several times I sent messages offering to speak with this meeting, but I was informed each time that it was not necessary. Finally, at my request to be heard I was informed that a delegation of 12 , had been appointed to meet with me. This delegation's spokesman made it clear that it was not empowered to discuss with me, but only to hear what I had to say and report back.

[^21]Thus I explained to this delegation four points outlining a composite of measures that were open to the African delegations.

First, the African delegations might have come to this session of the Conference with a challenge to the credentials of the South African Government delegation and, in view especially of the 1961 resolution, ${ }^{1}$ this could have been a basis for excluding the delegation from participating at this session. The African delegations could, however, take action to challenge these credentials at the next session if they so desired.

Second, a resolution could be submitted to this session of the Conference under the existing urgency procedure which would put this Conference clearly on record against the policy of apartheid. In addition, this resolution could ask the United Nations to become seized with this problem and to determine a policy to be adopted by the entire United Nations family on the issue of apartheid. This resolution could also request the Security Council of the United Nations to deal with the issue of apartheid on an urgent basis at its July 1963 session.

Third, I stated that I would be prepared personally, in my capacity as Secretary-General of the Conference and Director-General of the ILO, to meet with the Secretary-General of the United Nations in July, upon the close of this session, in order to clarify and put personally to the Sec-retary-General such views as this Conference might decide to embody in a resolution at this session. This would ensure that resolutions passed by the ILO and by the United Nations are fully coordinated and that the Secretary-General is in possession of all the elements for his presentation to the Security Council.

Fourth, the African group could decide to undertake concerted action in the Governing Body of the ILO and in the governing bodies of all other international organizations, and in the United Nations itself, to obtain the specific amendment of the constitution of the ILO, the constitutions of all other international organizations, and the constitution of the United Nations itself, which would state specifically that the policy of apartheid was fundamentally contrary to the constitutions of all these bodies and that any nation practicing this policy cannot be a member of the United Nations or any of the organizations comprising the United Nations.

In making these points to the delegation I reiterated my willingness and my desire to meet with the whole assembly of African delegations, to explain the position to them as I saw it, and to discuss any question with them. The delegation's spokesman indicated, however, that they would report to the whole meeting and would inform me in due course of its wishes.
That was yesterday morning. Early in the afternoon I heard unofficial reports that the meeting of African delegates had concluded. The press, however, had word that a declaration had been adopted and that it was to be read to the plenary sitting. There was even a text of such a declaration in the hands of some journalists.
Some of the members of the delegation from the African meeting came back to see me yesterday afternoon. Their spokesman then informed me that the meeting had decided that the African delegations would cease participating in the work of the session. At the same time, it was made clear that this decision was subject to change in the light of developments that might take placepresumably any further negotiations that might lead to a different situation.

I turned to these gentlemen and $I$ asked these spokesmen for the African delegates whether they could clarify the reports I had received concerning a declaration to be made on their behalf. In reply I was informed that the information I had received, and that I had heard, was completely inaccurate. No declaration had been approved by the delegations. Furthermore, I was assured that, as Secretary-General of the Conference, I would be informed of any such declaration before it was made to the Conference. I told the Selection Committee last evening, for the record, on my word as Secretary-General of this Conference, that I was informed that there was no declaration, that no declaration had been agreed and that I was not seized of one; because I believed.
Many of you will have read the substance of this so-called declaration in today's newspapersI have. I refer to this now as a matter of privi. lege because this text contains certain allegations concerning which the facts must be made clear also. It concerns the person who presided over the sitting of the Conference last Friday, Mr. Rudi Faupl, the workers' vice president of the Conference. Let me read the text which was given to the press:
"Considering the personal and anticonstitutional action of the vice president, Mr. Faupl, president of the 11th meeting, and the deplorable manner with which the representative of the Republic of South Africa was imposed on the members of the Conference in violation of the 1961 resolution . . . [the African delegations] decide as a protest to abstain from participating in the meeting
What I am going to tell you now I also told the spokesman representing the African delegations and, subsequently, the Selection Committee. It is this: that Mr. Faupl, when he presided at the sitting of the Conference where this problem came up, was presiding after a meeting of all the officers of the Conference at which it was agreed by all the officers of the Conference that he should take the chair so that the business of the Conference could proceed.
Now, Mr. Faupl stated that he did not want to take the chair; he stated that he had voted in favor of the resolution on South Africa; he stated that from the bottom of his toes he was against the whole policy of apartheid; he stated that his whole career in his country had been spent in fighting racialism and he did not want to have to be placed in the position of ruling in a case which ran against his own conscience when it came to the elements of this issue. This was the discussion which took place among the officers of this Conference. But he was prevailed upon by his colleagues, by all the officers of this Conference, to do his duty, and he said: "I will accept that; after all, it is true, I have been elected; this is an honor, being vice president, which has been conferred upon the workers. But I accept only in all these circumstances, in the interests of the Organization and in the interests of complying with the constitutional requirements of the job at this session, and only on this condition, that all the officers of the Conference agree that I shall rule in this matter that the South African delegate has the right to speak." That was his position.
The Government vice president [Sergei Slipchenko, Ukrainian Socialist Republic] then indicated that he would like to suggest an amendment to what Mr. Faupl had proposed, his amendment being that when Mr. Faupl ruled it should be very clear that he was ruling that all delegates had the right to speak, not just the delegate of South

Africa, so that it was clear that we were talking about a principle which really was basic to the whole issue of freedom of speech. That, of course, was accepted unanimously by the officers, including Mr. Johnson, and it was on that basis and on behalf of all the officers that Mr. Faupl came to this rostrum and agreed to preside.

We then went back to the Selection Committee, all the officers of the Conference went to the Selection Committee, including Mr. Johnson, and I reported to the Committee that the acting President would proceed in the Conference on this agreed basis.
Now, there are many other aspects of this problem that I could go into, but I thought I ought to make it clear that any public insinuation of this character in this matter concerning Mr. Rudi Faupl and concerning the manner in which he presided must be publicly, irrevocably, and clearly denied. There must not be any misunderstanding about the manner in which any officer of this Conference has discharged his responsibilities. I do not want to go further into this case, but I think it important that this particular point be made.

Now let me revert to the story of the negotiations and add that on several occasions during the last few days I have been in contact with the Government delegation of the Republic of South Africa in order to ascertain, in line with the resolution of 1961, whether that delegation would be prepared to withdraw from the Conference. I was given to understand that the Government of South Africa had decided, as a matter of policy, not to leave.
This Conference at its 1961 session adopted a resolution condemning the racial policies of the Government of the Republic of South Africa and advising the Republic of South Africa to withdraw from membership of the ILO.

The Government of South Africa has not complied with this advice, nor has its delegation consented to withdraw from this session of the Conference, and there is no provision in the ILO constitution for the expulsion of a member state.

In the face of this situation, Mr. Johnson of Nigeria, who was the mover of the 1961 resolution, resigned as president of the session, and the African delegations, as I was told yesterday, have decided to participate no further in its work.

So far, the situation would seem to be entirely negative. However, there are, in addition, more recent factors which put the situation in a different light.

The first of these is the continuing determination of the majority of delegates that the constructive work of the ILO in fulfillment of its basic objectives should not be allowed to be paralyzed. Accordingly, a new president of the Conference will be elected, and under his guidance the basic work, our search for peace based upon social justice, can continue its way to fruition.

And, in addition, a resolution has been submitted to me under the urgency provision of the Standing Orders, and the Officers of the Conference are now seized of it. This draft resolution would reiterate the condemnation of apartheid of the 1961 resolution and refer the situation created by South Africa's noncompliance with that resolution as a matter of urgency to the United Nations. It would request the United Nations to consider the situation in relation to South Africa's continued participation as a member of the United Nations and to report action taken to the ILO. This draft resolution, which has been presented by the Government delegate of Panama, thus takes up one of the suggestions I made to the African delegations. Other points could be taken up in the Governing Body.

Let me say, in concluding this assessment of the situation, that the ILO has had to face very grave crises in its recent history. I have been through them all, and I believe myself that from each test we have emerged strengthened, and I believe that we will do so again. There are two reasons for this: as an Organization, we have never wavered, we never will waver, in our basic moral purposes; and we have never adopted, and we shall never adopt, arbitrary methods.
In 1954, when issues of a different character, but equally as grave as those which confront us today, were raised, issues concerning the right of the Soviet Union to participate fully in the work of the ILO, I recalled to the Conference that the rule of law, due process of law tempered by reason and equity, was the essence of our tradition and civilization.

Let me quote what I said then. "Yet we can never afford to take a tradition like ours for granted. The rule of law can be destroyed by any acquiescence in a violation of law. A habit of
reasonable compromise can be undermined by emotional intransigence. Whatever future course this Organization may take, any abandonment of our tradition, any resort to unconstitutional means to overcome a problem in defiance of due process of law, can only be to our loss. It would drain away our constitutional strength.
"And this is an issue, let me emphasize, which does not affect the ILO alone. With great care we have all helped to build a framework for international cooperation through the United Nations family of organizations. Any move to break away from this acquired habit by resorting to the use of power alone, no matter what the seeming advantages, no matter what the provocation, would not only threaten the ILO, it would be a setback for the United Nations. Each of us here must continue the work of our predecessors, to nurture prudently the growth of a civilized community of nations."

That is what I said in 1954, and which I feel bound to recall in the light of our present very different circumstances, because the principle I tried to express, the feeble manner in which I tried to put my views across on this particular concept is, I believe, of lasting and real validity. These are words, but there is truth in them, and I believe that if we adhere to the law it will reinforce the moral purpose of the ILO in its struggle against racial discrimination and for universal recognition of human dignity. Without law there can be no respect for dignity, no civilized recognition of equal rights and equal opportunities. The infraction of law only creates the basis for discrimination. So we must fight discrimination, but we must fight it with truth and we must fight it with the dignity that comes from truth.

My friends, you do not have to tell me about racial discrimination; I need no lessons on racial discrimination. It is a challenge to the existence of a world community, and so it is a challenge to world peace, it is a challenge to world order. We must fight this discrimination, we must fight this enemy, but we must fight it with methods which strengthen the foundations of world order. We must-I urge upon you, I pray you-engage this enemy effectively. This cannot be done by quitting the Conference, by sitting in the halls.

That is why I regret the decision of which I was informed yesterday that the African dele-
gations were planning to take no further part in this session of the Conference. I think this is an unfortunate decision, I think it is a very unwise one. I would prefer to see Africans stay and fight on this issue, fight under the rules of law which are open to them, and show the world how men can meet a challenge and master it, and master it with the power of truth and dignity. I know from my own struggle with fascism through five years of war that you cannot engage the enemy when you retreat.

This issue of apartheid is one by which the United Nations and the other specialized agencies, as well as the ILO, are now challenged. I believe that this Conference should take a decisive step in responding to the challenge, in doing so in a way whereby the United Nations and the ILO, with the other organizations, work out together a common policy, a common action, combining their force and their effectiveness. Whether this is done depends upon the delegates present here-depends in large measure upon the African delegates.

It has been said, and it has been mentioned in the press, that some people would be ready to destroy the ILO as a protest against South Africa. Let me say this. They will not. They cannot destroy the ILO; they do not have it in their power to destroy the ILO. The ILO is too firmly rooted in the movements of workers everywhere in the world towards fuller freedom and a social order which is more just and equitable, and in the struggle of the peoples of emerging nations for a better way of life. Those who talk this way cannot destroy the ILO, but they can limit the effectiveness with which the ILO works to achieve what they themselves want. They can, if the passion of the moment so dictates, reject the weapon which the ILO can be in the struggle against discrimination.

And this is the question with which this Conference is now squarely faced. Do we lay down our weapons? Do we abandon the field of battle? Do we sabotage the foundations of a civilized world community in our haste to leave? Or do we, on the contrary, go forward together to engage in the struggle and to triumph over injustice and oppression, to triumph over poverty and discrimination? That is the decision before this Conference.

## Hours of Work in the United States and Abroad*

Editor's Note.-The following article is an excerpt-with necessary editorial modifica-tions-from a set of background materials on hours of work presented by the Commissioner of Labor Statistics before a subcommittee of the House Education and Labor Committee on June 11, 1963. The excerpt is limited to the discussion of current pattern of working hours, including workweeks over 40 hours, in the United States and-briefly-in certain industrialized foreign countries. Omitted were those materials dealing with trends in hours of work, dual jobholding, paid vacations and holidays, and the costs of supplementary benefits.

There has been a continuing long-term decline in the time spent at work by the average American. This is true whether the measuring rod is the hours scheduled for work or the hours actually spent on the job, whether daily, weekly, or annually.

The decline in working time has involved reductions in hours per day and days per week, and inrreases in days off from work in the form of paid vacations and paid holidays.

Over the years, the basic reasons for reducing hours have undergone several changes. Originally, the physically exhausting nature of extremely long workweeks was the primary motivating force. With the gradual decline in working hours, the trend toward further reductions has reflected a desire for increased leisure time for its own sake. More recent proposals for reducing hours, on the other hand, have been offered as a possible solution to the continuing high rate of unemployment.

## Current Patterns of Working Hours

In May 1963, the average workweek for the entire U.S. economy was 40.7 hours. Among those at work, about a fifth worked very long hours ( 49 or more), but this was matched by another fifth who worked part time (less than 35 hours). As usual, the largest single group of workersabout 40 percent-put in 40 hours. (See table 1 and chart 1.)

There were about 31 million workers whose hours ranged between 35 and 40 a week. The proportion of workers reporting precisely 40 hours of work was comparatively high in manufacturing, railroads, public utilities, and public administration (standard governmental activities). Workers reporting $35-39$ hours of work constituted only 6 percent of those at work; by occupational group, this proportion was highest among clerical workers, and by industry it was highest in finance, insurance, and real estate. As of May 1963, however, a relatively small proportion of blue-collar workers were in this category.

Hours actually worked averaged $39 \frac{1}{2}$ for nonfarm wage and salary workers. Longer than average were the weekly hours of workers in railroads, wholesale trade, mining, and forestry and fisheries (ranging between 42 and 45). These are industries employing relatively few women or parttime workers and where the nature of the work might require exceptionally long hours under certain circumstances. On the other hand, hours of 39 or below were found in retail trade and in several of the service industries, such as education, entertainment and recreation, and private household service. It should be noted, however, that reported hours may be somewhat understated in these sectors because of the irregularity of the workweek and the variety of activities engaged in, often for more than one employer.

While hours of work per week have declined in every occupational group over the past decade, very wide differences remain. Longest workweeks continued to be registered by farm operators (55 hours) and nonfarm managers, officials, and proprietors ( 50 hours) in May 1963. These groups

[^22]Table 1. Persons at Work, by Hours of Work, During the Survey Week, May 1948 and May 1963

| Hours of work | Totel at work (all industries) |  |  |  | Nonagricultural wage and salary workers |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number |  | Percent distribution |  | Number |  | Percent distribution |  |
|  | 1948 | 1963 | 1948 | 1963 | 1948 | 1963 | 1948 | 1963 |
| Total.-...--- | 56,900 | 66,889 | 100.0 | 100.0 | 43, 015 | 55,291 | 100.0 | 100.0 |
| 1 to 34 hours.------ | 8,238 | 13, 016 | 14.5 | 19.5 | 5,482 | 9,920 | 12.8 | 18.0 |
| 1 to 14 hours.- | 1,838 | 4,560 | 3.2 | 6. 8 | 1,392 | 3,673 | 3.2 | 6.6 |
| 15 to 21 hours. | 2,290 | 3, 347 | 4. 0 | 5. 0 | 1,260 | 2,297 | 2.9 | 4.2 |
| 22 to 29 hours. | 1,853 | 2,562 | 3.3 | 3. 8 | 1,220 | 1,917 | 2.8 | 3. 5 |
| 30 to 34 hours. | 2,257 | 2,547 | 4.0 | 3.8 | 1,610 | 2,033 | 3.7 | 3.7 |
| 35 to 40 hours | 23, 131 | 31,184 | 40.7 | 46.6 | 21, 242 | 29,091 | 49.4 | 52.7 |
| 35 to 39 hours. | 2,258 | 4,067 | 4.0 | 6.1 | 1,806 | 3,511 | 4.2 | 6.4 |
| 40 hours.------ | 20,873 | 27,117 | 36.7 | 40.5 | 1,436 | 25,580 | 45.2 | 46.3 |
| 41 hours or more.- | 25,533 | 22,687 | 44.9 | 33.9 | 16, 296 | 16, 279 | 37.9 | 29.5 |
| 41 to 47 hours. | 5,273 | 5,311 | 9.3 | 7.9 | 4, 618 | 4, 656 | 10.7 | 8.4 |
| 48 hours | 8,189 | 4,188 | 14.4 | 6.3 | 6,834 | 3,511 | 15.9 | 6.4 |
| 49 hours or more | 12,071 | 13, 188 | 21.2 | 19.7 | 4,844 | 8,112 | 11.3 | 14.7 |

NOTE: Data relate to actual hours of work during the survey week by members of the labor force who were at work. Data are for the month of May of each year and reflect hours worked at all jobs during the week. These figures are based on interviews obtained in the monthly survey of households. Because of rounding, sums of individual items may not equal totals.
include a high proportion of self-employed and supervisory personnel with major responsibilities for the functioning of enterprises. Next longest average of working hours (over 42) were recorded among professional workers and skilled craftsmen, where the proportion of self-employed is also relatively high and where heavy burdens of responsibility are also concentrated. At the other end of the scale, hours were relatively low for private household workers (25) and nonfarm laborers (34). Among these groups, job attachments are relatively unstable and a full-time workweek is often made up only by combining work for a number of different employers.

Scheduled Hours. Forty hours is the most prevalent weekly work schedule for blue-collar workers in most industries in the United States. The 40hour week is also the most common schedule for office workers in most industries and in most cities except in the Northeast, but in all regions substantial numbers of office workers have shorter schedules. (See table 2.)

About 85 percent of the manufacturing bluecollar workers in metropolitan areas are on a 40hour schedule. Those that do not work a 40 -hour week are about evenly divided between shorter and longer schedules. The shorter workweeks are concentrated in a few industries such as print-
ing, the women's apparel trades, and the rubber industry in Akron. (Almost all unionized printing establishments have schedules of less than 40 hours, with $37 \frac{1}{2}$-hour weeks being most common.) Longer schedules are found in a limited number of continuous-process manufacturing industries such as paper and pulp, where many employees are scheduled to work 48 hours 1 week out of every 4 and, hence, average about 42 hours a week.

In some nonmanufacturing industries such as retail and wholesale trade and various service industries, schedules of substantial numbers of blue-collar workers exceed 40 hours. Thus, in metropolitan areas about one-fifth to one-sixth of the nonoffice workers in retail and wholesale trade are on schedules of more than 40 hours a week. (The 1961 amendments to the Fair Labor Standards Act provide that a standard of 44 hours will apply to the larger retail trade establishments beginning in September 1963. The standard will be reduced to 42 hours in September 1964 and to 40 hours in September 1965.) About 3 out of 10 blue-collar workers in the service trades in these areas, most of whom are not covered by the FLSA, also work schedules in excess of 40 hours.

In most of the highly unionized nonmanufacturing industries, 40 hours is the most common standard workweek. Thus, all but 6 precent of the workers covered by union wage scales in local trucking are on a 40 -hour schedule, as are 85 percent of those in local transit and about 90 percent of those in the building trades. Most of the building trades workers not on a 40-hour schedule have a 35 -hour week. The most notable exception is in New York City, where electricians on building construction are employed for 25 hours a week at straight-time and 5 hours at overtime. Local transit is the only unionized industry in which as much as 10 percent of the workers are regularly employed for more than 40 hours.

While the 40 -hour week is still the most common single schedule for office workers in metropolitan areas, more than one-third work fewer than 40 hours. Workweeks in excess of 40 hours are extremely rare for office workers.

In each of the four regions of the country, at least one-sixth of the office workers in metropolitan areas regularly work less than 40 hours, and in the northeastern cities more than three out of five worked such schedules. Short work schedules were in effect for two out of three office workers
in finance, real estate, and insurance. The prevalence of short work schedules in the northeastern section of the country reflects in part the concentration of insurance and finance and of national offices of large industrial concerns in this part of the country.

In southern metropolitan areas, 23 percent of all plant workers were employed for workweeks of more than 40 hours, compared with 6 to 8 percent in the other three regions.

## Workweeks Over 40 Hours

In May 1963, the workweek of an estimated 22.7 million workers (including those in agriculture, the self-employed, and white-collar employees as well as wage earners) exceeded 40 hours. This total included 13.2 million with workweeks of 49 hours or more, about one-fifth of the total at work. Of this 13.2 million total, about 2.4 million were working on farms and another 2.7 million were in nonfarm self-employment (including about 130,000 unpaid family workers).
The approximately 8.1 million nonfarm wage and salary employees working over 48 hours include about $1 \frac{1}{4}$ million government workers and roughly 1 million dual jobholders. This latter group averaged about 52 hours of work altogether, including 12 hours on secondary jobs in May 1962 (latest available data).

The proportion of nonfarm wage and salary employees working over 48 hours has shown a persistent rise over the postwar period. This increase, while relatively small, is nevertheless significant because it runs counter to the general pattern of shorter scheduled workweeks in many sectors of the economy and because it diverges from the downtrend in the proportion working 41 to 48 hours.
There is no basis for believing that this uptrend, which appears to have been more pronounced since the mid-1950's, is the result of more dual jobholding or better survey techniques. Dual jobholding has been a fairly constant proportion of total employment since 1956 (earlier studies were not comparable), and there have been no basic changes in the labor force survey schedule design, enumeration techniques, or quality control procedures since the mid-1950's.

The rising trend in the number and proportion of persons in nonfarm industries with very long
weekly hours of work was apparent in May 1963 to varying degrees in nearly every major industry and occupation. However, a major factor responsible for this trend appeared to be both an increasing proportion of professional and technical workers in nonfarm employment, and a lengthening of hours among those highly skilled workers. (See chart 2.)

Characteristics of Those With Long Workweeks. Self-employed workers tend to have much longer workweeks than any other class of workers; in 1963, persons self-employed in nonfarm industries had an average workweek of 47 hours compared to about $391 / 2$ hours for nonfarm wage and salary workers as a whole. Comprising about 10 percent of all nonfarm workers, the self-employed accounted for 20 percent of all persons working 49 hours or more per week.

The proportion of wage and salary workers with very long hours is high in trade and low in manufacturing industries. However, even in manufacturing, 1 out of every 8 full-time employees

## Chart 1. Distribution of Hours of Work for Nonfarm Employees, May 1948 and May 1963


worked 49 hours or more in 1963 (table 3). In all probability, a high proportion of these were nonproduction workers or dual jobholders.

Employees in certain occupations are more likely to work longer hours. More than 40 percent of all persons in the managers, officials, and proprietors group worked 49 hours or more in 1963; about 20 percent of all professional and technical and the same proportion of sales workers also had long workweeks. Together, these three occupations accounted for over 40 percent of all workers and over 50 percent of the nonfarm workers with especially long workweeks in 1963. Extended hours were least common among clerical workers, domestics, and nonfarm laborers. Persons with very long hours appear to be concentrated in the more highly skilled occupations-where a relative shortage exists-or in positions where they would probably have a personal interest in their job. (See table 4.)

In 1963, manual workers (craftsmen, operatives, and laborers) comprised about 3 million persons with workweeks of more than 48 hours, representing about one-fourth of the overall total working such hours. Out of the 3 million, an estimated 800,000 were dual jobholders.

Certain groups in the population are more likely than others to work extended hours. In May 1963, 40 percent of all men in nonfarm industries worked more than 40 hours per week compared with 18 percent of the women. ${ }^{1}$ The average workweek for men in the central age groups (25-64 years) was about 45 hours per week, compared with about 36 for women in the same age categories. In part, these differences reflected the higher proportion of women on part time. Even

[^23]Table 2. Percent Distribution of Scheduled Weekly Hours ${ }^{1}$ of Office and Plant Workers in Metropolitan Areas, by Industry Division and Region, ${ }^{2}$ 1961-62 ${ }^{3}$

| Scheduled weekly hours ${ }^{1}$ | $\underset{\text { areas }}{\underset{\text { All }}{ }}$ | Industry division |  |  |  |  |  | Region ${ }^{2}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Manufacturing | Public utilities ${ }^{4}$ | Wholesale trade | Retall trade | $\underset{\text { nances }}{\mathrm{Fi}}$ | Services | Northeast | South | North Central | West |
|  | Office workers |  |  |  |  |  |  |  |  |  |  |
| All weekly work schedules. | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Under 40 hours ${ }^{6}$ | 36 | 22 | 25 | 31 | 24 | 66 | 50 | 62 | 24 | 23 | 18 |
| 35 hours.-. | 11 | 7 | 9 | 9 3 | 5 | 17 | 19 | 25 | 3 | 3 | 1 |
| $361 / 4$ hours.- | 3 14 | 8 | 13 | 13 | 11 | -828 | 19 | 20 | 12 | 11 | 9 |
| 383/4 hours.- | 14 4 4 | 4 | 1 | 4 | 1 | 7 | 5 | 4 | 4 | 5 | 5 |
| 40 hours...-. | 62 | 77 | 75 | 64 | 70 | 34 | 44 | 38 | 71 | 76 | 81 |
| Over 40 hours | 2 | 1 |  | 5 | 6 | ${ }^{(7)}$ | 5 | ${ }^{(7)}$ | 6 | 1 |  |
| Average scheduled weekly hours... | 38.9 | 39.4 | 39.2 | 39.2 | 39.5 | 37.9 | 38.5 | 37.8 | 39.6 | 39.5 | 39.6 |
|  | Plant workers |  |  |  |  |  |  |  |  |  |  |
| All weekly work schedules. | 100 | 100 | 100 | 100 | 100 |  | 100 | 100 | 100 | 100 | 100 |
| Under 40 hours ${ }^{6}$ - | 743821112231 | 84385711221 | (7) $\begin{aligned} & 1 \\ & 1 \\ & 1\end{aligned}$ | 3 | 11 | --------- | 8536329254162 | $\begin{array}{r} 11 \\ \hline \hline \\ 4 \\ 80 \\ 8 \\ 1 \\ 1 \\ 2 \\ 2 \\ 1 \end{array}$ | $\begin{array}{r\|} \hline 4 \\ 2 \\ 2 \\ 72 \\ 23 \\ 1 \\ 4 \\ 4 \\ 8 \\ 3 \end{array}$ | $\begin{array}{r} 6 \\ 3 \\ 2 \\ 86 \\ 8 \\ 1 \\ 2 \\ 2 \\ 2 \\ 1 \end{array}$ |  |
| 371/2 hours. |  |  |  | 2 | 4 | --------- |  |  |  |  |  |
| 40 hours....--- |  |  | 94 | 79 | 67 | ----- |  |  |  |  |  |
| Over 40 hours ${ }^{\text {6 }}$ |  |  | 5 |  | 22 |  |  |  |  |  |  |
| 42 hours..- |  |  |  | ${ }^{(7)} 4$ | $\stackrel{2}{5}$ |  |  |  |  |  |  |
| 45 hours-- |  |  |  | 3 | 3 |  |  |  |  |  |  |
| 48 hours- |  |  | 1 | 2 | 7 | --.-- |  |  |  |  |  |
| Over 48 hours. |  |  | 1 | 4 | 2 |  |  |  |  |  |  |
| Average scheduled weekly hours. | 40.4 | 40.1 | 40.3 | 41.0 | 41.0 |  | 41.5 | 40.1 | 41.3 | 40.3 | 40.2 |

[^24][^25]Table 3. Wage and Salary Workers in Nonagricultural Industries, by Hours of Work and Major Industry Group, May 1948 and May 1963
[Percent distribution]

| Major industry group | Total $\stackrel{\text { at }}{\text { work }}$ work | Hours of work |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & 1 \text { to } \\ & 34 \end{aligned}$ | $\begin{gathered} 35 \text { to } \\ 39 \end{gathered}$ | 40 | $41 \text { to }$ | 48 | 49 or more |
| May 1963 |  |  |  |  |  |  |  |
| Total | 100.0 | 17.8 | 6.4 | 46.3 | 8.4 | 6.4 | 14.7 |
| Mining, forestry, and fisheries <br> Construction | 100.0 | 7.9 | 2.4 | 50.9 | 6.8 | 8.1 | 23.8 |
|  | 100.0 | 16.9 | 3.8 | 49.1 | 9.7 | 5.3 | 13.3 |
| Manulacturing <br> Transportation and public utilities | 100.0 | 9.4 | 5.3 | 56.8 | 8.9 | 7.9 | 11.8 |
|  | 100.0 | 9.7 | 5.5 | 57.4 | 6.7 | 5.1 | 15.6 |
| Wholesale and retail trade Finance, insurance, and real estate. | 100.0 | 24.1 | 5. 5 | 31.7 | 9.8 | 8.9 | 20.0 |
|  | 100.0 | 12.5 | 18.3 | 44.4 | 7.2 | 2.8 | 14.9 |
| Service industriesPublic administration.-------- | 100.0 | 30.7 | 7.0 | 35.0 | 8.2 | 4.3 | 14.7 |
|  | 100.0 | 8.7 | 4.7 | 65.3 | 5.2 | 4.6 | 11.5 |
| May 1948 |  |  |  |  |  |  |  |
| Total | 100.0 | 12.8 | 4.2 | 45.2 | 10.7 | 15.9 | 11.3 |
| Mining, forestry, and fisheries. $\qquad$ | 100.0 | 11.3 | 6 | 36.8 | 5.4 | 37.2 | 8.8 |
| Construction | 100.0 | 16.2 | 4.1 | 45. 6 | 10.3 | 14.6 | 9.3 |
| Manufacturing Transnortation and public | 100.0 | 9.1 | 3.8 | 60.7 | 10.1 | 9.5 | 6.8 |
| Transportation and public utilities. | 100.0 | 6.3 | 1.9 | 39.8 | 10.5 | 27.4 | 14.0 |
| Wholesale and retail trade Finance, insurance, and real estate_ | 100.0 | 14.7 | 2.8 | 29.6 | 13.2 | 22.9 | 16.7 |
|  | 100.0 | 7.8 | 10.5 | 44.3 | 13.7 | 13.4 | 10.4 |
|  | 100.0 | 23.7 | 7.7 | 29.7 | 10.4 | 14.3 | 14.3 |
|  | 100.0 | 5.3 | 1.8 | 63.7 | 8.3 | 11.4 | 9.5 |

among full-time workers, however, a much higher proportion of men than women (nearly one-half versus one-fourth) worked over 40 hours. (See table 5.)

Married men are much more likely than single men to work longer hours, which probably reflects their stronger motivation to maximize income and their larger proportion among the self-employed and in highly skilled occupations where longer workweeks are more prevalent. More married women than single women work long hours (17 versus 14 percent in 1963), but the hours of both are exceeded by those of women who are widowed, divorced, or separated. These women, of course, have a greater need for income.

A greater proportion of whites than nonwhites had workweeks in excess of 40 hours in 1963-35 as compared with 28 percent. This reflects the higher concentration of whites in self-employment and in the more highly skilled occupations, as well as the lower proportion of whites on part time for economic reasons.

Overtime Hours in Manufacturing. In 1962, overtime hours for manufacturing production workers aggregated 34.7 million per week and represented
a payroll cost of $\$ 120.4$ million, including about $\$ 40$ million in premium pay (assuming payments at a rate of time and one-half). Overtime hours accounted for 6.9 percent of total paid man-hours in manufacturing and 10.1 percent of total payroll.

During the 7 -year period for which data are available (1956-62), overtime hours in manufacturing ranged from a low of 2 per week in the recession year of 1958 to a high of 2.8 in both 1956 and 1962, and have averaged about 2.5 .

Changes in the amount of overtime work have varied with fluctuations in the business cycle. In a period of business contraction, the length of the average workweek has declined but less sharply than employment, and mainly through the reduction of overtime. With business improvement, the work force has expanded and average hours of work have increased, again chiefly through increased use of overtime. Even at the bottom of the cycle, however, a considerable amount of overtime has been worked.

To what extent does industry utilize the availability of surplus labor to reduce hours and cut overtime costs? Some insight into this question is given by a special study relating hours of work with unemployment rates in 113 metropolitan areas.

In September 1962, average weekly hours of production workers in manufacturing industries for this group of areas was 40.6 hours, approximately the same as the national average. There was a wide range of averages among the 113 areas; the lowest was 36.4 (Wilkes-Barre-Hazleton, Pa.) and the highest, 46.7 (Kenosha, Wis.).

When hours of work in these areas were matched with the areas' labor market classification by the
Table 4. Persons at Work 49 Hours or More, by Major Occupation Group, April 1952 and April 1963

| Major occupation group | Percent distribution |  | Thousands of persons |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1952 | 1963 | Percent change 1952-63 |
|  | 1952 | 1963 |  |  |  |
| Total | 100.0 | 100.0 | 10,726 | 11,829 | 10 |
| Professional and technical | 6.9 | 12.7 | 744 | 1,507 | 103 |
| Managers, officials, and proprietors. | 22.7 | 24.0 | 2,438 | 2,844 | 7 |
| Clerical | 3.6 | 3.8 | 2, 388 | 2,844 | 15 |
| Sales. | 6.2 | 7.0 | 666 | 832 | 25 |
| Craftsmen and foremen | 9.2 | 10. 2 | 990 | 1,208 | 22 |
| Operatives-..... | 11. 6 | 12.5 | 1,242 | 1, 477 | 19 |
| Nonfarm laborers | 2.5 | 2.3 | 264 | 272 | 3 |
| Private household workers.--.-.- | 1.6 6.8 | 1.9 | 170 | 221 | 30 40 |
|  | 22.1 | 12.0 | 2,368 | 1,421 | -40 |
| Farm laborers. | 6.8 | 5. 0 | 730 | 587 | -20 |

Bureau of Employment Security, ${ }^{2}$ the data suggested that average weekly hours tended to be higher in areas with relatively low or moderate unemployment than in areas of relatively substantial unemployment. In September 1962, median weekly hours were one-half hour lower in "D" areas than in "C" areas, and 1.9 hours lower in " E " areas than in " D " areas. In the one " F " area (unemployment over 12 percent), the average was 36.4. However, overtime was widespread throughout these areas, and only in those with heaviest unemployment was it very rare or nonexistent. (See table 6.)

Another significant aspect of hours worked in manufacturing is their wide diversity, not only among the various industries, but even among different plants within an industry. This situation is illustrated in table 7, where production workers are distributed in terms of the average weekly hours in the plants where they are employed. Thus, in some industries where average weekly hours are relatively low (e.g., apparel),

Chart 2. Proportion of Employees Working Over 40 Hours


Table 5. Persons at Work in Nonagricultural Industries, by Hours of Work, Age, Sex, and Marital Status, May 1955 and May 1963

| Age and marital status | Men |  |  |  | Women |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Per- <br> cent <br> at work <br> $1-34$ <br> hours <br> 1963 | Per- <br> cent <br> at work <br> 4 hiours <br> or more <br> 1963 | Average weekly hours |  | Per-centat work$1-34$hours | $\left.\begin{gathered}\text { Per- } \\ \text { cent } \\ \text { at work } \\ 41 \\ \text { or morre } \\ \text { or more }\end{gathered} \right\rvert\,$ | A verage weekly hours |  |
|  |  |  | 1955 | 1963 |  |  | 1955 | 1063 |
| Total <br> Age | 12.3 | 40.0 | 43.0 | 42.9 | 29.6 | 17.8 | 36.6 | 35.2 |
|  |  |  |  |  |  |  |  |  |
| 14 to 17. | 90.5 | 3.3 | 18.4 | 13.3 | 90.5 | 3.2 | 17.1 | 12.4 |
| 18 and 19 | 43.2 | 21.8 | 35.8 | 32.3 | 35.3 | 10.4 | 34.5 | 32.0 |
| 20 to 24 | 15.0 | 36.0 | 41.5 | 41.6 | 19.5 | 13.6 | 38.1 | 36.5 |
| 25 to 34 | 6.5 | 44.4 | 44.3 | 45.0 | 27.3 | 17.6 | 37.5 | 35.8 |
| 35 to 44 | 5.8 | 46.0 | 44.7 | 45. 5 | 27.5 | 17.6 | 36.8 | 36.0 |
| 45 to 64 | 7.9 | 40.6 | 44.0 | 44.5 | 26.1 | 21.6 | 37.6 | 37.1 |
| 65 and over.--- | 36.4 | 24.4 | 39.3 | 35.3 | 48.4 | 19.9 | 36.7 | 31.3 |
| Marital Status |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Single.. | 36.6 | 20.4 | 36.9 | 33.2 | 31.7 | 13.6 | 36.0 | 35.1 32.7 |
| Other marital status. | 15.0 | 39.0 | 42.2 | 42.6 | 24.1 | 24.2 | 38.5 | 37.8 |

Note: See note, table 1.
there are nevertheless a number of plants with high average hours. Further, there is undoubtedly an even greater variability of hours among the workers themselves. This diversity reflects the wide variation in worker preferences, economic conditions, manufacturing processes, and unionmanagement relations, all of which may affect an employer's decision to schedule overtime work.

For manufacturing as a whole, production worker employment fell 8 percent during the 1956-62 period while average weekly hours and average overtime hours remained the same. Since industrial production increased rapidly during the period (the Federal Reserve Board index of industrial production in manufacturing showing a rise of 18 percent), the decline in employment appears to be a consequence of increased productivity. It does not appear that any major change in the length of the average workweek or in the use of overtime took place during this period. (See table 8.)


Table 6. Average Weekly Hours ${ }^{1}$ of Production Workers in Manufacturing for 113 Standard Metropolitan Areas Classified According to Labor Supply, ${ }^{2}$ September 1962

| Labor supply classification ${ }^{2}$ | Areas classified by BES | Areas with hours data |  |  | Number of areas with hours of- |  |  |  | Percent of areas with hours of- |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\underset{\text { ber }}{\text { Num- }}$ | Manufacturing production workers (thousands) | Median hours | $\begin{gathered} 36.0- \\ 37.9 \end{gathered}$ | $\begin{gathered} 38.0- \\ 39.9 \end{gathered}$ | $\begin{aligned} & 40.0- \\ & 41.9 \end{aligned}$ | $\begin{gathered} 42.0 \text { and } \\ \text { over } \end{gathered}$ | Total | $\begin{gathered} 36.0- \\ 37.9 \end{gathered}$ | $\begin{aligned} & 38.0- \\ & 39.9 \end{aligned}$ | $\begin{aligned} & 40,0- \\ & 41.9 \end{aligned}$ | $\begin{gathered} 42.0 \text { and } \\ \text { over } \end{gathered}$ |
| Total. | 147 | 113 | 10,476 | 40.6 | 3 | 24 | 72 | 14 | 100.0 | 2.7 | 21.2 | 63.7 | 12.4 |
| A. | ${ }_{10}^{0}$ | 0 |  |  |  |  | 6 | 0 | 100.0 |  | 25.0 | 75.0 |  |
| B | 96 | 76 | 7,557 | 40.9 | 0 | 12 | 53 | 11 | 100.0 |  | 15.8 | 69.7 | 14.5 |
| D | 34 | 23 | 2, 145 | 40.4 | 1 | 6 3 | 13 0 | 3 0 | 100.0 100.0 | 4.4 40.0 | 26.1 60.0 | 56.5 | 13.0 |
| E | 6 2 | 5 1 | 363 20 | 38.5 36.4 | 2 0 | 3 <br> 1 | 0 | 0 | 100.0 100.0 | 40.0 | 60.0 100.0 |  |  |

${ }^{1}$ Average weekly hours relate to the average hours for which pay was received. Overtime hours represent that portion of the gross average weekly hours which were in excess of regular hours and for which premium payments
were made. For more details, see Employment and Earnings, May 1963, p. 7-E.

A variety of patterns prevails in the use of overtime work. In some industries, use of overtime appears to be at a minimum but in others, such as food processing, sugar refining, pulp and paper products, agricultural chemicals, and copper ore mining, overtime is more extensive.

For example, in the highly seasonal agricultural chemical industry (fertilizers, insecticides, etc.), the annual average of gross weekly hours has been about 43. However, this average normally varies from a seasonal low of about 41 hours to a peak of 45 to 47 hours in April and May. With peak demand, production worker employment rises
${ }^{2}$ For an explanation of classification, see Area Labor Market Trends; see also text footnote 2.

SOURCE: Prepared by State agencies in cooperation with Bureau of Labor Statistics; excludes 3 areas in Puerto Rico.
very sharply-by nearly 68 percent. Thus, most of the adjustment in this industry to its extremely seasonal pattern is made by hiring more workers, but part of the adjustment consists of raising the workweek by 4 to 6 hours.

In sugar refining, an annual average of about 44 hours reflects a workweek in the range of 40 to 43 hours during 10 months of the year, rising to about 50 in the peak season in November and December. Production worker employment jumps from an average of about 25,000 in slow seasons to about 40,000 in the 3 to 4 months beginning with October, largely because of the requirements for

Table 7. Production Workers in Manufacturing, by Average Weekly Hours ${ }^{1}$ of Their Plants and Major Industry Group, October 1962
[Percent distribution]

| Industry | Total | Average weekly hours ${ }^{\text {a }}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 40.1-12.0 | 42,1-4.0 | ${ }^{44.1-46.0}$ | 46.1-48.0 | Over |
| All manutacturing. | 100.0 | 44.8 | 26.0 | 13.2 | 7.9 | 3.9 |  |
| Durable goods. | 100.0 | 42.4 | 30.0 | 13.5 | 7.6 | 3.4 |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Ster |  |  |  |  |  |  |  |
| Mashinery meal prouacts....-- - - - - |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Nondurable goods.... |  |  |  |  |  |  |  |
| Frod and kindred products. |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| (Patemer |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Rathber and misedilaneous plastic productis |  |  |  |  |  |  |  |

[^26]NOTE: Because of rounding, individual percentages may not add to 100.
processing sugar beets. The industry apparently needs to double its labor input, from about 1 million man-hours per week in the off season to about 2 million at the seasonal peak. It accomplishes this by a 60 -percent increase in production worker employment, but also has to raise hours substantially.

Long hours have also been characteristic of the paper and pulp industry, which averages between 43 and 44 hours per week. A major cause for these long workweeks is the continuous-process operation that is prevalent in many parts of the industry. Since the facilities are in operation 168 hours per week, the average workweek for four shifts must be 42 hours. Normally, three shifts work 40 hours while one of the shifts works 48 hours.

The high average workweek in the copper ore mining industry illustrates the effect of special factors other than seasonality of demand or unusual processing methods. Characteristically, working hours in this industry have a seasonal low in the summer and a peak in the winter, with small fluctuations in employment. This pattern arises out of the location of most copper minesin isolated mountain or desert areas where workers cannot profitably use a long weekend and where they prefer to avoid long hours during the
summer. Thus, while the mines could operate year-round with a stable workweek and employment, workers' preferences have led to this seasonal variation.

For the 1956-62 period, individual industries show a variety of trends. In certain industriee (e.g., transportation equipment, lumber and wooe products, and petroleum refining), productiod worker employment has declined markedly whiln overtime hours have been increasing. On ths other hand, there are other industries (such as ordnance, electrical equipment, and printing and publishing) in which the trend has been in exactly the opposite direction-an increase in production workers with stable or declining average weekly overtime hours.

## Working Hours in Some Other Countries

Most other industrialized countries are experiencing efforts by trade unions to reduce working hours to the 40 -hour standard widely accepted in the United States. At the present time, however, current practices embodied in both law and collective bargaining agreements provide for hours somewhat longer than those worked in this country. Summary information both on standard weekly hours and actual hours worked for

Table 8. Changes in Employment, Average Weekly Hours, and Average Overtime Hours ${ }^{1}$-for Production Workers in Manufacturing, by Major Industry Group, 1956-62


[^27]Table 9. Normal Weekly Maximum Hours of Work in Industry in Selected Foreign Countries

| Country | Fixed by- |  | Country | Fixed by- |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Law | $\begin{gathered} \text { Collec- } \\ \text { tive } \\ \text { contract } \end{gathered}$ |  | Law | Collective contract |
| Australia ${ }^{1}$ | 40 |  | Israel | 47 | 47 |
| Austria--- | 48 | 45 | Italy... | 48 | - 44-48 |
| Belgium | 44-48 | 45 | Japan_-.......-.--- | 40 |  |
| Canada ${ }^{\text {2 }}$ - | 44-48 | 40-44 | Netherlands.------ | 48 | 45 |
| France. |  | (8) 43 | Norway | 45 | 37-42 |
| Federal Republic | 448 | 1 $40-47$ | Sweden--1-d | 45 | $40-42$ $45-46$ |
| of Germany. |  |  | United Kingdom.- |  | 42-44 |

${ }^{1}$ The hours of work are determined by an arbitration system established under a constitutional provision.
${ }_{3}^{2}$ The hours of work are determined by provincial legislation.
3 In the steel industry, 42 hours.
${ }^{4}$ The general standard fixed by law is 8 hours a day, with special regulations governing Sunday work. Indirectly, this means a regular 48 -hour workweek.
${ }_{5}^{5}$ A verage 44.

- Average 46.

Source: For Australia, Yearbook of the Commonwealth of Australia, 1932 ; for Western Europe, Arbeit und Wirtschaft (Austrian Chamber of Labor an d Austrian Trade Union Federation, Feb:uary 1963); for Canada, Proninci al Labour Standards (Department of Labour of Canada, December 1962); for Israel, Histadrut (General Federation of Labor in Israel), as transmitted in Airgram A-736, May 24, 1963, by the American Embassy in Tel Aviv; for Japan, Labor Legislation (Ministry of Labor, 1959).
selected foreign countries is presented in tables 9 and 10.

France introduced the legal 40-hour week in 1936 in an effort to create additional employment opportunities. In practice, however, the legislation has not yet been fully implemented; the actual average working time is higher. In October 1962, for example, it was 46.2 hours per week.
In Italy some big enterprises, including some in the metal industry, have recently introduced the 45 -hour week. The mine workers have obtained the 40 -hour standard workweek. In Austria, the regular 45 -hour week was introduced in February 1959 for those enterprises in industry and commerce which are subject to collective agreements. Sweden, Norway, and Denmark have in recent years reduced the working time gradually to the regular 45 -hour week in such a way that every year the weekly working time was reduced by 1 hour.

In Switzerland, a normal 45 -hour week has been in force in the machine and metal industry since May 1960. In the Swiss watch, printing, and other major industries, weekly working time is to be reduced from 48 hours to 44 hours by the mid-1960's. In a referendum held in October 1958, however, Switzerland rejected the legal introduction of a 44 -hour week.

In the United Kingdom, the normal working time is fixed by wage orders or collective agree-
ments. Generally a 44 -hour week prevails, but in the British machine industry, 42 hours per week has been the normal working time since March 1960. In April 1963, collective agreements were concluded in the construction and electrical industries reducing the normal workweek to 40 hours, and similar contracts are under negotiation in shipbuilding and engineering.

In Belgium, collective agreements provide for a 45 -hour standard workweek for a vast majority of workers. The Belgian Government announced in 1963 a change which, if carried through, would make 45 hours the statutory workweek.

In the Federal Republic of Germany, the statutory maximum hours of work are fixed by several laws and regulations and are generally 8 hours per day with a 6 -day workweek. However, 5.5 million wage and salary earners, including those in the pace-setting metal industries, are covered by collective contracts providing for a 42-43-hour standard workweek at present and for a reduction to a 40-hour week by 1965-66.

A general reduction of the workweek to 40 hours has been one of the fundamental aims of the trade union movement in all Western European countries ever since the end of World War II. This goal has repeatedly been raised when new legislation or collective agreements have been discussed. The question of shorter hours of work was also involved in the discussions leading to the 1957 treaty establishing the European Economic Community. A provision was included in the treaty stating that the member countries agree upon the necessity of improving workers' living and working

Table 10. Hours Worked Per Week in Manufacturing in Selected Foreign Countries ${ }^{1}$

| Country | Date | Average hours worked ${ }^{1}$ |
| :---: | :---: | :---: |
| Australia. | December 1962 | 39.89 |
| Austria | December 1962 | 43.0 |
| Canada | September 1962 | 41.4 |
| France. | September 1962 | 45.9 |
| Federal Republic of G | September 1962 | 44.5 |
| Italy ................... | February 1962 | ${ }^{2} 168.3$ |
| Japan | September 1962 | 49.3 |
| Netherlands. | $1961$ | 46.7 |
| Norway. | December 1961 | 341.6 |
| Switzerland. | September 1962 | 47.7 45.7 |
| United Kingdom | Oetober 1962... | 46.2 |

[^28]Table 11. Overtime Premium as Percent of StraightTime Hourly Wage in Selected Foreign Countries

| Country | First hour | Second hour | Third hour | Fourth hour | Additional hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 25 | 25 | 25 | 50 | 50 |
| Belgium | 25 | 25 | 50 | 50 | 50 |
| Denmark | 25 | 331/3 |  | 50 | 100 |
| France- | 25 for up to 8 hours of overtime, then 50. |  |  |  |  |
| many | 25 | 25 | 50 | 50 | 50 |
| Italy. | 20 | 20 | 30 | 30 | 30 |
| Norway. | 25 | 25 | 50 | 50 | 50 |
| Netherlands | - 10 | 25 |  |  | 50 |
| Sweden-- | 25 to 50 | Up | to 70 aft | first ho |  |
| Switzerland. | 25 | 25 | 25 | 25 | 25 |

Source: Arbeit und Wirtschaft, February 1963.
conditions with the aim of equalizing such conditions by upgrading standards in poorer countries. The unions concerned have emphasized that the implementation of this article must include shortening of the hours of work. Their campaign for shorter hours has met with considerable success in the EEC and other countries. As indicated above, a trend in the direction of the 40 -hour week has been generally evident throughout Western Europe in recent years, especially in collective agreements covering the larger industrial enterprises.

Among the major problems encountered in dealing with the question of shorter working hours has been their effect on the demand for labor in a tight labor market, and their relationship to productivity. The economics minister of the West German State of North Rhine-Westphalia has pointed out recently that the reduction of weekly working time by 1 hour created a demand for 500,000 additional employees in the Federal Republic of Germany, which, in view of the general scarcity of indigenous labor and the limited availability of foreign workers, was difficult to satisfy. Unions have agreed to gradual introduction or postponement of shorter working hours when convinced that such a step was necessary to avoid drastic repercussions in the labor market or to avoid interfering with efforts to increase national productivity. Under the system of wage and price control in The Netherlands, the Government has ruled that reductions in working time are
admissible only within the framework of increasing productivity.

Another way in which U.S. experience differs from that of most other industrialized countries pertains to the penalty rates for overtime work. In other countries rates are generally below the 50 -percent premium paid in the United States, although in a number of cases a lower premium applies only for the first 2 or 3 hours of overtime work. (See table 11.)

Although workers in Western Europe generally tend to work longer hours than their counterparts in America, the number of paid public holidays is higher in most Western European countries than in the United States, ranging from 4 to 8 in Switzerland to 16 in Italy. The exception is France, where there are 11 statutory holidays in the year but only 1 day is required by law to be a paid holiday. Collective agreements in various industries provide for additional paid holidays up to the full 11 days, but most commonly 5 .

Almost all Western European countries have established legal minimum time of paid annual leave in terms of working days, ranging roughly from 2 to 3 weeks; the exceptions are The Netherlands and the United Kingdom, where a minimum of 2 weeks is granted on a contractual basis. In many cases, the average number of vacation days actually paid is still higher. In Germany, the minimum was raised from 12 to 15 days by a new Federal law which became effective January 1963. In the framework of the prevailing labor shortage in continental Europe, the trend in collective agreements in the pace-setting industries has been toward longer vacations with higher pay. In Belgium and in The Netherlands, workers receive double pay during their vacations. In France, since the nationalized Renault factories granted their workers four weeks of paid vacation, instead of the legal 3 weeks, about 3 million additional workers in other industries have been granted the extra week, bringing the total to over 6 million workers.

## Older Workers' Performance in Industrial Retraining Programs

Measures to improve the employability of older workers whose jobs are affected by technological changes are particularly important for the 1960's. When laid off because of skill obsolescence, older workers generally find it difficult to locate new jobs. However, by retraining workers and assigning them to other jobs within the firm or returning them to their old jobs, management is frequently able to retain valuable employees.

Research on the adaptability of older workers to retraining programs indicates that in a significant number of cases, their performance compares favorably with younger employees. This article summarizes a study of older workers' performance in retraining programs at four firms in different industries where extensive new technology had been introduced. ${ }^{1}$

The innovation at each firm is described along with its implications for job skills and retraining. Results of tests given as part of the retraining courses are then analyzed to determine how well older workers performed. A case study of an aircraft company presents in greater detail a description of course content and the relative performance of older and younger trainees.

## Scope and Method

The four firms selected for study were in industries where the introduction of technological changes required the retraining of employees. More than 2,000 retrained workers in a variety of occupations were covered: Production workers in an oil refinery; maintenance mechanics in an airline; engineers, technicians, and craftsmen in an aircraft factory; and operators in a telephone company. These firms were the only ones of about 100 canvassed which had kept suitable objective measures of the performance of individual workers during retraining, had included both younger and older workers (over age 40), and had personnel records showing age and educational level of workers. The data on trainee performance were obtained from company records and interviews with training and personnel officials.

The training courses were usually highly specialized and were given to only a small number of trainees. In analyzing the results, trainees in most cases were divided into two age groupsyounger and older trainees. ${ }^{2}$ Because of the diversity of courses, it was not considered feasible to aggregate the test results. Comparisons of younger and older workers were therefore made only within individual courses. Although each test covered only a small number of trainees, the number of tests was sufficient to draw tentative conclusions.

## Aspects of Retraining

Technological Change. Retraining programs constituted a major step in introducing technological change at plants studied. Major modifications in job duties of employees affected by the new technology were required at each firm, but replacement of incumbent workers was not considered as desirable or practicable as retraining. Table 1 summarizes the type of change at each firm, its impact on job duties, and the content of representative training programs.

Older and Younger Workers. Although test results often revealed that the younger group did better in retraining courses than older trainees, there were noteworthy exceptions which made it precarious to predict success based solely on age. In the few cases when training continued over long periods, older workers more often performed as well or better than younger workers. Moreover, on most tests, a proportion of older workersas high as 40 percent-did better than a significant proportion of younger workers. Younger trainees appeared to learn more quickly when training courses were short and emphasis was on rapid acquisition of perceptual motor skills. Tables 2A through 2D provide examples of comparative performance of older and younger workers in the retraining programs.

The findings of this study reaffirm the importance of appraising a worker's adaptability on the basis of individual capacity and aptitudes rather

[^29]Table 1. Description of Retraining and Changes in Technology and Job Requirements at Four Selected Firms

| Firm | Description of new technology | Impact on job skill and responsibility | Description of training |
| :---: | :---: | :---: | :---: |
| Oil refinery --------- | Modernization of oil refining operations. New equipment featured a high degree of process integration, increased capacity, more precise control, and new products. The new system eliminated separate cooling, storage, and reheating operations. More than 2,000 instruments are used to record and control pumps, compressors, and related devices. | Production workers must now have knowledge of processes in other parts of the mill. Because of more instrumentation, instrument mechanics were transferred to the production department. Hourly wage rates are substantially higher. | Operating employees received training in new equipment and processes, including typical problem situations. Three sets of nearly similar courses were given, each involving a separate course for the four zones (process units) of the refinery. The first sets lasted a total of 7 weeks, full-time, and the third averaged 4 to 8 hours a week for 2 years. Workers from the instrument division received training over a 9 -month period in principles of measuring pressure, etc., elementary math, control valves and process flow, electricity and electronics, and control and recording devices. |
| Aircraft company--- | Major expansion in scope and complexity of operations. With rapid changes in military technology in recent years, the company has had to include, in addition to aircraft production, research and development of advanced weapon systems, electronic components, and metallurgy of exotic metals. | New technology has had implications for numerous occupations. For example, welders and assemblers now work with closer tolerances and with metals which require special handling. Additional skill and knowledge is also needed in electronics, technical writing, and blueprint reading. | Extensive retraining was required for production workers, technicians, and engineers. Typical courses included optical tooling, electronics, blueprint reading, and welding. (See case study on pp. 937-939. for description of training programs and relative performance of older workers.) |
| Airline | Introduction of turbine powered aircraft..- | Maintenance mechanics must acquire an overall knowledge of jet aircraft, new maintenance equipment, and their periodic modifications. Jet aircraft maintenance requires greater precision, particularly on hydraulic and electrical systems. Approximately the same physical abilities are used. | Courses for mechanics ranged from 6-hour familiarization sessions to detailed technical courses lasting 260 hours. Training consisted of classes and lectures describing equipment and servicing procedures, and maintenance of in-service equipment. Retraining was in stages, coinciding with the acquisition of jet aircraft. |
| Telephone company. | Introduction of electronic data processing. Because of EDP, the billing procedure for long distance calls changed. A special card is used to enter telephone numbers and other data needed for proper billing. Data is entered on the card by special pencil, and the operation is known as the "sense-mark" procedure. | Telephone operators must learn new techniques for recording calls. Rather than recording data on paper, in the new system, the operator scans vertical columns on the card, making a mark in 1 of 10 spaces for each letter or digit of the number. The marks must be made rapidly and accurately, which requires good sensorimotor coordination. | Training of telephone operators consisted of a 2-day course to develop manual skill in marking and interpreting cards. Trainecs received practice telephone calls to test their ability to record data, and placed calls to assess their ability to use cards as a memory device. Speed and accuracy were emphasized. |

than on age. ${ }^{3}$ Arbitrary age barriers in training programs would exclude some older workers capable of high-level performance in training.

Counseling. The test results reflect, to some extent, the prevalence of informal methods of selecting trainees; only a few were tested, interviewed, or counseled before training. However, the performance of those few workers provided counseling suggests that such procedures might lead to better matching of the candidates' aptitudes with the retraining to be given and modification of programs to meet the needs of the trainees.

[^30]Counseling also helps allay apprehensions about training, especially for older workers who may resist training because of its novelty or unfamiliarity.

Education. Some evidence, although fragmentary, suggests that lack of education may have been a handicap for the older trainees. The older group had a lower average level of educational attainment and lacked recent school experience. Older and younger workers with the same level of education differed less in performance. At the oil refinery, where the level of formal education was emphasized in selecting trainees for some courses, in all but one of the six courses the older workers achieved grades above the group average.

Need for Additional Research. The evidence from this pilot study would indicate a need for further research into the potentialities and problems of retraining employed older workers. ${ }^{4}$ Since continuing technological change will undoubtedly intensify the need for retraining employees, it would be helpful to know more about methods that obtain the best results with older trainees. Wider dissemination of knowledge about the ability of older persons to learn new skills and to maintain these skills through continued practice should contribute to an easier adjustment to technological change.

## Limitations of the Study

In assessing the findings, it is important to take into account certain limitations of the study. Since the performance of older trainees on tests is compared with that of younger trainees, the study does not deal directly with the question of whether the test performance met the employers' minimum requirements. No evidence was found, however, that any trainee was laid off because of test results. Companies apparently preferred to use performance on the job as the yardstick for evaluating the individual worker.

The study was also limited to those aspects of retraining for which data on the performance of trainees could be obtained from company records. For overall assessment, comparative records of attendance, continuity of service, and productivity of trainees after reassignment should be considered. The interests and attitudes of trainees about the changes in their jobs and retraining and the opinion of supervisors and instructors about workers' performance, although relevant, were outside the scope of the study.

Finally, the results of the study should not be expected to agree with experience in retraining programs where all trainees are carefully screened so that only those with maximum potentialities for success are chosen.

## A Case Study of Retraining

In recent years, one of the four companies studied, a large West Coast aircraft manufacturer, undertook extensive retraining programs to cope with changing production requirements and chang-
ing technology. From the more than 200 training courses given, 6 representative courses were selected for study for which performance data were available covering both older and younger workers. These courses are briefly described and the performance results set forth in the following: paragraphs.
Optical Tooling. Because of the need for greater precision in assembling parts, a number of new optical devices for measuring and alining have been introduced. Higher aircraft speeds require greater accuracy and smaller tolerances in assembling. Optical tools, which replace the level and plumb, are more sensitive to minute misalinements caused by contraction or expansion of metals. They also allow the assembler more accurately to aline parts in angular relationship to each other.

Forty-six production workers were given instruction in the use of several different devices. Twenty-four were younger trainees and twentytwo were older. Classroom lectures combined with demonstrations were followed by practice by the trainees themselves in setting up and using the instruments. Each class was limited to four or five trainees.

\footnotetext{

- For a description of some current research projects on retraining, see Report of the Secretary of Labor on Research and Training Activities Under the Manpower Development and Training Act Transmitted to the Congress February 1963 (U.S. Department of Labor, Offlee of Manpower, Automation and Training), pp. 93-99.

Table 2A. Training Courses for Instrument Mechanics at an Oil Refinery: Comparative Performance of Older and Younger Trainees on Tests

| Course | Younger trainees (age 39 and under) |  |  | Older trainees (age 40 and over) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { trainees } \end{aligned}$ | Percent |  | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { trainees } \end{gathered}$ | Percent |  |
|  |  | Above average grade | Below average grade |  | Above average grade | Below average |
| Company course: |  |  |  |  |  |  |
| Elementary mathematics | 7 | 29 | 71 | 6 | 67 | 33 |
| Fractions and deci- | 8 | 47 | 53 | 7 | 71 | 29 |
| Vendor course: |  |  |  |  |  |  |
| Control valves--..-- | 8 | 50 | 50 | 7 6 | 43 67 | 57 33 |
| Controls and valves Level indicators. | 8 | 50 50 | 50 50 | 6 | 67 50 | 33 50 |
| University course: Generators and AC circuits_ | 7 | 43 | 57 | 6 | 50 | 50 |

Table 2B. Training Courses at an Aircraft Plant: Comparative Performance of Older and Younger Trainees on Tests

| Course | Younger trainees ${ }^{1}$ |  |  | Older trainees ${ }^{1}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { trainees } \end{gathered}$ | Percent |  | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { trainees } \end{aligned}$ | Percent |  |
|  |  | Above average grade | Below average grade |  | Above avergrade | Below average grade |
| 1. Optical tooling for toolmakers ${ }^{2}$ | 24 | 79 | 21 | 22 | 36 | 64 |
| 2. Introdution to electronics for engineers | 36 | 53 | 47 | 17 | 47 | 53 |
| 3. Basic electronies for technical writers. | 19 | 53 | 47 | 19 | 42 | 58 |
| 4. Electronics technician, transition and development | 9 | 67 | 33 | 19 9 | 33 | 68 67 |
| 5. Blueprint reading I for machinists. | 9 | 78 | 22 | 8 | 33 25 | 75 |
| 6. Blueprint reading II for machinists. | 9 | 44 | 56 | 8 | 25 50 | 75 50 |

[^31]Electronics. Because of the growing use of electronic equipment both in the design of aircraft and in the production tools used, the company provided extensive training for engineers, technical writers, and maintenance electricians.

Engineers. An introductory course in electronics, designed to provide general competence rather than skill in specific applications, was given to 53 engineers. About a third of this group were older trainees. The classes were scheduled for $2 \frac{1}{2}$ hours after work, twice a week, for 23 months. A total of 300 hours of classes were given. Half the instruction consisted of classroom lectures and discussion and the other half laboratory work. Trainees were selected from all engineering de-partments-including hydraulics, blueprint preparation, and technical specification. Although all trainees were classified as engineers, as many as 1 out of 3 lacked an engineering degree. All had at least a high school education.

Technical Writers. A course on basic electronics designed to familiarize technical writers with terminology used in describing electronic apparatus was given to 38 employees. Classes met for 2 hours after work, twice a week, for about 5 months. The course consisted entirely of lectures and discussions, with a minimum of mathematics. Of the 38 trainees, 19 were over age 40.

Maintenance Electricians. The third electronics course was intended to prepare maintenance electricians for new jobs in the maintenance and repair of advanced electronic apparatus. Classes were held on company time, 5 days a week, for $31 / 2$ hours over a 4 -month period. The course involved lectures on electronic theory and laboratory work with test equipment and components. While intellectual skills were emphasized, the work also called for some manual dexterity and sensorimotor coordination. After completion of the course, the trainees were upgraded in pay (in contrast to trainees in the previously described electronics courses) and given the job title, "industrial electronics technician."
The 18 trainees who completed the course had been selected from a group of 50 maintenance electricians after careful screening, which included an examination testing their knowledge of AC and DC circuits, vacuum tubes, transistors, and basic algebra. Nine of the eighteen trainees were older workers. Only the 20 individuals scoring the highest were accepted for training, most of whom had some experience maintaining less complicated types of electronic equipment. Of this group, one

Table 2C. Telephone Operator Trainees: Level of Performance on Tests Interpreting Tickets, by Age Group

| Tests and level of performance | Age group (percent) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 18-24 | 25-34 | 35-44 | 45 and over |
| Speed using old method: |  |  |  |  |
| A bove average performance ${ }^{1}$. | 52.2 | 52.7 | 50.9 | 33.3 |
| Below average performance.. | 47.8 | 47.3 | 49.1 | 66.7 |
| Errors using old method: |  |  |  |  |
| Above average performance ${ }^{2}$ | 63.0 | 68.5 | 69.1 | 64.9 |
| Below average performance | 37.0 | 31.5 | 30.9 | 35.1 |
| Speed using new method: |  |  |  |  |
| Above average performance ${ }^{1}$ | 60.9 | 54.6 | 38.2 | 28.1 |
| Below average performance. | 39.1 | 45.4 | 61.8 | 71.9 |
| Errors using new method: |  |  |  |  |
| Above average performance ${ }^{2}$ | 56.5 | 60.6 | 60.0 | 39.3 |
| Below average performance. | 43.5 | 39.4 | 40.0 | 60.7 |
| Speed difference: ${ }^{8}$ |  |  |  |  |
| Above average performance. | 55.4 | 54.6 | 49.1 | 31.8 |
| Below average performance. | 44.6 | 45.4 | 50.9 | 68.2 |
| Number of trainees. | 92 | 165 | 55 | 57 |

[^32]left the course before completion to accept a higher paying job, and another left because of illness.

Machinists. With the introduction of new weapons systems, some machinists experienced difficulty in analyzing and interpreting symbols used on blueprints. The foreman of the group requested the training department to conduct a course in blueprint reading. After a preliminary screening examination, 17 trainees were selected - 8 of whom were over age 50 . The course was given during working hours, 2 hours a day, for 7 days, and covered explanations of the various symbols used and their translation into the final product.

Welders. A variety of changes in welding technology necessitated several retraining courses. New metals such as titanium and zirconium alloys and light gage steel are now used when conventional welding technology is not applicable. Moreover, requirements for weld size and assembly dimensions have become more critical.

Changes in technology require that welders have some knowledge of metallurgy and causes of metal distortions. The welder also uses more complex equipment and must adjust a larger number of variables to achieve proper regulation of temperature, gas flow, and speed of weld.

The courses were primarily designed to familiarize welders with the new equipment, processes, and techniques. Only 20 percent of the time involved classroom lectures and discussions of the theory and background of new methods. In the practice sessions, comprising 80 percent of the training, trainees were assigned standardized test jobs and their performance on these jobs was carefully measured and appraised. A final performance score was given each trainee based on the number of hours needed to meet U.S. Air Force standards.

Trainees had either applied to take the course or were recommended by their supervisor. About 200 were selected on the basis of their performance

[^33]Table 2D. Airline Maintenance Workers: Distribution of Courses According to Comparative Performance of Older Trainees

| Course level | $\left\lvert\, \begin{gathered} \text { Number } \\ \text { of } \\ \text { courses } \end{gathered}\right.$ | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { tainees } \end{aligned}$ | Percent of courses showing that older trainees did ${ }^{1}$ - |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Better than younger trainees | Equally as well as younger trainees | Not as well as younger trainees |
| 1. | 8 | 39 | 75.0 | 12.5 | 12.5 |
| 2 | 45 | 286 | 20.0 | 11.1 | 68.9 |
| 3 | 45 | 268 | 28.8 | 4.5 | 66.7 |
| 4. | 82 | 476 | 29.3 | 15.9 | 54.8 |
| 5 | 21 | 140 | 23.8 | 14.3 | 61.9 |
| 6 | 27 | 140 | 33.3 | 18.5 | 48.2 |

${ }^{1}$ Percentages were computed on the basis of counting each course as a single observation. Data on the performance of trainees in each course were singlyzed to determine whether the scores of the older half of the trainees fell above themedian course grade more often, equally often, or less often than the younger trainees. Excluded are 24 courses in which the total range in grades is less than 5 points and/or the total range of ages is less than 5 years.
on a preliminary welding test. The union negotiated a classification-welder-and higher pay for those who completed training.

Performance in Retraining. The methods used to assess the performance of trainees at the aircraft plant involved both practical and written tests. Table 2B shows the comparative performance of older and younger workers in six of the courses. Half the older trainees obtained grades above the average in only one of the six measures. A significant proportion of the older trainees ( 40 percent or more) were, however, above average in two other courses. In the case of the younger trainees, a majority were above average in five of the courses. The younger group scored lowest in Blueprint Reading II, the course in which the older group scored highest. There was little variation in the performance of the two groups when differences in education were taken into account. ${ }^{5}$

The performance of older trainees in the four welding courses compared favorably with younger trainees. In two of the courses, the older group qualified in a shorter period of time. According to course instructors, previous relevant experience probably accounted for the superior performance of older trainees in these courses.
-Edgar Weinberg
Division of Technological Studies

# Earnings in Selected Metropolitan Areas of the South, June 1962 

Increases in area pay levels in nine southern metropolitan areas ranged from 3 to 8 percent, or as much as 14 cents an hour, between June of 1961 and 1962. The rise in overall earnings in these areas, revealed by a Bureau of Labor Statistics study, ${ }^{1}$ was undoubtedly influenced in part by the amendments to the Fair Labor Standards Act which increased the Federal minimum wage from $\$ 1$ to $\$ 1.15$ an hour for previously covered workers and established a $\$ 1$ minimum for newly covered workers, effective September 3, 1961. ${ }^{2}$ This article summarizes June 1962 findings in the nine areas and presents some of the wage changes which took place between survey periods.

## Earnings in June 1962

Average straight-time wage levels for all nonsupervisory workers covered by the survey differed by as much as 44 percent, ranging from $\$ 1.51$ an hour in Asheville, N.C., to $\$ 2.18$ in Lake Charles, La., in June 1962, but by no more than 10 percent among the remaining areas-from $\$ 1.70$ to $\$ 1.87$ an hour. (See table.) The proportions of workers earning less than $\$ 1$ ranged from 6 to 13 percent among the nine areas, while from 21 to 34 percent averaged less than $\$ 1.25$ an hour. Comparatively greater differences were found in the proportion of workers earning $\$ 2$ or more an hour, varying from 16 to 55 percent.

In manufacturing industries, the level of straight-time earnings for nonsupervisory workers ranged from $\$ 1.58$ an hour to $\$ 2.69$, again in Asheville and Lake Charles. ${ }^{3}$ The wide difference in manufacturing pay levels is largely attributable to differences in the two areas' industry composition. Relatively lower paying manufacturing industries, such as food, textiles, and apparel, provided the major source of factory worker employment in Asheville, whereas the higher paying petroleum refining and chemical industries employed a substantial portion of the factory work force in Lake Charles. Manufacturing averages were between $\$ 1.75$ and $\$ 2$ an hour in Wichita Falls, Tex., Amarillo, Tex.,

Durham, N.C., and Monroe, La., and were above $\$ 2$ in Tuscaloosa, Ala., and Lexington, Ky.

Few manufacturing employees in any of the areas were paid less than the current $\$ 1.15$ Federal minimum wage, although from nearly a tenth to almost a fifth received less than $\$ 1.25$ an hour, the Federal minimum which will become effective on September 3, 1963. Differences among the areas in the proportion of workers earning $\$ 2$ or more an hour varied widely, from 14 percent in Asheville to 84 percent in Lake Charles. Among the other areas, only in Tuscaloosa and Lexington did the majority of the manufacturing workers earn more than $\$ 2$.

In the nonmanufacturing industries studied, average hourly earnings varied from $\$ 1.42$ in Asheville to $\$ 1.90$ in Lake Charles, which was about half the dispersion found in manufacturing ( 34 and 70 percent, respectively). The narrower range in nonfactory earnings is attributable in part to the greater similarity among the areas in the distribution of workers by nonmanufacturing industry. In six of the nine areas, approximately a tenth of the nonfactory workers averaged less than $\$ 1$ an hour, and from a half to two-thirds earned between $\$ 1$ and $\$ 2$ an hour in all of the areas.
The earnings of nonmanufacturing workers averaged from 3 to 79 cents an hour below those of manufacturing workers in the nine areas. Pay differences appeared to be directly related to the level of manufacturing earnings in the area. Thus, in three areas where manufacturing earnings were the lowest, the factory pay advantage did not exceed 16 cents an hour; in the two middleranked areas, pay differences were 36 and 39 cents; and in the three areas with the highest paid manufacturing workers, factory earnings, on the average, were 48 to 79 cents an hour higher

[^34]than in nonmanufacturing. However, when ranked by average hourly earnings, the order of the cities was not always identical for manufacturing and nonmanufacturing. For example, Wichita Falls and Amarillo recorded the second and third lowest average earnings in manufacturing, but were ranked fifth and third from the top in nonmanufacturing earnings.

[^35]The level of earnings in retail trade was lower than in nonmanufacturing as a whole in each of the southern communities studied. Average retail pay levels ranged from $\$ 1.21$ an hour in Tuscaloosa to $\$ 1.62$ in Lake Charles and varied from $\$ 1.30$ to $\$ 1.55$ an hour in the remaining areas. In the South as a whole, average earnings were $\$ 1.39$ an hour in June 1962.4 At least a tenth of the retail employees in seven of the nine areas were paid less than $\$ 1$ an hour in June 1962; at

Average Straight-Time Hourly Earnings ${ }^{1}$ of Nonsupervisory Employees in Manufacturing and Nonmanufacturing ${ }^{2}$ and Percent Earning Less Than Specified Amounts, Selected Metropolitan Areas ${ }^{3}$ of the South, June 1962

| Metropolitan area*s and industry | Number of workers | A verage hourly earnings ${ }^{1}$ | Percent of workers earning less than- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | \$0. 75 | \$1.00 | \$1.05 | \$1.15 | \$1.20 | \$1.25 | \$1. 50 | \$2.00 | \$2. 50 |
| Amarillo, Tex | 21,800 | \$1.78 | 2.5 | 6.5 | 12.3 | 15.4 | 20.2 | 23.3 | 45.1 | 68.8 | 83.2 |
| Manufacturing | 3. 200 | 1. 80 | (5) | (5) | 1.7 | 1.5 | 6.6 | 10.5 | 43.2 | 69.0 | 87.9 |
| Nonmanufacturing | 18,600 | 1.77 | 2.9 | 7.6 | 14.3 | 17.8 | 22.6 | 25.6 | 45.4 | 68.8 | 82.3 |
| Retail trade.....-....- | 6,400 1,900 | 1.55 2.64 | ${ }_{(5)}^{2.9}$ | ${ }_{(5)}^{8.4}$ | 25.0 | 33.4 | 38.1 | 41.3 | 63.5 | 81.2 | 90.8 |
| Asheville, N.C_ | 26,300 | 1.51 | 2.4 | 8.0 | 12.8 | 15.9 | 27.7 | 31.8 | 56.2 | 84.4 | 95.7 |
| Manufacturing | 14, 400 | 1. 58 | . 4 | . 7 | 1.5 | 1.8 | 14.9 | 19.0 | 47.9 | 85.5 | 97.5 |
| Nonmanufacturing | 11,900 | 1.42 | 4.8 | 16.9 | 26.7 | 33.2 | 43.2 | 47.4 | 66.2 | 83.1 | 93.6 |
| Retail trade. | 4,500 | 1. 30 | 3.5 | 17.1 | 36.9 | 49.9 | 57.0 | 61.4 | 78.2 | 91.0 | 96.1 |
| Contract construction | 1,600 | 1.78 | $\left.{ }^{5}\right)$ | . 3 | 3.2 | 4.9 | 18.6 | 20.9 | 36.9 | 61.8 | 88.5 |
| Durham, N.C. | 23, 800 | 1,74 | . 6 | 6.2 | 12.1 | 15.4 | 24.5 | 26.9 | 42.5 | 65.2 | 89.2 |
| Manufacturing | 11, 300 | 1. 93 | . 2 | 1.1 | 2.0 | 2.7 | 11.3 | 13.0 | 27.2 | 51.0 | 89.5 |
| Nonmanufacturing | 12, 500 | 1.57 | . 9 | 10.8 | 21.2 | 26.9 | 36.3 | 39.3 | 56.3 | 77.9 | 88.9 |
| Retail trade....-.... | 3,800 | 1.43 | . 6 | 10.4 | 33.7 | 43.6 | 48.3 | 52.2 | 71.0 | 87.7 | 93.7 |
| Contract construction | 2,500 | 1.71 | . 1 | 1.4 | 6.8 | 9.9 | 24.9 | 26.9 | 44.4 | 69.1 | 84.4 |
| Huntsville, Ala. ${ }^{4}$ - | 17,600 | 1.87 | 2.7 | 6.8 | 13.8 | 16.6 | 25.0 | 27.4 | 44.4 | 67.5 | 78.5 |
| Nonmanufacturing | 13,900 | 1.89 | 3.2 | 8.3 | 16.8 | 20.3 | 27.6 | 29.3 | 44.5 | 64.9 | 76.7 |
| Retail trade. | 3,400 | 1.38 | 4.1 | 13.7 | 36.9 | 48.1 | 52.7 | 54.6 | 73.4 | 88.9 | 94.0 |
| Contract construct | 2,500 | 1.92 | 1.4 | 1.5 | 7.3 | 8.8 | 17.5 | 18.3 | 39.7 | 66.9 | 76.9 |
| Services. | 5,900 | 2.41 | 4.6 | 10.8 | 14.3 | 14.9 | 19.5 | 20.3 | 26.1 | 42.2 | 57.6 |
| Lake Charles, La | 18,200 | 2. 18 | 2.5 | 6.0 | 10.1 | 13.6 | 19.2 | 20.9 | 32.4 | 45.3 | 59.8 |
| Manufacturing | 6,500 | 2.69 | . 4 | . 4 | 1.7 | 3.8 | 7.0 | 8.0 | 12.0 | 16.3 | 31.5 |
| Nonmanufacturing | 11,700 | 1.90 | 3.7 | 9.2 | 15.3 | 19.1 | 26. 0 | 28.0 | 43.7 | 61.6 | 75.7 |
| Retail trade. | 3,700 | 1.62 | 5.4 | 13.3 | 24.5 | 33.7 | 37.7 | 38.8 | 57.6 | 78.1 | 87.6 |
| Contract construction | 2,600 | 2.64 | ${ }^{(5)}$ | ${ }^{(3)}$ | 1.7 | 1.9 | 6.6 | 8.1 | 17.1 | 27.8 | 49.5 |
| Lexington, Ky - | 24, 800 | 1.84 | 2.5 | 7.7 | 14.8 | 18.0 | 23.1 | 25.7 | 40.3 | 63.2 | 79.3 |
| Manufacturing | 7,700 | 2.17 | (5) | 1.3 | . 7 | 1.4 | 6.0 | 8.2 | 19.1 | 44.3 | 65. 3 |
| Nonmanufacturing | 17, 100 | 1.69 | 3.6 | 11.0 | 21.2 | 25.6 | 30.9 | 33.6 | 49.9 | 71.8 | 85.6 |
| Retail trade. | 6,000 | 1.51 | .6 | 6.8 | 28.4 | 37.1 | 41.4 | 45.7 | 65.5 | 81.3 | 91.6 |
| Contract construction | 3,100 | 2.13 | . 1 | . 5 | 4.8 | 6. 6 | 8.7 | 8.8 | 23.7 | 51.1 | 65.9 |
| Monroe, La | 15, 800 | 1.74 | 5.5 | 10.5 | 15.5 | 19.3 | 30.3 | 32.1 | 45.1 | 68.7 | 83.3 |
| Manufacturing | 5,500 | 1.99 | (3) | 1.6 | 3.3 | 4.3 | 11.9 | 13.9 | 21.9 | 53.7 | 80.7 |
| Nonmanufacturing | 10,200 | 1.60 | 8.5 | 15.3 | 22.1 | 27.4 | 40.3 | 42.0 | 57.6 | 76.8 | 84.7 |
| Retail trade | 3,300 | 1. 40 | 10.0 | 21.7 | 38.3 | 50.1 | 54.8 | 56.0 | 71.9 | 87.1 | 95.5 |
| Contract construction | 1,900 | 2.05 | (5) | . 4 | 1.9 | 2.1 | 16.8 | 17.1 | 33.6 | 59.1 | 70.2 |
| Tuscaloosa, Ala | 14,800 | 1. 81 | 6.9 | 12.6 | 18.3 | 20.7 | 31.1 | 33.5 | 44.4 | 62.2 | 77.0 |
| Manufacturing | 7,300 | 2.15 | 1.0 | 1.3 | 2.6 | 2.9 | 14.6 | 16. 1 | 22.6 | 41.1 | 65.8 |
| Nonmanufacturing | 7,500 | 1.48 | 12.4 | 23.1 | 32.9 | 37.1 | 46.4 | 49.7 | 64.5 | 81.9 | 87.4 |
| Retail trade | 3,100 | 1.21 | 14.4 | 32.4 | 53.3 | 60.1 | 65.6 | 68.4 | 80.5 | 92.0 | 95.9 |
| Contract construction. | 1,300 | 2.03 | 1.7 | 2.0 | 5.8 | 6.9 | 12.6 | 14.5 | 30.4 | 60.3 | 67.6 |
| Wichita Falls, Tex |  |  | 3.1 | 8.7 | 13.2 | 17.6 | 24.4 | 26.5 | 48.9 | 72.0 | 86.1 |
| Manufacturing | 2,800 | 1. 76 | (5) | . 5 | 1.1 | 1.4 | 13.6 | 15.6 | 41.9 | 69.1 | 89.5 |
| Nonmanufacturing | 12,200 | 1. 68 | 3.8 | 10.5 | 15. 9 | 21.3 | 26.9 | 29.0 | 50.4 | 72.7 | 85.3 |
| Retail trade. | 4,400 | 1.52 | 3.7 | 13.8 | 25.0 | 35.0 | 41.0 | 43.1 | 62.3 | 81.3 | 91.0 |
| Contract construction. | 1,500 | 2. 14 | (\%) | ${ }^{(5)}$ | ${ }^{(5)}$ | . 7 | 2.3 | 2.5 | 32.1 | 50.8 | 67.5 |

[^36]The following are the central cities and counties which comprise the metropolitan areas studied: Amarillo, Tex. (Potter and Randall Counties); Asheville, N.C. (Buncombe County); Durham, N.C. (Durham County); Huntsville, Ala. (Madison County); Lake Charles, La. (Calcasieu Parish); Lexington, Ky. (Fayette County); Monroe, La. (Ouachita Parish); Tuscaloosa, Ala. (Tuscaloosa County); and Wichita Falls, Tex. (Archer and Wichita Counties).
4 Data for manufacturing industries did not meet criteria for publication.
${ }^{5}$ Less than 0.05 percent.
Note: Because of rounding, sums of individual items may not equal totals.
least a fourth in the nine areas received less than $\$ 1.05$; and a majority of the workers earned less than $\$ 1.25$ in five of the areas.

Earnings in the contract construction industries, in contrast with retail trade, were substantially higher than the all nonmanufacturing average in each of the areas. The range in earnings for contract construction workers was from $\$ 1.71$ an hour in Durham to $\$ 2.64$ in Amarillo and Lake Charles. Earnings were at least $\$ 2.50$ an hour for three-tenths or more of the workers in six of the areas. A comparison of contract construction wage levels with those in manufacturing showed that the former group had a pay advantage in four of the areas.

## Changes in Average Hourly Earnings

The rise in area wage levels between June 1961 and June 1962 extended from 5 to 14 cents an hour. (See chart.) The magnitude of changes in earnings did not appear to relate to the area wage level. Areas showing at least a 6 -percent increase, for example, included Lake Charles with the highest average earnings and Wichita Falls with next to the lowest earnings level. Only Huntsville improved its earnings rank relative to the other areas over the year.
Pay levels increased a greater degree in nonmanufacturing than in manufacturing for each of the areas except Asheville, where the average for

Changes in Average Hourly Pay Levels, Selected Metropolitan Areas in the South, June1961June 1962

${ }^{1}$ Insufficient data to warrant presentation.
2 Decrease of 1 cent.
${ }^{3}$ The increase in the all industries average is higher than manufacturing
and nonmanufacturing because of an increase in the proportion of manufacturing workers in higher paying manufacturing industries between the 1961 and 1962 survey.
factory workers was the lowest among the areas. ${ }^{5}$ Cents-per-hour increases in average hourly earnings in nonmanufacturing were as high as 13 cents in three areas and from 10 to 12 cents in three other areas, whereas the largest increase in manufacturing was 8 cents an hour. The following tabulation shows by what percentage average hourly earnings of manufacturing workers are greater than nonmanufacturing workers.

|  | ${ }_{1961}$ | June |
| :---: | :---: | :---: |
| Amarillo, Tex | 4 | 2 |
| Asheville, N.C | 9 | 11 |
| Durham, N.C | 26 | 23 |
| Lake Charles, La | 51 | 42 |
| Lexington, Ky | 32 | 28 |
| Monroe, La | 30 | 24 |
| Tuscaloosa, Ala_ | 54 | 45 |
| Wichita Falls, Tex | 14 | 5 |

## Changes in the Distribution of Earnings

In June 1961, the proportion of manufacturing workers paid less than $\$ 1.15$ an hour ranged from 5 to 16 percent. In June 1962-9 months after the $\$ 1.15$ Federal minimum wage became effective-fewer than 5 percent of these workers in any of the areas studied earned less than that amount. Over the year, the proportion of workers doubled at the 5 -cent wage interval which included the $\$ 1.15$ rate and in some areas tripled. In each area, the proportion of factory workers concentrated at or just above the $\$ 1.15$ Federal minimum in June 1962 was greater than the proportion at or just above the $\$ 1$ Federal minimum in effect in June 1961.

Changes in the distribution of factory earnings were not entirely limited to the lower pay levels. The proportion of factory workers earning at least $\$ 2$ an hour increased between survey years by several percentage points in most of the areas, although small declines were experienced in Amarillo and Wichita Falls.

In nonmanufacturing industries, workers' earnings were affected at two different pay levels by

[^37]the amendments to the Fair Labor Standards Act effective in September 1961- $\$ 1.15$ which applied to workers covered by the act prior to the amendments (mostly in mining, transportation, public utilities, finance, and wholesale trade); and $\$ 1$ which applied to workers brought under the act in 1961 (mostly in retail trade ${ }^{6}$ ). There were substantial reductions in the proportion of workers paid less than $\$ 1$ and less than $\$ 1.15$ an hour between June 1961 and June 1962. The proportion of workers at or just above the $\$ 1.15$ Federal minimum increased in each of the areas studied. Although many of the workers at the $\$ 1$ to $\$ 1.05$ wage interval in June 1961 were raised to the higher minimum, the effect of these increases on the earnings distributions was partly offset, apparently, by the movement into this earnings interval of newly protected workers, since the proportion of nonmanufacturing workers earning between $\$ 1$ and $\$ 1.05$ an hour did not change significantly between survey years.

Changes at the $\$ 1$ level were much sharper when earnings of retail employees were examined separately, as shown in the following tabulation:

|  | Percentage of retail workers earningLess than \$1 $\$ 1$ to $\$ 1.05$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | June | $\begin{aligned} & \text { June } \\ & 1962 \end{aligned}$ | $\begin{aligned} & \text { Junee } \\ & 1961 \end{aligned}$ | June |
| Amarillo, Tex | 21 | 8 | 12 | 17 |
| Asheville, N.C | 35 | 17 | 12 | 20 |
| Durham, N.C. | 28 | 10 | 9 | 23 |
| Huntsville, N.C. | 46 | 14 | 10 | 23 |
| Lake Charles, La | 34 | 13 | 13 | 11 |
| Lexington, Ky | 25 | 7 | 10 | 22 |
| Monroe, La_ | 43 | 22 | 10 | 17 |
| Tuscaloosa, Ala | 50 | 32 | 12 | 21 |
| Wichita Falls, Tex | 29 | 14 | 15 | 11 |

Up to half and no less than a fifth of these workers in any single area earned less than $\$ 1$ an hour in June 1961. No more than a third of such workers were paid less than $\$ 1$ in June 1962, and the proportions with these earnings were more than halved in most of the areas between survey periods. Concomitantly, the proportion of workers concentrated at the $\$ 1$ to $\$ 1.05$ wage interval increased substantially in most of the areas.
-Herbert Schaffer
Division of National Wage and Salary Income

## Earnings in Leather Tanning and Finishing, March 1963

Straight-time earnings of production and related workers in leather tanning and finishing establishments averaged $\$ 2.13$ an hour in March 1963. All but 5 percent of the 25,493 workers covered by a Bureau of Labor Statistics study ${ }^{1}$ earned between $\$ 1$ and $\$ 3$ an hour; a tenth of the workers earned less than $\$ 1.50$, and 5 percent earned $\$ 3$ or more. Average earnings for production workers varied by location, establishment size, community size, labor-management contract coverage, and occupation.

A large majority of the workers were in establishments providing paid holidays and vacations, as well as several types of health and insurance plans.

## Earnings

Compared with the nationwide average earnings of $\$ 2.13$ an hour, production-worker averages in the three major regions ${ }^{2}$-together accounting for slightly more than four-fifths of the industry's work force-were: $\$ 2.10$ in New England, $\$ 2.20$ in the Middle Atlantic, and $\$ 2.27$ in the Great Lakes. Workers in the Border and Southeast regions averaged $\$ 1.89$ and $\$ 1.60$ an hour, respectively. (See accompanying table.) The March 1963 average for all production workers was 7.6 percent above the average of $\$ 1.98$ in May 1959, when the Bureau conducted a similar study. ${ }^{3}$ Since that study, average earnings of production workers increased 5 percent in New England, 8.1 percent in the Great Lakes region, and 10.6 percent in the Middle Atlantic region.

Men accounted for nine-tenths of the industry's production workers in March 1963 and averaged $\$ 2.16$ an hour - 36 cents more than the average for women. Men greatly outnumbered women in all but one of the occupations studied separately; an equal number of men and women were employed as trimmers (dry).

Production workers in establishments with 100 or more employees averaged $\$ 2.17$ an hour- 16 cents more than workers in smaller establishments. Among the three major regions, the average wage
advantage for workers in the larger establishments amounted to 9 cents in New England, 14 cents in the Middle Atlantic, and 52 cents in the Great Lakes region.

Production workers employed in metropolitan areas ${ }^{4}$ averaged $\$ 2.23$ an hour compared with $\$ 1.98$ for workers in smaller communities. In New England, workers in metropolitan areas averaged 42 cents an hour more than those in the smaller communities; in the other two major regions, however, averages for the two com-munity-size groups were almost identical.

Production workers in establishments having collective bargaining agreements averaged $\$ 2.22$ an hour- 27 cents an hour more than workers in establishments without such agreements. Among the three major regions, the differential amounted, on the average, to 11 cents in the Middle Atlantic, 24 cents in the Great Lakes, and 42 cents in New England.

The exact impact on earnings of any of the characteristics identified above cannot be isolated and measured because of their interrelationship and the influence of other factors, including method of wage payment.

Slightly more than half of the industry's production workers were paid under incentive wage systems, usually individual piece rate systems. Regionally, the proportions of workers paid on an incentive basis were nearly a third in the Southeast, approximately half in three other regions, and three-fifths in New England.

[^38]Earnings of all but 5 percent of the workers were between $\$ 1$ and $\$ 3$ an hour, with the middle half earning between $\$ 1.80$ and $\$ 2.46$. A tenth of the workers earned less than $\$ 1.50$, with a larger proportion at these levels in the Southeast and Border States than in the major regions:

|  | Percent of workers with straight-time hourly earnings of less than- |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 81.20 | \$1.30 | \$1.40 | \$1.50 |
| New England_ | 0. 6 | 4. 2 | 7. 7 | 10. 5 |
| Middle Atlantic | . 3 | 1. 7 | 2. 7 | 3. 8 |
| Border States_ | 9. 1 | 11.8 | 20. 1 | 23.5 |
| Southeast | 3. 8 | 6. 2 | 25. 6 | 51.1 |
| Great Lakes | . 8 | 1. 8 | 2. 7 | 3. 6 |

Percent of workers with straight-time

Number and Average Straight-Time Hourly Earnings ${ }^{1}$ of Production Workers in Leather Tanning and Finishing Establishments, by Selected Characteristics and Regions, ${ }^{2}$ March 1963

| Characteristic | United States ${ }^{\text {8 }}$ |  | New England |  | Middle Atlantic |  | Border States |  | Southeast |  | Great Lakes |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Workers | Earn- <br> ings ${ }^{1}$ | Workers | Earnings ${ }^{1}$ | Workers | Earn- <br> ings ${ }^{1}$ | Workers | Earnings ${ }^{1}$ | Workers | Earnings ${ }^{1}$ | Workers | Earn- <br> ings ${ }^{1}$ |
| All production workers.-------------- | 25,493 | \$2. 13 | 7,586 | \$2.10 | 6,938 | \$2. 20 | 2,439 | \$1.89 | 1,198 | \$1. 60 | 6,462 | \$2.27 |
| Men $\qquad$ <br> Women $\qquad$ | 23,200 2,293 | $\$ 2.16$ 1.80 | 6,911 675 | $\$ 2.14$ 1.73 | 6,434 504 | \$2. 1.84 1.84 | 2,170 269 | $\$ 1.90$ 1.88 | 1,088 110 | \$1.62 1.35 | 5,732 730 | $\$ 2.32$ 1.87 |
| Size of Estarlishment |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 6,612 18,881 | 2.01 2.17 | 2,454 5,132 | 2.04 2.13 | 2,120 4,818 | 2.10 2.24 | 2,187 | 1.91 |  |  | 1,011 5,451 | 1. 83 2.35 |
| Size of Community |  |  |  |  |  |  |  |  |  |  |  |  |
| Metropolitan areas 4 $\qquad$ <br> Nonmetropolitan areas $\qquad$ | 14,961 10,532 | 2.23 1.98 | 4,185 3,401 | 2.29 1.87 | 4,268 2,670 | 2. 20 2.19 | 1,060 1,379 | 2.19 1.67 | 931 | 1.63 | 4,499 1,963 | 2. 28 2. 25 |
| Labor-Management Contracts |  |  |  |  |  |  |  |  |  |  |  |  |
| Establishments with- <br> Majority of workers covered $\qquad$ <br> None or minority of workers covered.- | 17,138 8,355 | 2. 22 1.95 | 5,257 2,329 | 2.23 1.81 | 5,244 1,694 | 2.22 2.11 | 1,248 1,191 | 1.82 1.97 |  |  | 4,303 2,159 | 2.35 2.11 |
| Major Type of Leather s |  |  |  |  |  |  |  |  |  |  |  |  |
| Side leather-- | 10, 201 | 2. 16 | 4,323 | 2.06 |  |  |  |  |  |  | 3,834 | 2.39 |
| Sole leather-...-.-. |  | 1.88 |  |  | 1,027 | 2.12 | 1,272 | 1.67 |  |  |  |  |
| Upper leather, kid. | 2,022 | 2.28 |  |  |  |  |  |  |  |  |  |  |
| Selected Occupations |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 941 | 2. 40 | 362 | 2. 42 | 193 | 2. 48 | 28 | 2.08 | 84 | 1. 53 | 257 | 2. 65 |
|  | 339 414 | 2.33 2.48 2.48 | 148 | 2.30 2.44 | 46 96 | 2.40 2.63 | 17 | 2.37 | 34 <br> 34 <br> 1 |  | 94 151 | 2. 63 |
| Buzzle.-.-.-....- | 112 | 2.28 | 43 | 2.58 | 41 | 2.23 |  |  | 13 | 1.56 | 12 | 2.34 |
| Overshot. | 76 | 2.46 | 55 | 2. 53 | 10 | 2.49 |  |  |  |  |  |  |
| Colorers, fat liquorers, or oilwheel operators. | 677 | 2.25 | 241 | 2.21 | 139 | 2.28 | 64 | 1.94 | 52 | 1.75 | 162 | 2.54 |
| Embossing- or plating-press operators.-.--- | 845 | 2.11 | 296 | 2. 02 | 190 | 2.31 | 28 | 2.26 | 48 | 1.59 | 188 | 2.31 |
|  | 435 | 2.31 | 143 | 2.31 | 121 | 2.37 | 46 | 1. 98 | 16 | 1.65 | 88 | 2.47 |
| Haulers---- | 763 | 2.15 | 151 | 2.05 | 205 | 2. 18 | 63 | 1.84 | 61 | 1.76 | 227 | 2.36 |
| Janitors----- | 187 | 1.72 | 53 | 1.82 | 37 | 1.67 | 24 | 1.48 | 12 | 1.44 | 58 | 1.83 |
| Laborers, material handling, dry work--.- | 872 | 1.78 | 304 | 1.75 | 202 | 1.88 | 119 | 1.54 | 30 | 1.43 | 183 | 1.98 |
| Laborers, material handling, wet work-.-- | 658 | 1.86 | 272 | 1.85 | 151 | 1.87 | 58 | 1. 58 |  |  | 143 | 2.03 |
| Measuring machine operators.------------ | 360 | 2. 03 | 121 | 2.01 | 77 | 2. 10 | 29 | 1.80 |  |  | 99 | 2. 15 |
| Seasoners, hand | 386 | 2.02 | 122 | 1.84 | 121 | 2.27 | 71 | 1.89 |  |  | 50 | 2.23 |
| Seasoners, machine.-- | 775 | 2. 09 | 279 | 2. 00 | 141 | 2. 26 | 62 | 1. 78 |  |  | 239 | 2.26 |
| Shaving machine operators | 636 | 2. 60 | 207 | 2. 55 | 157 | 2. 70 | 35 | 2. 66 |  |  | 208 | 2.64 |
| Automatic.-.-- | 277 | 2. 61 | 15 | 2. 52 | 81 | 2.92 | 17 | 2. 33 |  |  | 143 | 2.56 |
| Hand operators | 359 | 2. 60 | 192 | 2. 55 | 76 | 2. 47 | 18 | 2.97 |  |  | 65 | 2. 80 |
| Stakers, machine.-.-.-.-- | -916 | 2. 42 | 271 | 2. 43 | 280 | 2. 56 | 36 | 2.95 | 57 | 1.48 | 222 | 2. 41 |
| Tackers, togglers, and pasters Pasters.-.-.-.-. | 1,852 | 2.46 2.48 | 767 302 | 2.38 2.39 | 392 | 2.54 2.34 | 115 | 2.57 1.75 | 31 | 1.61 | 481 366 | 2. 56 2.65 |
| Tackers.. | 176 | 2.41 | 103 | 2.12 | 41 | 3. 46 |  |  |  |  | 15 | 2.65 1.75 |
| Togglers. | 875 | 2. 45 | 362 | 2.46 | 247 | 2.47 | 92 | 2.79 | 17 | 1.41 | 100 | 2. 36 |
| Trimmers, dry | 514 | 2.03 | 226 | 1.98 | 83 | 2.17 | 30 | 1.87 | 30 | 1.49 | 122 | 2.19 |

${ }^{1}$ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.
${ }^{2}$ The regions in this study are: New England-Connecticut, Maine, Massachusetts, New Hampshire, Rhode 1sland, and Vermont; Middle AtlanticNew 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; and Great Lalkes-Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin.
${ }_{3}$ Includes data for regions in addition to those shown separately. Alaska and Hawaii were not included in the study.
"The term "metropolitan area," as used in this study, refers to the Standard Metropolitan Statistical Areas established under the sponsorship of the U.S. Bureau of the Budget.
© Establishments were classified on the basis of the major type of leather tanned or finished during the preceding year. The production-worker total above includes data for establishments tanning or finishing other types of leather in addition to those shown separately.
Note: Dashes indicate no data reported or data that do not meet publication criteria.

The occupational classifications for which separate data were obtained accounted for three-fifths of the production workers within the scope of the study. Hourly averages for those jobs ranged from $\$ 1.72$ for janitors to $\$ 2.60$ for shaving machine operators. The 1,852 tackers, togglers, and pasters-the largest occupational category studied separately-averaged $\$ 2.46$. Other numerically important jobs and their averages were material handling laborers, $\$ 1.78$ on dry work and $\$ 1.86$ on wet work; machine seasoners, $\$ 2.09$; embossing- or plating-press operators, $\$ 2.11$; haulers, $\$ 2.15$; colorers, fat liquorers, or oilwheel operators, $\$ 2.25$; machine buffers, $\$ 2.40$; and machine stakers, $\$ 2.42$. The accompanying table presents average earnings for some of the occupations studied separately and indicates variations in occupational earnings levels among the regions.

## Establishment Practices

Data were also obtained on work schedules and selected supplementary benefits, including paid holidays and vacations and several types of health, insurance, and pension plans. ${ }^{5}$

A work schedule of 40 hours a week was in effect in establishments employing nine-tenths of the industry's production workers in March 1963. This was also the predominant weekly work schedule in each of the regions. Approximately an eighth of the workers were employed on late shifts.

Paid holidays-ranging from 3 to 10 annuallywere provided by establishments accounting for nearly all of the industry's production workers.

[^39]Regionally, the most common holiday provisions were 9 days a year in New England, 7 days in the Middle Atlantic and Border States, 6 days plus 2 half days in the Great Lakes, and 5 days in the Southeast.

Paid vacations after qualifying periods of service were provided by establishments employing virtually all of the production workers. A large majority of the workers were in establishments providing 1 week of vacation pay after 1 year of service, 2 weeks after 5 years, and 3 weeks after 15 years. A fifth of the workers were in establishments providing 4 weeks of vacation pay after 25 years of service. Vacation provisions tended to be more liberal in the Great Lakes than in the other regions.

Life, hospitalization, and surgical insurance for which the employer paid at least part of the cost were available to more than nine-tenths of the production workers. Four-fifths of the workers were in establishments providing sickness and accident insurance; nearly three-fourths in those providing medical insurance; about half in those having accidental death and dismemberment insurance; and a tenth in those with catastrophe insurance. The proportion of workers in plants providing specified health and insurance benefits varied by region.

Retirement pension benefits providing regular payments for the remainder of the worker's life upon retirement (other than benefits available under Federal old-age, survivors, and disability insurance) were available to approximately half of the production workers. Provisions for retirement severance pay were reported by plants employing an eighth of the production workers.
-George L. Stelluto
Division of Occupational Pay

## Equal Pay Act of 1963

Editor's Note.-The following is the full text of the Equal Pay Act of 1963 (PL-88-38), which was signed into law by President John $F$. Kennedy on June 10, 1963.

Sec. 2(a) The Congress hereby finds that the existence in industries engaged in commerce or in the production of goods for commerce of wage differentials based on sex-(1) depresses wages and living standards for employees necessary for their health and efficiency; (2) prevents the maximum utilization of the available labor resources; (3) tends to cause labor disputes, thereby burdening, affecting, and obstructing commerce; (4) burdens commerce and the free flow of goods in commerce; and (5) constitutes an unfair method of competition.
(b) It is hereby declared to be the policy of this act, through exercise by Congress of its power to regulate commerce among the several States and with foreign nations, to correct the conditions above referred to in such industries.

Sec. 3. Section 6 of the Fair Labor Standards Act of 1938, as amended (29 U.S.C. et seq.), is amended by adding thereto a new subsection (d) as follows:
"(d)(1) No employer having employees subject to any provisions of this section shall discriminate, within any establishment in which such employees are employed, between employees on the basis of sex by paying wages to employees in such establishment at a rate less than the rate at which he pays wages to employees of the opposite sex in such establishment for equal work on jobs the performance of which requires equal skill, effort, and responsibility, and which are performed under similar working conditions, except where such payment is made pursuant to (i) a seniority system;
(ii) a merit system; (iii) a system which measures earnings by quantity or quality of production; or (iv) a differential based on any other factor other than sex: Provided, That an employer who is paying a wage rate differential in violation of this subsection shall not, in order to comply with the provisions of this subsection, reduce the wage rate of any employee.
"(2) No labor organization, or its agents, representing employees of an employer having employees subject to any provisions of this section shall cause or attempt to cause such an employer to discriminate against an employee in violation of paragraph (1) of this subsection.
"(3) For purposes of administration and enforcement, any amounts owing to any employee which have been withheld in violation of this subsection shall be deemed to be unpaid minimum wages or unpaid overtime compensation under this act.
"(4) As used in this subsection, the term 'labor organization' means any organization of any kind, or any agency or employee representation committee or plan, in which employees participate and which exists for the purpose, in whole or in part, of dealing with employers concerning grievances, labor disputes, wages, rates of pay, hours of employment, or conditions of work."

Sec. 4. The amendments made by this act shall take effect upon the expiration of one year from the date of its enactment: Provided, That in the case of employees covered by a bona fide collective bargaining agreement in effect at least thirty days prior to the date of enactment of this act, entered into by a labor organization (as defined in section 6(d)(4) of the Fair Labor Standards Act of 1938, as amended), the amendments made by this act shall take effect upon the termination of such collective bargaining agreement or upon the expiration of two years from the date of enactment of this act, whichever shall first occur.

## Technical Note

## The Use of Price Indexes in Escalator Contracts

In long-term contracts governing wages, rents, continuous or future delivery of a product, alimony payments, administration of legacies, and delivery of a new product for which the seller has no satisfactory cost estimate, to name a few examples, changes in the purchasing power of the dollar pose a problem because they are beyond the control of the contracting parties. One method the parties use to protect themselves against unforeseen price change, especially in times of inflation, is the escalator clause. Essentially, this attempts to have the transaction price represent constantvalue units as measured by the quantity of goods and services which a given amount of money will buy. It usually employs a price index as an objective means of adjusting the actual price. One advantage of escalation is that the techniques and measures used to convert monetary units into constant-value units are normally mechanical and, once established, cannot be manipulated by either party. Another is that it is relatively inexpensive to administer since, after the mechanics have bsen agreed upon, very little computing is required.

This article discusses the techniques of escalation using the two major price indexes published by the Bureau of Labor Statistics-the Consumer Price Index (CPI) and the Wholesale Price Index (WPI). It does not discuss the pros and cons of using one type of index or data as against another, or the desirability of escalation in preference to other means of protecting against price change. ${ }^{1}$ Both of these are matters for the
contracting parties to decide. But, for those who are interested in escalation, the article highlights some of the essential qualities of the data they may specify in the contract, shows how these data should be described in the agreement, and suggests techniques for adjustments.

## BLS Data for Escalation Purposes

The Consumer Price Index. The CPI measures changes in the cost of a list of goods and services which represents the items important in the expenditures of urban wage earners and clerical workers and their families. It does not measure their actual expenditures or their total cost of living, both of which include outlays for such purposes as income taxes, contributions to charity, and personal insurance-things which the workers and their families do not "consume." Nor does it measure the cost of changes in the manner or level of living which are typically associated with changes in income, size of family, the age of family members, etc. It does, however, measure changes in the prices of things which the "average" family normally buys for current consumption and, conversely, the purchasing power of the dollar spent by workers and their families as a group.

The same items are priced month after month, using specifications to insure that identical qualities are priced, in about 50 cities These cities represent all urban areas from metropolitan New York City to communities with as few as 2,500

[^40]residents. Price trends in each city affect the United States index according to population.

Within each city, price changes for the sample goods and services are combined with weights based on the importance in family expenditures of the sample items and the related items which they represent. Thus, if families make 1 percent of their outlays for milk and 20 percent for rent, a 5 -percent rise in rents would have 20 times as much effect on the index as a 5 -percent rise in milk prices.

Once the item sample has been determined, it stays fixed until the next major weight revision ${ }^{2}$ or until there is clear evidence that an alteration in the list of goods or services is called for. For example, as wages and their purchasing power rise, workers begin to spend proportionately less for food and other necessities and eventually the index weights must be revised. Also, new items must be added from time to time as they become important-such as television sets and nylon hose.

The CPI is published about the 25th of the month following that to which the index applies and reflects prices collected at varying dates during the entire month. Separate indexes are available for most of the largest cities: for New York, Chicago, Los Angeles, Detroit, and Philadelphia on a monthly basis; for the others on a quarterly basis. In addition to the total, or the All Items index, separate indexes are calculated for major categories of family spending: Food, housing, apparel, transportation, etc. ${ }^{3}$

The CPI has been used for many years as a wage escalator in labor-management contracts. It is estimated that about 2 million workers are now covered by such agreements. The index is also used to a lesser extent to adjust rent payments, royalties, pensions, and alimony payments.

[^41]Recently, an insurance company began issuing life insurance policies which contain a provision that benefits will be increased in proportion to the rises in the CPI.

The Wholesale Price Index. The WPI is a general purpose index designed to provide a continuous monthly series showing price changes, singly and in combination, for all commodities sold in primary markets of the United States. The index measures the general rate and direction of price movements in primary markets and the specific changes for individual commodities or groups of commodities. It is based on a sample of over 2,100 commodities chosen to represent a wide variety of commodity specifications and markets. The prices used in constructing this index are those which apply at the first important commercial transaction for each commodity. Most are the selling prices of representative manufacturers or producers or prices quoted on organized exchanges or markets. The basic weights are total transactions as reported in the latest industrial censuses.

The index is intended to measure price changes between two periods of time, excluding the influence of changes in quality, quantity, terms of delivery, level of distribution, unit priced, or source of price. To accomplish this, the index calculations are based on the relative change from one period to the next in prices of identical or nearly identical items, as defined by precise specifications.

The basic All Commodities index is divided into 15 major groups and about 80 subgroups. In addition, some 300 "product class" indexes, which group commodities characterized by similarity of raw materials, production processes, or end use, are of particular interest to users of escalator clauses. ${ }^{4}$ The Bureau will also, under contract, construct indexes for special combinations of individual series to meet the specifications of the parties to an escalator agreement.

A 1961 survey of WPI users ${ }^{5}$ revealed that 932 companies or individuals used the WPI for the escalation of sales or purchase contracts totaling nearly $\$ 14$ billion. The indexes most frequently specified in escalator contracts are shown on the following page.
Number of contracts
Metals and metal products ..... 178
All commodities ..... 124
All commodities other than farm
products and foods ..... 87
Finished steel products_ ..... 87
Steel mill products. ..... 73
Iron and steel ..... 66
Machinery and motive products ..... 24
Electrical machinery and equipment ..... 23
Machinery and equipment ..... 19
Structural steel shapes ..... 19
Petroleum and products_ ..... 19
Industrial chemicals ..... 16
General purpose machinery and equipment ..... 15
Chemicals and allied products ..... 14
Carbon plates ..... 13
Crude petroleum ..... 10
Lumber and wood products_ ..... 10
Specially constructed index formetals and metal products10

## Elements of Escalation

There are three major elements in an escalator clause contract:

1. Establishment of the initial price or rate at the time of the contract. The escalator clause protects against radical changes in real costs from the original estimate; it cannot correct an erroneous or inequitable original price. In fact, if the original price is incorrect, almost any escalator clause will exaggerate the error over time.
2. Selection of an appropriate escalating index. Escalation is usually based on an index which is assumed to represent the commodity or service being escalated. The escalator, then, is subject to any limitations inherent in the escalator index. The CPI is generally used for escalating wages and items sold at retail levels; the WPI is more often used for adjusting prices of raw materials or production equipment, industrial rents, etc.
3. Procedures for carrying out the escalation. Six basic points are usually defined in escalator mechanisms:
A. Identification of the Index To Be Used. The index used as the escalator should always be completely identified regardless of whether it is a widely known index or a special combination of individual series or categories. Exact title and the index base period should be indicated. For example, an adequate identification would be: The Consumer Price Index, All Items, U.S., 1957-
$59=100$, or the Wholesale Price Index, All Commodities (Except Farm and Food Products), $1957-59=100$, issued by the U.S. Bureau of Labor Statistics. The indexes are published first in a monthly press release, about 2 weeks later in a detailed report, and, about a month thereafter, in the Current Labor Statistics section of the Monthly Labor Review. The publication to be used should be specifically named in the contract.

If the contract is based on the WPI, it is safer to specify whether the preliminary or final index ${ }^{6}$ is to be used. The CPI is final on first publication. If an item or group or specially computed combination of individual WPI series is to be used, the BLS code or category numbers should be included in the identification.

In specially computed indexes based on either the CPI or WPI, the relative weights of items should be specified. For example, an index for escalating the price of turbines might assign the major components of the product the following relative importances to reflect changes in material costs:

|  |  |  |
| :--- | :---: | :---: |
| BLS Code |  |  | | Weight |
| :---: |
| (percent) |

B. Reference Dates of Escalation. The date to which the index being used as the base of the escalator refers should always be indicated. The reference base period is usually not the same as the base period of the price index or series; for example, the reference index may be the CPI for March 1962, stated on the 1957-59 official base period. The reference date of indexes on which subsequent changes are to be computed should also be specified. The parties may prefer-for the escalator base or the subsequent adjustments-to use a particular month's index, an annual average, or an average for 3 months, or 6 months, or 5 years, or any other period or date, whatever suits their purpose. In any event, the contract should specify precisely the reference dates of the indexes to be used.

[^42]C. Frequency of Adjustment. It should also specify the effective dates of adjustments. The parties may agree that adjustments are to be made quarterly. For example, if the index goes up or down by a specified number of points or fraction of a point by the end of the quarter, the change in wages, rents, etc., takes place automatically at a stipulated time. If the index does not change by at least this amount, then no change is called for in the wage rate, rent, or product price.

On the other hand, the change in the payment may be required whenever the index reaches a certain point- $118.0(1947-49=100), 120.0$, etc.or when it changes by a specified amount. Thus, if an increase of 1 cent in a wage rate is called for whenever the index moves up 0.5 point, the time interval is immaterial-it may be 1 month or 6 , or 12 , etc.
Two factors should be considered in deciding the frequency of adjustments:

1. Too frequent adjustments may create some difficulties because of the seasonal or erratic movements of prices, particularly for farm products and foods. As commodities move up the processing scale away from raw materials into more highly fabricated goods, seasonal price changes tend to become progressively less important. Use of quarterly, semiannual, or annual average indexes will minimize such periodic fluctuations and result in a smoother adjustment pattern.

Conversely, in a period of continuous price movement in one direction, infrequent adjustments may understate the true change somewhat, since escalator clauses adjust only for what has already happened. When prices are rising, payments do not increase as rapidly as the index; when prices are falling, payments do not decrease as fast as the index.
2. The time lag between collection of the basic price data and publication of the indexes does not permit the contracting parties to time adjustments to coincide with the occurrence of price changes. For the CPI and the WPI, 4 to 6 weeks elapse between the collection and the release of the index, even in preliminary form. If a final index is used, then the lag increases by at least a

[^43]month. Unless provision is made for this reporting lag, the understatement of the true price change will be intensified when prices are changing rapidly. In many instances, particularly for rents, retroactive payments are called for in order to correct the time lag.
$D$. The Mechanics of Adjustment. The heart of the escalator clause is the method of adjustment, which can be varied in many ways, depending on the purpose for which the index is to be used and the wishes of the contracting parties. There are two basic methods of adjusting payments in accordance with a price index-one is to apply to the price (or the wage rate) some multiple of the percentage change in the index; the other is to provide that for each specified absolute change in the index, the price will change by some specified amount. Either method is satisfactory. However, unless the base index is exactly 100.0 , a change of one index point is not the same as a change of 1 percent. When the index is greater than 100, a change of an index point is less than a change of 1 percent and when the index is less than 100, a change of a point is more than a change of 1 percent. Therefore, a clause might read that prices will change 1 percent for each 1 -percent change in the index or that prices will change a given dollar-and-cents amount for each 1-point change in the index.

Many wage agreements contain a cents-to-point relationship, requiring that wage rates be upped by a cent for every change of one-half (or 0.5) point from the base index. Others condition the change on 0.6 point, a whole point, etc. Such a relationship frequently is predicated on the wage rate-price index relationship at the time of the agreement. For example, if the base index for escalation is 120.0 and the average wage is $\$ 2.40$ per hour, then one index point is equivalent to 2 cents and one-half point equals 1 cent. To maintain this relationship, the parties may agree on a 1-cent wage increase if the index moves up onehalf point. Under this type of agreement, a new cents-to-point relationship must be calculated when the BLS changes its index base period, because rebasing changes the value of an index point. ${ }^{7}$ The index-wage relationship can also be of the percentage type. This is less frequently used in wage agreements than the cents-to-point relationship-perhaps because the resulting wage
rates might result in fractions of a cent or because the concept is not quite as simple.

For leases and other long-term price agreements, the percent-of-change technique offers no difficulty. If this method is adopted, the clause should specify how the change is to be computed; for example, the parties may decide that an index change of 12.5 percent is to result in a price adjustment of 12 percent, 12.5 percent, or 13 percent, or they may work out a schedule of changes, as in the cents-to-point contracts. As both the CPI and the WPI are published to one decimal place, it is desirable that contracts refer to the indexes in these terms.
E. Upper and Lower Limits of Adjustment. The escalator clause should specify whether adjustments will be made for index changes in either direction or only one. If an agreement mentions increases only, presumably decreases are not contemplated. Some clauses, on the other hand, specify that wages, rents, etc., are to move down as well as up but are not to drop below a specified minimum; for example, a wage escalation clause may call for a 1 -cent decrease for every 0.4 index point down to an index level of 97.8.

## F. Provision for Revision of the Index. The Bureau

 occasionally publishes corrections of indexes pre-viously published as final, because of late reports or errors. The contract should specify whether or not account is to be taken of such corrections.

For statistical accuracy, the Bureau is committed to keep the composition of the indexes in line with prevailing conditions. In both the CPI and the WPI, the BLS revises commodity specifications, adds new products, discontinues obsolete items, and, from time to time, revises the weighting structure and reference base.

Escalator mechanisms cannot be controlled by either party, so agreements often stipulate a procedure to follow if the escalator mechanism changes or disappears. In most cases, this procedure simply states that the original issuing agency will be sole judge of the comparability of successive indexes, and that if the agency cannot supply indexes which are comparable, a named independent authority (such as the dean of the business school or the head of the economics department in the State university) will select a method of continuing the contract. When the relationship is one of cents to point as in a wage contract, the parties may want to renegotiate. For this reason, the Bureau gives notice of anticipated changes in the official indexes at least 6 months in advance.
-Francis S. Cunningham
Division of Industrial Prices and Price Indexes

The compiler of a general-purpose index number . . . cannot foresee to what uses and misuses his figures will be put. For each of the legitimate uses he might conceivably devise an appropriate series. But he cannot conceivably devise a single series that will serve all uses equally well. For the very qualities that make an index number good, say, for the man of affairs concerned with the business outlook, may make it bad for other men interested in the fortunes of farmers, in the effects of the tariff, in the relation between gold output and prices, in comparing changes in price levels in different countries, etc. The day has not yet come when the uses of index numbers are sufficiently differentiated and standardized to secure the regular publication of numerous special-purpose series. Until that day does come, the making of general-purpose series will continue and the makers will go on choosing their methods perforce on rather vague and general grounds. So long also must most of the users of index numbers put up with figures imperfectly adapted to their ends.

[^44]
# Significant Decisions in Labor Cases* 

Labor Relations

Agency Shop. On June 3, 1963, the U.S. Supreme Court handed down two unanimous decisions clarifying the legal status of agency-shop contracts. The Court held that such agreements are a legitimate form of union security under section 8(a) (3) of the Labor Management Relations Act, but that they may be prohibited by State law under section 14 (b) of the act.

In the first case, the Court ruled ${ }^{1}$ that it was an unfair labor practice for an employer to refuse bargaining on a union's proposal of an agencyshop agreement requiring nonunion employees to pay to the union amounts equal to initiation fees and membership dues as a condition of employment. Where not prohibited by a State law, the Court held, such an agreement conditions employment upon a practical equivalent of union "membership" within the meaning of the act's unionshop provision.

The case grew out of a dispute between the General Motors Corp. and the United Automobile Workers, whose national agreement requiring all employees to join the union did not apply "in any State which prohibits, or otherwise makes unlawful, membership in a labor organization as a condition of employment." Since Indiana's right-to-work law, however, permits the agency shop, the union demanded that the company bargain on an agency shop proposal whicb would require all nonunion employees hired at the company's Indiana plants to pay to the union, within 30 days after the agreement or their initial employment, a sum equal to the initiation fee and monthly sums equal to the regular membership dues.

Contending that such an agreement would violate the LMRA, the company refused to bargain on this proposal. The union filed charges with the National Labor Relations Board, which held that the agency shop was a legitimate union se-
curity arrangement and that the employer had committed an unfair labor practice by refusing to bargain on it. ${ }^{2}$ The court of appeals reversed, holding that section 8(a) (3) of the act, authorizing agreements requiring "membership" in a labor organization as a condition of employment, did not permit an agency shop since such an agreement does not require membership in the union. ${ }^{3}$

The Supreme Court agreed with the Board that the agency shop is a legitimate form of union security and a proper subject for collective bargaining. It said that the 1947 amendments to the act had altered the meaning of "membership" for purposes of union security contracts by making union membership as a condition of employment dependent only upon payment of fees and dues. The union's agency-shop proposal would condition employment upon the "practical equivalent" of membership under section 8(a)(3) of the amended act.

Although the Court recognized that, under the agency-shop arrangement, the employee's name would not be placed on the union rolls, it dismissed this as a distinction more formal than real in the context of permitted union security arrangements. Noting that administrative and judicial rulings under the Wagner Act had approved forms of union security "less severe" than the closed or union shop, the Court also said that the 1947 Taft-Hartley amendments were not intended to validate only the union shop and abolish all other union security agreements permitted by State law. Its view of the legislative history of the amendments was that Congress intended "to reduce the evils of compulsory unionism while allowing financial support for the bargaining agent."

Since the agency shop was a legitimate form of union security, the company's refusal to bargain on the union's proposal constituted an unfair

[^45]labor practice from which the Board properly directed it to refrain.
In the other agency-shop decision, the Court ruled ${ }^{4}$ that section $14(\mathrm{~b})$ of the LMRA, permitting States to outlaw agreements requiring union membership as a condition of employment, also allows States to prohibit an agency shop or substantially equivalent arrangements. The Court, however, reserved for reargument the question of whether State courts or only the NLRB, has power to prohibit the violation of such a law.

The agreement between the Retail Clerks and the Food Fair Stores supermarkets in Florida provided that the company's nonunion employees would pay to the union, within 30 days after the agreement or their initial employment, an initial and subsequent monthly "service fees" not to exceed the initiation fees and monthly dues of union members. A trial court's dismissal of a suit by several employees seeking to annul the provision was reversed by the Florida Supreme Court, which held that the agreement violated the State's right-to-work law. ${ }^{5}$

The U.S. Supreme Court held that since section 14(b) of the LMRA permits States to prohibit agreements authorized by section $8(a)(3)$, requiring union membership as a condition of employment, and since the agency-shop arrangement is a practical equivalent of such an agreement (see General Motors), a State is permitted to outlaw agency-shop agreements under section 14(b) of the act.

To the contention that the arrangement here differed from a true agency-shop agreement, such as that involved in the General Motors case, in that the service fees were to be used to defray the costs of collective bargaining, the Court replied that such restrictions were not ironclad or apparent on the face of the agreement. Even if all receipts from nonmembers were to be used for the restricted purpose, the Court said that since the amount of the service fees was the exact equivalent of union dues, the overall effect would be the same as under an agency-shop arrangement and should receive the same treatment.

The Court noted that interpretation of section 14(b) of the LMRA should probably have been referred to the NLRB when the suit was first brought, since the scope of the provision was unclear at that time. Since, however, the meaning
of the section had been settled by the General Motors case, it was now unnecessary to refer the problem to the Board for clarification of the statute. However, the Court said, questions remained as to whether the State's right-to-work law made the agency shop an unfair labor practice under the LMRA and, if so, whether a State court might enjoin such arrangements. The Court reserved these questions for full argument and decision during the fall term of 1963.

Federal-State Jurisdiction. In two other cases decided on the same day, the Supreme Court delimited the area in which the State may exercise jurisdiction over damage suits against a union where the crux is the alleged interference with a member's employment.

In one of the cases, the Supreme Court held ${ }^{6}$ that a State court had no jurisdiction of a union member's action for damages caused by the union's refusal to refer him to a job upon request of the employer, even if the union's conduct violated State law. The union's action may have arguably been subject to the LMRA's provisions and, thus, be within the exclusive jurisdiction of the NLRB.

A member in good standing of the Shreveport, La., local of the Plumbers union sought employment in Dallas, Tex., on a bank construction project where the hiring was done through union referral. The project foreman asked the union's Dallas local to refer the member to work, but the local's business agent refused because of the member's alleged noncompliance with internal union rules. The member's union card from the Shreveport local was accepted by the Dallas local, and he was referred to other jobs, but not to the bank construction project. Eventually he brought suit in a State court, claiming damages from the union for failure to refer him to the bank construction and alleging that the union's action interfered with his right to contract and to pursue a lawful occupation, was a breach of promise implicit in union membership not to discriminate against any member or deny him the right to work, and violated certain State laws.

[^46]The union successfully challenged the State court's jurisdiction, asserting that the dispute was within exclusive jurisdiction of the Board, and the case was dismissed. However, the dismissal was laid aside by the State's court of civil appeals, which, relying on the U.S. Supreme Court's decision in Gonzales, ${ }^{7}$ rejected the union's preemption argument and demanded the case for trial. The jury findings for the member were upheld, in effect, by the Texas Supreme Court, and the union appealed.

The U.S. Supreme Court held that the principle established in the Garmon case ${ }^{8}$ was applicable here. In that case, the Court had ruled that in the absence of any compelling State interest such as the maintenance of domestic tranquillity, the State must defer to the exclusive jurisdiction of the Board where the matter litigated may arguably be subject to the protection of section 7 or the prohibition of section 8 of the act.

The Court noted that if the refusal to refer and the resultant inability to obtain employment are assumed to have been based on the member's noncompliance with union rules, then the union's action may have violated the member's rights protected by section $8(\mathrm{~b})(1)(\mathrm{A})$ and may have induced the employer to discriminate against the member in violation of sections $8(\mathrm{~b})(2)$ and $8(\mathrm{a})(3)$ of the act. On the other hand, the facts may show that the union's conduct was to prevent the member from circumventing a valid hiring hall arrangement and, hence, was a protected concerted activity within the meaning of section 7 . In either case, "it is reasonably 'arguable' that the matter comes within the Board's jurisdiction," the Court said.

The Supreme Court did not accept the member's contention that even if the union's interference with his employment is a matter within the jurisdiction of the Board, the State courts are still not deprived of jurisdiction of the case under the principle established by Gonzales. (In the Gonzales case, a union member who had been expelled successfully sued for restoration of membership and for damages flowing from the expulsion.) The Court explained that Gonzales

[^47]involved primarily an internal union matter-the relationship between a member and his union. The award of consequential damages was a collateral relief. Since the State court had jurisdiction over the suit for restoration of union membership, it had the power to "fill out" the State remedy by awarding consequential damages.

In the present case, the Court held, the subject matter involved-almost exclusively-the union's action regarding the member's efforts to acquire employment. The man did not seek determination of his status as a union member, the Court said, and the State is not called upon to "fill out" a remedy as in the Gonzales case. The State court was initially without jurisdiction.

The dissenting Justices Douglas and Clark maintained that Gonzales could not be distinguished from the present case. They held that expeditious administration of justice in this area dictates allowing the individual employee to seek redress of his grievances in his home town tribunal, not at some place that may be distant and expensive to reach.

In the other case, the Supreme Court held ${ }^{9}$ that a State court lacked jurisdiction over an action for damages against a union brought by a member who had been laid off and prevented from obtaining subsequent employment as a foreman or superintendent because of an alleged violation of a union rule.

A member of the Iron Workers' union, employed as a foreman, was fined by the union and suspended from membership for violating union rules by instructing Boilermakers on a project how to perform certain work claimed by the Iron Workers. The fine was later suspended and the member placed on probation. After the two crafts had resolved their jurisdictional dispute, the Iron Workers informed the employer they would no longer take orders from the foreman. Several weeks after the completion of the project, he was laid off "as a result of his dispute with the union" and was not hired subsequently as a foreman or superintendent by the same or any other employer

In his suit for damages under the State law, the member charged that the union and some of its officials conspired to bring about his discharge from duties "as superintendent and foreman" and to prevent his reemployment in such capacity. The trial court characterized the action complained of as a "common-law tort." In rejecting
the union's argument of Federal preemption, the court held, in line with the Gonzales decision, that the Federal law does not prevent a State action "to recover damages for a common-law tort which is also an unfair labor practice." A jury verdict (on the second trial) for the member was upheld by the State supreme court, and the union appealed.

The Supreme Court held that, as in the Borden case, the rationale of the Gonzales decision would not support a finding that the State could exercise jurisdiction in this case. The suit here does not involve a dispute over internal union matters as did Gonzales; the gist of the violation here is the "interference with the plaintiff's existing or prospective employment relations," the Court said.

To rebut the preemption argument of the union, the member contended that, as a job superintendent, he was a "supervisor" within the meaning of section 2(11) and thus is excluded from the act's coverage by section $2(3)$. The Court found, however, that the member worked sometimes as a regular iron worker, sometimes as a foreman, and sometimes as a supervisor. Since the member's
employment status fluctuated it must be determined for the purpose of this suit. The court felt that the Board could more wisely be charged with such a determination.

Should it be assumed that the member was solely a supervisor, the court held, the dispute would still be within the Board's jurisdiction. The union's insistence on the discharge of a supervisor for failure to comply with union rules might violate section $8(\mathrm{~b})(1)(\mathrm{A})$ by tending to coerce nonsupervisory employees into observing those rules. In such a case, the Board has the power, under section 10 (c), to order the union to reimburse the supervisor for loss of wages. Moreover, by forcing the employer to discharge a supervisor, the union would also violate section $8(\mathrm{~b})(1)(\mathrm{B})$ because, in effect, it would be coercing the employer in the selection of his representatives for the purpose of collective bargaining or the adjustment of grievances.

The Court concluded that the subject matter of this case falls within the exclusive jurisdiction of the Board. Justices Douglas and Clark dissented, for the reasons stated in the Borden case dissent.

## Chronology of Recent Labor Events

## June 2, 1963

United States Rubber Co. agreed to a 2 -year contract with the Rubber Workers covering 24,000 workers in 18 plants similar to contracts previously reached for the other large companies in the industry (Chron. item for Apr. 24, MLR, June 1963). It provides wage increases in 1963 and 1964 totaling 16 cents an hour in tire plants and 13 cents in nontire plants. Supplemental unemployment benefits were increased in amount and duration, and a joint study committee was established to discuss automation and other problems.

## June 3

The U.S. Supreme Court in NLRB v. General Motors ruled that agency shop arrangements, requiring payment of amounts equal to and in lieu of fees and dues, are lawful under the Labor Management Relations Act in States which do not prohibit such contracts. In a related case, Retail Clerks, Local 1625 v. Schermerhorn, the Court affirmed State authority to outlaw agency-shop and service fee agreements. (See also p. 954 of this issue.)

In two cases, the U.S. Supreme Court denied State court jurisdiction over damage actions brought by members against their unions involving allegation of union interference with a member's employment. The Court found that refusal of a union's hiring hall to refer a member to a particular employer and layoff of a member because of his dispute with the union were both within the jurisdiction of the National Labor Relations Board. The cases were United Association of Journeymen and Apprentices, Local 100 v. Borden and International Association of Bridge, Structural and Ornamental Iron Workers, Local 207 v. Perko. (See also pp. 954-955 of this issue.)

## June 4

President John F. Kennedy directed Secretary of Labor W. Willard Wirtz to require completely nondiscriminatory admission to apprenticeship programs, requested review of all Federal construction programs to prevent discriminatory hiring practices, and announced his intention, accomplished June 22, to extend the authority of the Committee on Equal Employment Opportunity to include construction based fully or in part on Federal grant-in-aid programs. On June 6, Secretary Wirtz announced a variety of measures to insure equal employment oppor-
tunity, including establishment of new apprenticeship standards, and the creation of a 50 -man task force which began immediate on-the-site inspection of Federal construction projects. (See also p. 964 of this issue.)

On June 21, the Building and Construction Trades Department adopted a program for eliminating discrimination in apprenticeship and job referrals.

Under the Walsh-Healey Public Contracts Act, a minimum wage determination of $\$ 1.65$ an hour was issued by Secretary of Labor W. Willard Wirtz for persons employed in the manufacture or furnishing of the products of the pumps and compressors industry. No specific wage determination had previously been made for this industry.

## June 6

The Northrop Corp. announced pay increases awarded under a periodic wage review ranging from 5 to 8 cents an hour for 6,500 employees. (See also p. 960 of this issue.)

## June 8

A schedule of new minimum wage rates, which includes 10 -percent increases required by the 1961 amendments to the Fair Labor Standards Act, was announced by the Department of Labor for industries covered by the act prior to the amendments in Puerto Rico and the Virgin Islands. The new rates, revising a prior schedule announced March 23, will become effective for most industries November 3 , and bring minimum rates to 25 percent above those in effect before the amendments.

## June 10

The Equal Pay Act of 1963 (P.L. 88-38), which prohibits wage discrimination because of sex, was signed by President Kennedy. (See also p. 947 of this issue.)

In a Case involving a 1961 strike by Division 1287 of the Street, Electric Railway and Motor Coach Employes against Kansas City Transit, Inc., the United States Supreme Court reversed a Missouri Supreme Court decision and struck down the State's King-Thompson Act, which prohibited strikes against public utilities seized by the State. The Court declared that the State's seizure of the utility had been merely a maneuver to circumvent a strike and thus conflicted with Federal legislation guaranteeing the right to strike against private employers. The company had conducted business as usual following the seizure, without State participation in management.

In a work assignment dispute between the Lathers and the Carpenters, the National Labor Relations Board gave effect to a jurisdictional agreement between the two international unions, even though the employers had not accepted the agreement. The Board found that none of the other criteria it had laid down for deciding such
cases (Chron. item for February 28, MLR, April 1962) provided a basis for determination in this case-Wood, Wire and Metal Lathers Union and Acoustics \& Specialties, Inc.

## June 11

Local 9 of the Brewery Workers ratified a 2-year contract with the Pabst, Miller, and Schlitz companies which contained a 10-cent-an-hour wage increase each year. Pay differentials for the second and third shifts were also increased. (See also pp. 961-962 of this issue.)

Anthony Provenzano, a Teamster vice president and president of New Jersey Teamster Joint Council 73, was convicted in a Federal court in Newark, N.J., of extorting \$17,100 from Dorn Transportation, Inc., between June 1, 1959, and January 1, 1962. The Secretary of Labor had sued the previous week to invalidate his reelection to the presidency of Local 560 in December 1962, on the basis of failure to conform with Landrum-Griffin Act election requirements.

## June 14

A $\$ 3.9$ million grant enabling the Board of National Missions of the Presbyterian Church to buy five Kentucky hospitals owned by the United Mine Workers Welfare and Retirement Fund's Miners Memorial Hospital Association was approved by the Area Redevelopment Adminsitration. Five other hospitals owned by the union will continue under its auspices for at least a year. (See also pp. 964965 of this issue.)

## June 17

The U.S. Supreme Court reversed a South Carolina decision denying unemployment benefits to a Seventh Day Adventist who had refused to work on Saturday and was dismissed by a textile mill when it shifted to a 6-day
week. Other 5-day employment was unavailable. A 7 to 2 majority held that the denial was unconstitutional since its effect was to limit free exercise of religion. The case was Adell H. Sherbert v. Charlie V. Verner.

## June 20

The Steelworkers union and 11 major steel producers agreed upon extension of their 1962 contracts for 21 months on terms recommended by their joint Human Relations Committee. Wage rates were unchanged; but the companies agreed to increase contributions to the savings and vacation plan by 9.5 cents an hour, beginning in 1964. The senior half of each company's work force are to receive a 13 -week vacation every 5 years. Life and hospital insurance benefits were improved and sickness and accident benefits increased. The agreement also made experimental changes in several provisions affecting job security. (See also pp. 959-960 of this issue.)

A Walsh-Healey Act wage determination for the scientific, industrial, and laboratory equipment industry by the Secretary of Labor set the minimum at $\$ 1.35$ an hour for the electrical indicating instruments and service test equipment branch and $\$ 1.50$ in the rest of the industry. The industry minimum had been $\$ 1.20$.

## June 28

The National Labor Relations Board ruled that a multiemployer construction industry association unlawfully refused to bargain on a proposed nondiscriminatory hiring hall on grounds that it was illegal under a right-to-work law. The Board held that bargaining is mandatory on the issue under the Labor Management Relations Act, since it is not a form of union security and is not subject to State regulation. The case was Houston Chapter, Associated General Contractors and Local 18, Construction and General Laborers Union.

# Developments in Industrial Relations* 

## Wages and Collective Bargaining

Basic Steel. For the second consecutive year, 11 major basic iron and steel companies and the United Steelworkers of America agreed to leave wage rates unchanged and instead to adopt contract provisions designed to improve income and job security.

The agreement, worked out by the joint Human Relations Committee and recommended to the companies and the Union Wage Policy Committee, was reached on June 20 without resort to formal negotiations. The 1962 agreement permitted reopening on or after May 1, 1963, with the right to strike or lockout 90 days later. ${ }^{1}$ The union and the companies signed the new contracts on June 29, to run for at least 21 months from August 1, with provision for reopening on 120 days' notice after January 1, 1965. This would put the earliest strike date at May 1, 1965.
The major feature of the agreement was the addition of extended vacations for workers on the top half of the seniority roster. It also improved insurance benefits and included "experimental" provisions covering outside contracting, scope of the bargaining unit, performance of bargaining unit work by supervisors, and scheduling overtime when some employees are on layoff. It also specified that a revised job classification manual would go into effect by the end of June 1963, applying to description or classification of jobs established or changed after January 1, 1963.

Effective January 1, 1964, the companies are to increase their contributions to the savings-vacation fund by $9 \frac{1}{2}$ cents an hour, bringing the total contribution to $12 \frac{1}{2}$ cents. In addition, up to onefourth the cost of the vacation plan can be financed by diverting money from the SUB fund if it reaches maximum funding. (Previously up to $41 / 2$ cents a man-hour could be so diverted.) Although the basic agreement provides for re-
negotiation in 1965, the provision for company contributions is to remain in effect for 5 years.

Beginning in 1964, the half of the wage earners in each company with the greatest seniority will receive a total of 13 weeks' vacation- 9 or 10 weeks more than their normal vacation-every fifth year. (In the intervening 4 years, they will receive their usual 3 or 4 weeks' vacation.) Employees retiring after they are entitled to one extended vacation period will receive prorated benefits of 1 week's vacation pay for each 6 months of subsequent services. As soon as employees become entitled to an extended vacation benefit, this supersedes the credit of 1 week's vacation pay at retirement for each 5 years' service prior to 1961, provided under the 1962 agreement. ${ }^{2}$ Employees in the junior group who retire will still receive this retirement benefit provided by the previous agreement.

Benefits for the extended vacation period will equal 40 hours' pay for each week of vacation. Vacations can be scheduled throughout the year.

Provision is also made for an additional week of vacation pay, to be credited in cycles, with the length of the cycles dependent on the level of the savings-vacation fund. Employees in the junior group will participate in each cycle; those in the senior group will receive the extra week of vacation pay during the first and fourth cycles; whether or not the fourth cycle is reached in any 5 -year period will depend on the level of the savingsvacation fund. Employees in the senior group must save the additional vacation pay until retirement; those in the junior group can choose between taking the vacation week immediately or deferring it until retirement. A provision in the 1962 agreement for 1 week's vacation pay for each 2 years' service after January 1, 1961, to the extent funds were available, was discontinued as of the end of January 1964. Workers who have not received a week's vacation pay under this provision were to be the first to receive such pay under the new cycle arrangement. (Under the previous financing arrangements, funds reportedly had not

[^48]been adequate to provide vacation pay to workers with relatively low seniority.)

Application of the "sabbatical" vacation p'an to the senior half of the work force, instead of workers with 15 or more years' service as in the can industry, ${ }^{3}$ was designed to equalize costs of the plan among the 11 companies and prevent any changes in costs because of changes in the age composition of the steel labor force. The senior group reportedly will include those with 17 or more years' service at U.S. Steel; 16 years at Bethlehem Steel Co., Armco Steel Corp., Great Lakes Steel Corp., and The Colorado Fuel \& Iron Corp.; 15 years at Republic Steel Corp.; 14 years at Jones and Laughlin Steel Corp.; 12 years at Inland Steel Co., and The Youngstown Sheet \& Tube Co.; and 18 years and 21 years, respectively, at Wheeling Steel Corp. and Pittsburgh Steel Co.

Improvements in insurance, estimated to cost about 1 cent an hour, included 365 days' hospitalization instead of the former 120 days, a $\$ 10$ increase in weekly sickness and accident benefits, and an increase of $\$ 500$ in life insurance.

The experimental provisions of the agreement, to be in effect from August 1, 1963, through December 31, 1964, included (a) specific restrictions on contracting out of bargaining unit work to accord with past practice or to "improve or clarify" the existing protection for bargaining unit employees; (b) a flat prohibition on supervisors' performing bargaining unit work unless experimental, intended for training purposes, required by emergency conditions, negligible in amount, or could not reasonably be assigned to a bargaining-unit employee; (c) assurance that new or changed jobs will not be excluded from the bargaining unit when they involve a significant amount of bargaining unit duties even though they may also involve duties not normally within the bargaining unit; and (d) a prohibition on overtime work without consulting the union if it appears that qualified laid-off employees could be recalled for at least 2 weeks.

Other Metalworking. The Northrop Corp. announced, in early June, 5 - to 8 -cent-an-hour wage increases retroactive to May 27 for 6,500 hourly employees in California. Employees of the Norair and Nortronics Divisions and Northrop Space Laboratories in plants at El Segundo, Palos

Verdes Estates, Anaheim, Palmdale, and Edwards Air Force Base were affected.

The General Dynamics Corp. granted pay increases to 11,500 nonunion employees at its Astronautics, Convair, and Electronics divisions in San Diego, its division in Pomona, Calif., and one in Fort Worth, Tex. The increases, effective July 1, raised base pay 3 percent for salaried employees and $2 \frac{1}{2}$ percent for hourly paid workers. The length of service required for 3 weeks of vacation was decreased from 12 to 10 years, and overtime provisions for salaried employees were improved. Under contracts negotiated in 1962, ${ }^{4}$ over 30,000 union workers, most of whom are represented by the International Association of Machinists, received a $21 / 2$-percent wage increase on June 22 at the four California divisions and on August 5 at the Fort Worth division.

Employees of the New York Shipbuilding Corp. represented by the Boilermakers union on June 22 ratified a 2 -year agreement covering 3,500 workers. The contract provided a 7 -cent-an-hour increase the first year, with an additional 9 cents an hour the second year. Other provisions lowered the voluntary retirement age for men from 65 to 62 , added insurance benefits, improved vacations, and extended seniority recall rights from 5 to 6 years.

The Brown Instruments Division of Minneapo-lis-Honeywell Regulator Co. in Philadelphia reached agreement in early June with the United Instrument Workers, which is affiliated with the Electrical Workers (IUE), on a 2 -year contract covering over 1,400 workers. The agreement established a program under which the company will train interested workers for higher rated jobs already in existence or to be established. Training will last from 60 to 460 working days and will take place during working hours, with workers paid at the new job rate after 60 days, regardless of the length of the training period. The employer will determine whether individual workers are making sufficient progress to justify their continuation in the training program. The contract also increased wages 6 cents an hour in 1963 and 7 cents in 1964, raised insurance benefits, and added a paid holiday.

[^49]With near record levels of production and sales in the auto industry, the Detroit metropolitan area moved up from "substantial and persistent unemployment" to "moderate unemployment" during June 1963 for the first time since July 1957, according to the U.S. Department of Labor's Bureau of Employment Security. Ford Motor Co. said that it had no men on layoff lists in the Detroit area who had not recently been offered a job and that it had hired new factory workers in May and June. General Motors Corp., most of whose factories are outside the Detroit area, reported it had exhausted layoff lists in its Michigan plants and had also begun hiring new workers.

Lumber and Paper. When negotiations over wage issues broke down in early June, the Woodworkers and the Lumber and Sawmill Workers Union (a Carpenters affiliate) jointly called a strike of 6,000 workers against West Coast logging and sawmill operations of U.S. Plywood Corp. and St. Regis Paper Co. The coordinated action by the unions was significant because their keen rivalry in organizing and bargaining activities had previously held cooperation to a minimum. A few days later, the four other members of a "Big Six" bargaining association-Crown Zellerbach Corp., International Paper Co., Rayonier, Inc., and Weyerhaeuser Co.-shut down their West Coast operations, idling an additional 13,000 workers. The unions' negotiations with the Timber Operators Council, Georgia-Pacific Corp., and Simpson Timber Co., which began in April and early May, remained deadlocked. Neither union secured a wage increase in 1962 negotiations under reopeners in the Pacific Coast lumber industry. ${ }^{5}$ In this year's bargaining, the Woodworkers had reduced the proposed package from 60 to 35 cents an hour, and the Sawmill Workers had requested a 40-cent settlement.

The International Paper Co. and three unionsthe Papermakers and Paperworkers, the Pulp and Sulphite Workers, and the Firemen and Oilersrepresenting approximately 4,400 workers at the company's six Northern Division mills agreed on June 15 to a 2 -year contract retroactive to June 1.

The agreement provided general wage increases of 6 cents an hour the first year and $2 \frac{1}{2}$ percent (with a 6-cent minimum) in 1964. The company

[^50]payment for dependents' coverage under group hospital-medical insurance was increased from $\$ 3$ a month per employee to a maximum of $\$ 7.50$ in the first year and $\$ 9.50$ the second year. Maximum health and accident benefits were increased to $\$ 70$ a week, from $\$ 50$, and the waiting period for such benefits for illness was shortened to 3 days from 7 days. Eligibility for a fourth week of vacation was reduced to 20 years, from 23 years, the retirement plan was improved, and shift differentials were increased to 7 and 12 cents, from 6 and 11 cents.

Other Manufacturing. Dow Chemical Co. and Ethyl-Dow of Freeport, Tex., and 10 unions reached agreement June 6 on 5 -year contracts increasing wage rates 8 cents an hour, effective June 13, and 6 cents more in June of both 1964 and 1965. One additional day of personal ("merit") vacation per year will become effective in 1964, and 1 additional day of regular vacation in 1965. Employees previously received merit vacations on a graduated scale ranging from 5 days after 5 years' service to 20 days after 20 years. These vacation days could be taken at any time within 5 calendar years after they were earned and were in addition to regular vacations of 12-13 days. A reopener on wages and shift differentials or vacations was provided in the fourth and fifth years. The contracts affect about 3,500 workers.

Also reaching agreement June 6 on an 8-cent-anhour wage increase were the Union Carbide Chemical Co. in Texas City, Tex., and the city's Metal Trades Council. The agreement, negotiated under a wage reopener, covered some 1,800 employees and followed the pattern set earlier this year by a wage increase at Monsanto Chemical Co. in Texas City.

Dunlop Tire and Rubber Corp. and the United Rubber Workers (Local 135), representing 825 production and maintenance employees in the Tonawanda, N.Y., tire plant, agreed in June to a 2-year contract providing wage increases similar to those previously negotiated by the Big Four ( 9 cents effective July 15 this year and 7 cents effective June 29, 1964). ${ }^{6}$ In addition, the company agreed to pay $\$ 40,000$ on March 4, 1964, for adjustments of the labor-grade structure. Fringe benefit improvements were similar to those negotiated by the large rubber companies, in-
cluding supplemental workmen's compensation pay and increased payment to the supplemental unemployment benefits fund, together with establishment of short workweek benefits and a raise in the amount and duration of weekly benefits. The local had previously agreed to a 9.2 -percent rate reduction for incentive workers at Dunlop, effective March 1, $1963 .{ }^{7}$

On June 2, United States Rubber Co. also agreed to 2 -year contracts similar to those previously reached in the industry.

The American Radiator and Standard Sanitary Corp. and the International Brotherhood of Operative Potters, representing approximately 1,600 employees at six plants located in Tiffin, Ohio, Trenton, N.J., Kokomo, Ind., Richmond and Torrance, Calif., and New Orleans, La., agreed on May 31 to a 3-year contract effective June 1, 1963, with a wage reopener after the second year. The first year of the contract provided wage and inequity adjustments and improvements in pensions and shift differentials reportedly amounting to $8 \frac{1}{2}$ cents plus 3 cents for company assumption of the total cost of the insurance for employees and dependents. Shift differentials were increased from 9 and 12 cents to 10 and 15 cents. The pension plan was improved by liberalizing provisions for those with 15 years' service who seek early retirement and those disabled whose age and years of service total 75 or 80 . Increased wages and Columbus Day as the eighth paid holiday were to become effective in the second year of the contract and a $1 / 2$-cent increase in insurance in the third year. The total package was reportedly worth more than $19 \frac{1}{2}$ cents.
A 2 -year agreement providing general wage increases of 10 cents an hour effective in each year, increased shift differentials, and liberalized vacations was ratified on June 11 by Local 9 of the Brewery Workers International Union and three Milwaukee breweries-Joseph Schlitz Brewing Co., Pabst Brewing Co., and Miller Brewing Co. Shift differentials were increased a cent an hour-to 11 and 16 cents; the service qualification for a 5 -week vacation was reduced to 17 years from 20 years, and a sixth week of vacation was added after 20 years' service. The agreement, which covers approximately 4,500 workers, also established a joint labor-management committee
on labor stability. The smaller Milwaukee Brewing Co. requested separate negotiations.

Construction. Building contractors associations and 10 unions in New York City reached agreement in late June on 3-year agreements affecting 70,000 to 75,000 workers. Five unions-the so-called "concrete alliance" whose members work mainly on reinforced concrete construc-tion-agreed on June 21 to wage increases of 75 cents an hour over the 3 years and additional contributions of 2 percent for supplementary benefits. For carpenters, the largest union involved, the package increase was approximately $92 \frac{1}{2}$ cents an hour. Their scale had been $\$ 5.05$ an hour plus 8 percent in supplementary benefits.

Glaziers Local Union 1087 (an affiliate of the Painters) settled on the same date for 95 cents an hour in wages during the contract period with no changes in supplementary benefits. The Steamfitters agreed to a 95 -cent-an-hour package, with the allocation to be decided later. Negotiations were continued beyond the midyear expiration date of contracts with 10 other building trade groups affecting an additional 75,000 workers.

In negotiations with the Keystone Building Contractors Association, the Laborers District Council of Western Pennsylvania, composed of 3 Hod Carriers locals in 11 counties, in late May secured wage-rate increases totaling 35 cents an hour- 10 cents on June 15, 1963, and $121 / 2$ cents on the same date in 1964 and 1965. At the end of the contract, rates for the 4,500 workers involved will range from $\$ 2.90$ to $\$ 3.075$ an hour, depending on the contract zone involved.

In late May, the Hod Carriers' Union reached agreement with the Construction Contractors Council on a 3 -year contract affecting about 9,000 laborers in the Washington, D.C., area. The contract provided wage increases of 5 cents an hour effective May 27, 1963; $7 \frac{1}{2}$ cents an hour May 1, 1964; 5 cents May 1, 1965; and 5 cents November 1, 1965. The previous scale was $\$ 2.70$ an hour plus $17 \frac{1}{2}$ cents an hour for fringe benefits.

The Southern Illinois Builders Association and the Southern Illinois Contractors Association

[^51]on June 5 agreed to a 3 -year contract with the Southwest Illinois District Council of Laborers, affecting about 6,000 laborers in 12 counties. The contract, effective August 1, 1963, provided a 15-cent-an-hour wage increase in both the first and second years but no increase the third year. This provision will almost equalize laborers' scales in the St. Louis area east and west of the Mississippi River. At the expiration of the Illinois contract, the top paid laborers on the east side of the river will be receiving $71 / 2$ cents an hour more than their Missouri counterparts, who recently negotiated a 60 -cent-an-hour package increase over 3 years.

Locals 302 and 612 of the Operating Engineers in western Washington approved a 2 -year contract with the Associated General Contractors (Mountain-Pacific, Seattle, and Tacoma chapters) granting a 20 -cent wage increase effective June 1, 1963, and 15 cents in wages and 10 cents in fringes on June 1, 1964. The 45 -cent package affects approximately 5,000 workers on heavy construction jobs in the Seattle, Yakima, Tacoma, Port Angeles, Aberdeen, Mount Vernon, and Wenatchee areas.

Other Nonmanufacturing. A $17 \frac{1}{2}$-cent wage increase and improved health and welfare benefitsthe same terms recently negotiated by the Amalgamated Clothing Workers and the Clothing Manufacturers Association ${ }^{8}$-were provided for some 5,000 custom tailors and clothing workers in New York City. The agreement is effective July 1 and affects tailors employed by members of the Manhattan Merchant Tailors Association, the United Custom Tailors, and the Uniform Manufacturers Association.

The Pennsylvania Power and Light Co. and the Employees Independent Association agreed in June on a 2 -year contract establishing a major medical plan for 3,700 clerical and manual employees and their dependents and raising hourly wages an average of 10 cents the first year and 9 cents the second. Effective June 3, 1963, wage rates were increased from 6 to 16 cents an hour depending on job classification; effective June 1, 1964, they will be increased from 5 to 14 cents. The contract covered employees of the Lehigh,

[^52]Central, Susquehanna, Harrisburg, and Lancaster divisions of the company; employees in the Scranton division are represented by other unions.

The Los Angeles City Council on May 20 approved a $5 \frac{1}{2}$-percent pay raise for 12,000 of the city's 42,000 employees effective July 1, 1963. Not included were policemen and firemen, whose pay is set by a formula, and such workers as nurses, janitors, elevator operators, and kitchen helpers.

## Discrimination

In early June, President John F. Kennedy called more than 300 labor leaders to a White House conference on civil rights. The President requested union leaders to (a) create a working committee to cooperate with government in ending job discrimination, (b) assist in registering minority group voters, (c) encourage the advancement of Negro trade unionists to leadership positions, and (d) take an active role in the formation of biracial committees. A letter from AFL-CIO President George Meany subsequently urged more than 800 local and State labor federations to set up civil rights committees, to take stock of discrimination in their communities, and to set up and immediately implement a program to deal with it. He reminded them of the resolution adopted in 1961 by the AFL-CIO convention which stated: "It is our purpose not only to mobilize all resources of organized labor to eliminate all discrimination in its own ranks but also to enlist communitywide support of labor's drive against discrimination."

The Building and Construction Trades Department of the AFL-CIO and the presidents of its 18 -member unions, with 3.5 million members, adopted on June 21 in Washington, D.C., a program for eliminating racial discrimination in apprenticeship, membership, and work referral. It urged local unions to refer to jobs and accept into membership any qualified applicant. If the union operates a hiring hall or other job referral system, applicants would be referred without discrimination if they are qualified. Locals should also accept and refer applicants for apprenticeships but with due regards to apprenticeship standards. With respect to such standards, it was stated that "we do not intend to delegate to outsiders
the right to decide the qualifications for entrance into the industry and union membership."

In the first action under this program, on July 1 the Carpenters executive board ordered its 3,000 locals to eliminate racial discrimination. The Carpenters union is the largest of the construction unions. In addition, the board ordered the end of racially segregated locals. The union keeps no records of its members' race, but the 1960 census reported 920,862 carpenters, of whom 5.3 percent were nonwhite. Jobs are to be made available on a first come first served basis to those meeting established qualifications. Union spokesmen expected to rely principally on persuasion to make the new policies effective.

The Los Angeles County Federation of Labor inaugurated a program June 18 to eliminate racial discrimination in union hiring halls. A four-man committee is to increase Negro employment by investigating complaints and checking hiring practices of employers and referral and placement practices of union locals, and by seeking AFL-CIO intercession with international unions.

The results of a survey of employment practices at Federal construction sites throughout the country ordered by President Kennedy in early June were released late in the month. At the 47 sites surveyed, about one-sixth of all workers but only one-twentieth of the skilled workers were Negroes. Follow-up surveys will be made to check compliance with Executive Order 10925 issued March 6, 1961. ${ }^{\text {a }}$ The President extended the authority of the Committee on Equal Employment Opportunity to federally assisted construction projects on June 22. The order also covered projects financed partly or wholly by Federal grant-in-aid programs. The President further ordered Secretary of Labor W. Willard Wirtz to forbid discrimination in federally approved apprenticeship programs. After these announcements, the National Association for the Advancement of Colored People announced it would withdraw its plans to picket Federal construction sites as it had the Philadelphia city construction projects. ${ }^{10}$

New York Governor Nelson A. Rockefeller in late June announced plans to speed up State construction programs in order to increase employment opportunities, especially for Negroes. At the same time, Peter Brennan, president of the

State Building Trades Council, announced plans to eliminate bias in membership and referral policy and in job training programs.

Also late in June, the Pharmacy-Community Human Rights Committee composed of union, management, and civil rights leaders in New York City announced plans to train 200 Negro and Puerto Rican young people as sales clerks and cosmeticians in drug stores. Commencing in September, these trainees will be paid $\$ 50$ a week for 30 hours on the job and 10 hours in the classroom.

## Union Conventions

The Communications Workers of America held its twenty-fifth annual convention June 10-14 at Kansas City, Mo., after adjourning negotiations with Michigan Bell Telephone Co. The union expected the settlement with this company to become the pattern setter for the year. President Joseph A. Beirne in his keynote address expressed dissatisfaction with the company's offer. He also mentioned CWA's Operation Latin America in which locals donate supplies and money to help democratic trade unionists in Latin America combat totalitarianism, lauded Labor Secretary W. Willard Wirtz for stressing at the Labor Ministers' conference at Bogotá, Colombia, ${ }^{11}$ the importance of labor unions in making the Alliance for Progress effective, and praised the Institute for Free Labor Development ${ }^{12}$ for its success in training talented young labor leaders in Latin America.

President Beirne was reelected by a 5-1 margin over Wayne K. Hazen of Jacksonville, Fla.

The delegates adopted a resolution warning that high unemployment caused by sluggish economic growth is exhausting public patience with the status quo. The convention affirmed the expulsion by a CWA trial court and the executive board of five union officers for attempting to swing their locals to the Teamsters. ${ }^{13}$ After some heated debate, it also resolved to offer its support to President Kennedy in carrying out his civil rights program.

[^53]The 40,000 -member International Leather Goods, Plastic and Novelty Workers Union (AFLCIO) held its tenth convention in Atlantic City, N.J., June 10-13, and reelected Norman Zukowsky president. Collective bargaining resolutions were adopted calling for reductions in the workweek to $371 / 2$ hours (the level prevailing in New York City) and uniformity of wage and other contract provisions between handbag plants within and outside New York City. The convention fixed a goal of July 15,1965 , as a uniform expiration date for all agreements.

The union called upon the AFL-CIO to form an apparel trades department, to include such unions as the International Ladies' Garment Workers, the Hat, Cap and Millinery Workers, the Textile Workers, and the Shoe Workers. The delegates also asked for amendment of the Trade Expansion Act to allow the President to negotiate agreements regulating the volume of trade and to clarify the law, and for repeal of the 10 -percent excise tax on handbags, luggage, and gloves.

The Retail Clerks International Association held its 19th convention in Chicago in late June as part of its celebration of its 75 th anniversary. The 400,000 -member union reported that its membership had doubled in the past 10 years and had increased 25 percent in the past 4 years. Officers' reports indicated that the union was involved in more than 2,000 National Labor Relations Board representation elections and card checks between 1959 and 1963, winning more than 60 percent.

## Other Developments

The Area Redevelopment Administration of the U.S. Department of Commerce announced in mid-June that it would grant $\$ 3.9$ million to a nonprofit corporation under the supervision of the Board of National Missions of the Presbyterian Church to purchase five hospitals in eastern Kentucky from the Miners' Memorial Hospital Association, a subsidiary of the United Mine Workers Welfare Fund. Administrators of the mine workers fund, with revenues declining as the unionized mines' output of coal fell, had earlier announced plans to close the hospitals on July 1 as an economy measure. The Area Redevelopment Administration is authorized to make loans and grants for facilities such as hospitals in order to attract industry to depressed areas. The Kentucky legislature, meeting in special session, granted $\$ 700,000$ to the hospitals to meet an operating deficit and to finance care for nonpaying patients until October 1, when the corporation takes over the operation of the hospitals.

The fund had cut pension benefits from $\$ 100$ to $\$ 75$ a month and canceled medical benefits for union members whose companies had not paid the 40 -cent-a-ton royalty. While these economies resulted in a $\$ 6$ million surplus for the 1963 fiscal year, in the 3 preceding years the fund operated at a loss. These economies and announcement of the fund's plans to close the hospitals had led to violence in eastern Kentucky, where these hospitals are the key medical facilities.

## Book Reviews and Notes


#### Abstract

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

Unwanted Workers: Permanent Layoffs and LongTerm Unemployment. By Richard C. Wilcock and Walter H. Franke. New York, Free Press of Glencoe, 1963. $340 \mathrm{pp} . \quad \$ 6.95$.
This book is a welcome addition to the growing body of literature in the general area of manpower problems and analysis. Specifically, this volume deals with the issue of long-term unemploymentpostwar trends, causes, and solutions. It illuminates a number of problems through detailed empirical research and provides a concise description and realistic evaluation of the many programs (both large and small) that are designed to cope with long-term unemployment.

The writers believe that the main cause of rising levels of total and long-term unemployment since 1953 has been inadequate aggregate demand. They support appropriate fiscal and monetary policies for the purpose of stimulating economic growth. However, these points are made almost in passing. Most of the book is given over to demonstrating that the problem of long-term unemployment requires what is coming to be widely known as an "active labor market policy." The situation calls for a coordinated program of assistance to the unemployed in maintaining their incomes, upgrading their skills, increasing their mobility, and helping them in their jobseeking efforts.

Although these authors reject the hypothesis of growing structural unemployment, the empirical studies which form the basis for much of the discussion and for the authors' conclusions focus on classic structural situations. Because of management decisions to increase efficiency of opera-
tions, four plants of the Armour Co. and one plant of the ABC Co. (a manufacturer of home laundry equipment) were shut down. The released employees were mainly semiskilled production workers, including a high proportion of long-term employees, many of whom were older workers reluctant to leave their home communities. Moreover, those laid off were generally unfit for other available job opportunities and experienced exceedingly long periods of unemployment. The authors clearly demonstrate that when relatively large numbers of semiskilled workers are thrown out of work and into the labor market at one time, they have a very difficult time finding new jobs. Unemployment insurance was not adequate protection against long-term unemployment resulting from the complete elimination of jobs; the employment service was not up to the task of finding enough alternative openings; the workers themselves were not very mobile geographically, nor were they very skillful in seeking other jobs.

As the reader is led through the statistics, charts, and tables, a vivid portrait of the jobless semiskilled production worker emerges. Many hollow generalizations about the unemployed fall by the wayside. For example, when they were working they were no less productive than millions of employed workers. There is no evidence here they remained on unemployment insurance unjustifiably since the vast majority had dependents and undeferrable expenses and unemployment insurance represented only about a third of their previous wages until it too was exhausted-an all-too-frequent occurrence. The unemployed did not have unrealistic job aspira-tions-they generally looked for the kind of work they had before, rejected very few alternative job offers, and eventually accepted reduced pay scales.

Part 3 deals with the range of remedies and public policies which might lead to a reduction in long-term unemployment. The argument for labor market programs is that such programs would facilitate the job expansion touched off by a general economic expansion. The authors also support job-creating public works programs under certain conditions. While the general outline seems useful to this reviewer, it also appears that the authors could have strengthened their justification of labor market programs on other grounds: (1) Whatever the level of structural un-
employment, it is too high from a humanitarian standpoint, and action must be taken since this is the kind of unemployment problem that individual workers are least able to deal with. (2) Whatever the postwar trend in structural unemployment, it is entirely possible that it will increase as we move further into the decade. (3) Whatever the merits of the arguments, it is clearly not going to be easy to achieve the general measures required to promote more rapid growth in real output because of the many constraints operating on policymakers in this area. (4) Improvement in labor market programs will not be easy either. It is possible, however, that there may be a much greater potential payoff for such programs than has hitherto been realized. We still know very little about the extent of job vacancies for highly skilled workers, but the suspicion is growing that the reservoir of such openings is very great. If the matching of workers and jobs could be achieved on a really large scale, the stimulus to consumer spending and thereby to economic activity might be considerable.

Despite some disagreement with the authors on matters of emphasis, I believe they have succeeded in bringing the problem of worker displacement into much sharper focus in human terms. Their book performs another service by pointing up the limitations of our present methods for dealing with these situations, in summarizing the broad range of private and public policies which attempt to combat long-term unemployment, and in vigorously advocating more effective programs for improving the operation of the American labor market.
-Robert L. Stein
Division of Employment and Labor Force Analysis Bureau of Labor Statistics

American Labor Unions-What They Are and How They Work. By Florence Peterson. New York, Harper \& Row, Publishers, 1963. 271 pp . 2d rev. ed. $\$ 5.50$.
American Labor Unions is the second version of a volume which originally appeared in 1945 and was revised for the first time in 1952. As its predecessors, the major direction of the study is toward a microscopic presentation of the details of trade union structure, government, internal rules of procedure, and activities. The current revision updates the material, incorporates dis-
cussion of new developments-including the impact of the Labor-Management Reporting and Disclosure Act of 1959 on union internal affairsand for the first time includes a treatment of the law of labor relations. Florence Peterson, onetime chief, Industrial Relations Division, U.S. Bureau of Labor Statistics, does not claim to deal here with general labor problems or to present a depth analysis of the development of the American trade union movement. The book is not suitable as a text in traditional university courses in labor relations, although for some of them, it could be valuable as a supplement to more comprehensive readings. The style is painstakingly descriptive, factual, and thoroughly objective. Line-for-line the study packs more information about trade union operation and activities than any other volume in the field. It is a storehouse of knowledge for anyone who desires an accurate and dispassionate description of the mechanism and activities of the labor union movement.

The volume is divided into five major divisions. Part I presents a kaleidoscopic review of the highlights of trade union development. Part II treats structure and government of basic components of the trade union movement-the AFL-CIO, and the national and local unions; it also includes a chapter dealing with union membership rules and the handling of finances. Part III contains the two new chapters on labor relations law. Part IV discusses the union-employer relationship, including the scope of the bargaining unit, the bargaining process, contract provisions, the nature of disputes and settlement procedures, and unionmanagement cooperation. The last part treats political and educational activities of the trade union movement, union membership welfare programs, and international activities of organized labor. An exhaustive glossary of labor terms and a union directory showing the names and membership totals of the national unions are included in the appendixes.

Beyond marshalling a tremendous amount of information, the author explains why unions have adopted certain practices and procedures. The study, therefore, is more than a compilation of facts. It encourages understanding of trade union operation and activities.
-Fred Witney
Department of Economics
Indiana University

Home, School and Work: A Study of the Education and Employment of Young People in Britain. By M. P. Carter. Oxford, England, Pergamon Press Ltd., 1962. 340 pp. (International Series of Monographs on Social and Behavioral Sciences, Vol. I.) \$7.50, Macmillan Co., New York.
Professor Carter's study, which is based upon information collected from 200 British youngsters, primarily from working class homes in Sheffield, is much more than a valuable source of information about young persons' knowledge of work, reasons for choosing jobs, methods of finding employment, and reactions toward labor unions. The author, a senior research worker in the Department of Sociological Studies at the University of Sheffield, has also provided some provocative insights into attitudes of British working class adults toward work and life which are reflected in the interviews with their children.

It is apparent that the parents in the lowest income areas and their children drifted through schools and in and out of jobs. Many of the children were indifferent as to which jobs they would secure and believed the kind of jobs they would get would depend as much on luck as on merit.

The schools attempted to replace aimlessness with aspiration. But youngsters often accepted unquestioningly the value judgment of parents, friends, and relatives who may have been no better equipped to judge than they were. In many slum area homes, discussions about occupations, work, and planning for the future never take place. A considerable number of young people took jobs on impulse.

Despite excellent occupational guidance material developed in England, Professor Carter finds that apparently most of the children in his survey had done little or no reading about work or occupations, and they appeared to be alarmed that any one should take work so seriously. Although the youngsters were aware that the steel, engineering, and cutlery industries were predominant in Sheffield, they were ignorant about the kinds of jobs that could be found in these industries.

The author criticizes the work of the youth employment officer who is supposed to provide vocational guidance to youngsters and help them find work. He believes that the small number of employment officers cannot adequately service
the large number of youth who need assistance each year.

Lack of motivation and a haphazard attitude toward life and work are apparently the byproduct of a society which has been too willing to accept poverty casually and has not successfully prevented the deterioration of basic institutions which could contribute some of the missing interest and desire for self-improvement. Both the adults and youngsters in the study apparently felt that they are unable to participate meaningfully in decisions governing their political and economic destiny.

Professor Carter's study is well worth the attention of American social scientists. His interpretation and analysis of the attitudes of English youth are provocative and should result in stimulating more of a positive approach to our own problems.

- Howard Rosen

> Manpower Development Officer Office of Manpower, Automation, and Training U.S. Department of Labor

The Right to Membership of a Trade Union. By R. W. Rideout. London, Athlone Press, University of London, 1963. 243 pp. $\$ 7.20$, Oxford University Press, Inc., New York.
Professor Rideout has made an important contribution to the literature of a field which has been neglected too long by lawyers, labor historians, and labor economists, with only two or three outstanding exceptions. The author has done exhaustive research into the case law governing the right of an individual to belong to a labor union. Future researchers and writers owe the author of this scholarly work a debt of gratitude for compiling the 850 cases cited.

The volume makes a comparative study of the law of union membership in the United States, Canada, England, Ireland, Wales, Scotland, South Africa, Australia, and New Zealand, both as to the law of admission to membership and of expulsion from membership. This reader noted more similarities than differences in the law as developed by the courts of these countries.

The volume is more suitable for the lawyer than for the layman, notwithstanding the author's expressed desire that both lawyer and layman find it useful. This is especially true in the chapter on due process, where the lawyer is likeliest to appreciate some of the subtleties the
courts have developed in applying, for example, the audi alterem partem rule. This is not to say that Professor Rideout has failed to translate legal theories into policy choices the layman can evaluate. His success in going beyond technical legal theory is perhaps best illustrated in the chapter on jurisdiction of the courts, where he undertakes to analyze the various theories used by the courts in assuming jurisdiction. Here, he offers the reader well developed conclusions on the practical shortcomings of strict reliance on any one of the legal doctrines: "Underlying the approach of all common law courts to any internal affair of a voluntary unincorporated association is, at least in theory, an understandable reluctance to interfere. . . . In practice, however, . . . the truth is that when obvious injustice has been done the courts will interfere. . . ."

The author makes some harsh comments on Title I of the Labor-Management Reporting and Disclosure Act of 1959: "Unfortunately, there has been a tendency, particularly in America, to use such meaningless words as 'fair' to define the content of this right [the right to be heard], and the Labor-Management Reporting and Disclosure Act, 1959, does not assist in the clarification of this all-important aspect since it merely requires a 'full and fair' hearing." The author criticizes the 4 -month "exhaustion of remedies" rule in the LMRDA as being unworkable and observes, "The fact that at last the legislature has entered the enclosure may give pleasure, but such pleasure may have to be tempered with regret that something more sensible was not done in the process."

One of the most significant contributions of the book is found in the last chapter, on remedies. Nowhere in the literature on union membership is there, to this reviewer's knowledge, any piece of research that even approaches what has been done by this author in bringing together and analyzing legal remedies available to an aggrieved member. Here, too, he goes beyond a mere classification of the case law, and concentrates on the way in which the courts' decisions have affected aggrieved members. He concludes that "very often [the aggrieved] may compromise his dispute rather than pursue his rights, especially as the current position of the law normally only permits a negative order which can be more easily circumvented than a positive remedy."

The only serious shortcoming of the book is that the cases are not confined to trade unions, particularly in countries other than the United States and Canada. While there is not the plethora of case law in these other countries dealing strictly with trade union situations, there is a question as to the applicability of the general issues presented to particular trade union situations. To the extent that trade unions occupy special legal status in the British Commonwealth countries (as they most assuredly do in America), the analysis is weakened by the inclusion of jockey club cases and the like.
-David A. Swankin
Office of the Assistant Secretary for Standards
U.S. Department of Labor

Facts About SIF (The Swedish Union of Clerical and Technical Employees in Industry). Stockholm, Svenska Industritjänstemannaförbundet, 1963. 44 pp .
This pamphlet describes the largest union of salaried workers in Swedish industry, a major segment of what is presented as the organized "white-collar movement."

SIF-the Swedish Union of Clerical and Technical Employees in Industry-is formally unaffiliated with the much larger Confederation of Swedish Trade Unions and, in contrast, has remained politically neutral. SIF stresses job security through agreements with employer federations on holidays, sick pay, overtime, pensions, and other conditions of employment. On salaries, it accepts the principle of pay differentials for separate functional status groups of employees and for individuals, based on age, qualifications, and responsibility. Negotiations on salary changes occur through collective bargaining mainly by plantwide "clubs" within the scope of national agreements reached by SIF and the Swedish Employers Confederation (SAF). In the works councils of individual plants, representatives of SIF clubs and of manual workers' unions regularly discuss such topics as production, sales, investment, and personnel policy. SIF also sponsors training courses for members and bargainers, and furnishes vocational information to prospective white-collar workers still in school.
Telling evidence is presented here that whitecollar workers can be organized, for more than 80 percent of the organizable salaried employees in
industry are said to belong to SIF. This is a striking achievement by our standards. Swedish society, of course, accepts organization to a much greater extent than in the United States. Some further clues to the organizing success of SIF may perhaps be found in two facts: (1) 70 percent of SIF members are male; and (2) the clubs' jurisdictions cover broad categories of employees, described here as administration, sales, purchasing, accounting, and supervision. The latter unit of organization may be applicable to the American scene as well.

-Louis H. Orzack<br>Department of Sociology Boston University

Institutional Economics: Veblen, Commons, and Mitchell Reconsidered. Lectures by Joseph Dorfman, C. E. Ayres, Neil W. Chamberlain, Simon Kuznets, and R. A. Gordon. Berkeley, University of California Press, 1963. 183 pp., bibliographies. $\$ 4$.
An almost coûntless number of writers have attempted to delineate and characterize something called "institutional economics." In this graceful and refreshing little book, five more eminent practitioners of the craft approach the problem, each from a different direction.
Dorfman sketches the intellectual background against which institutionalism emerged in the latter third of the 19th century. His lecture helps enormously to explain the wide differences in the conclusions of earlier appraisers of institutionalism. (Homan has said it doesn't exist, Boulding sees it as a minor chapter in the history of economic thought, and Gruchy maintains that it's alive, vigorous, and our only hope.) The three major characteristics of the original movement-the institutionalists believed that economic analysis must be evolutionary, interdisciplinary, and em-pirical-received varying emphasis at the hands of the leading figures in the tradition. Consequently, the "value-free" compilations of the National Bureau and the challenging critique of Clarence Ayres are somehow lumped in the same taxonomic bin.
Professor Ayres contributes the essay on Veblen and, with his usual wit, makes clear the Veblenian objection to price theory. His is the most successful essay in the book-but then, he had Veblen to work with. Neil Chamberlain describes and
explains the sometimes bewildering theories of John R. Commons and seems to share the opinion of Boulding and Parsons that, of the three writers considered here, Commons will be the most enduring. Simon Kuznets adds a warm and informative tribute to the accomplishments and to the leadership of spirit of Wesley Clair Mitchell.

In his ambitious concluding essay, R. A. Gordon courageously suggests a definition of institutionalism by means of seven propositions to which institutionalists, with varying degrees of fervor, will tend to subscribe. He also enumerates areas within contemporary economics in which institutionalist elements may be found-aggregative analysis, economic development, and the growth of techniques of quantification are of major importance. Finally, he argues that institutionalists have been guilty of a failure of nerve in their reluctance to broaden their scope of analysis. The greatest institutionalist of the century, he concludes, may well be a man seldom met in this context-Joseph Schumpeter.

The last section of the book is comprised of a selected bibliography of the writings of Veblen, Commons, and Mitchell.
-Donald J. McClurg
Department of Economics
University of Colorado
The Economics of Loyalty-Incentive Rates in the Railroad Industry of the United States. By Robert F. Lundy. Pullman, Washington State University, Bureau of Economic and Business Research, 1963. 144 pp., bibliography. (Bulletin 37.) \$6, Washington State University Press, Pullman.
The author sets a number of rather ambitious objectives for this brief work. It is his purpose to analyze the current economic effects of "loyal-ty-incentive" rates in the United States. In chapter 3, the author at last defines "loyaltyincentive rates" to be of two general forms:
The first has been the "annual volume rate," sometimes referred to as a "volume-guarantee rate," which is an agreement between a railroad or railroads and a shipper or shippers providing for a fixed (reduced) rate per ton or per hundredweight, conditioned upon the shipment of a specified minimum volume of the involved commodities during the year over the lines of the participating railroads. . . . The other form taken by loyalty-incentive rates has been that of "contract rates" or "guaranteed rates," the terminology varying with details involved in
the agreements. Such rates are more closely akin to Canadian agreed charges than are the annual volume rates in that they are conditioned on the shipment of an agreed percentage of the specified traffic of the shipper over the lines of the participating railroads.

The author proposes to analyze the economic effect of such rates on the competitive position of the railroads, the probable effect of such rates on intramodal and intermodal competition, the ability of the agencies to better compete on the basis of inherent advantage, the effect of loyaltyincentive rates on the shipping public, the legality of such rates, and finally, to suggest appropriate statutory amendments or changes in regulatory policy in light of the study.

The author accomplishes his purpose by presenting the general problem area, briefly describing the experience of Canada and certain European countries with rates of this nature, and describing the efforts of American railroads to apply loyaltyincentive rates on selected commodity movements. He then analyzes six leading cases, providing a review of Interstate Commerce Commission policy and summarizing the attitude of the courts. Upon this base, he analyzes the economic effects of loyalty-incentive rates.

Although he recognizes that the effects of "loyalty-incentive rates are not wholly or precisely predictable," that "the problem does not lend itself to empirical study," and that "there has not been much experience with loyalty-incentive rates in the United States," the author's conclusions are expressed with surprising confidence.

This brief review cannot present the analysis and conclusions in detail but, in general, the author finds that the "use of loyalty-incentive pricing as applied to certain competitive markets would be profitable to the railroads," that "it would increase the railroads' effectiveness in forestalling the use of private transport," and that such rates "would permit a considerable amount of intermodal competition, especially over longer periods." Further, he finds that "the effects of loyalty-type rates on shippers would generally be beneficial, promoting considerable advantages while not resulting in substantial disadvantages," and "thus, loyalty-incentive rates will have a tendency to overcome some of the inadequacies of the present rate structure and to induce a more economically efficient use of resources in transport . . ."

The author clearly recognizes some of the serious inherent limitations in his study, and perhaps his findings should have been expressed in more cautious terms. His work has nonetheless called attention to an extremely interesting economic development, a type of ratemaking that is not widely understood and that may have important economic effects. In time, the effect of such ratemaking techniques should become more apparent; with additional experience in this country, empirical data should become available which may serve further to support the author's tentative findings. Economists interested in transport should recognize this as a fruitful area. Additional research based on more extensive information would further clarify the economic effects of loyalty-incentive rates.

-James W. Bennett, Jr.<br>Chairman, Department of Transportation University of Tennessee

## Economics of the Free Society. By Wilhelm Röpke; translated by Patrick M. Boarman. Chicago, Henry Regnery Co., 1963. 273 pp. $\$ 4.95$.

It is, doubtless, good for the soul of a nonbeliever to be exposed occasionally to a tract on economic orthodoxy. This, in essence, is what Economics of the Free Society is. Mankind, according to Röpke, has only two alternatives: freedom or command. A free society is one "functioning with astonishing regularity through the medium of the free market with its freely fluctuating prices." A command society lodges power "in the hands of the consciously ordering, planning, inciting, commanding, and commandenforcing State." Heaven in this moral system is inhabited by competition, the price system, monetary stability, marginal utility, little business (though big business seems to have its points), independent farmers, free trade, and the gold standard. The denizens of hell include the State, business and union monopolies ("there is hardly a monopoly worth the name at whose birth, in one way or another, the State has not acted as midwife"), inflation, current policies to promote full employment, macro-economic concepts buttressed by statistics, and Maynard Keynes. Röpke, himself a refugee from Hitler, accuses Keynes of being "the intellectual authority for economic policy in National Socialist Germany."

While this statement may be considered both startling and preposterous, it has the virtue of being new. The basic framework of ideas that Röpke proposes, by contrast, is stale. Nor does he (or his translator?) state them well. There is a tendency to employ mushy language to glide over difficult problems or simply for its own sake. Consider this statement:

As to the question of what will become of unemployed workers and idle factories in a period in which markets are choked with goods and every branch of production overstocked, we make the following answer. In a depression, productive facilities will come to life and a market for the resultant goods will be created when those who have been shut out of the productive process win back their former purchasing power by being reinstated in this process, a chain of events which will occur once economic equilibrium in reestablished.

One is reminded of Calvin Coolidge's remark, "When more and more people are thrown out of work unemployment results."

Economics of the Free Society is more interesting for its history than for its contents. Röpke wrote it in German while in exile in Turkey in 1936 and it was first published in Vienna just before the Anschluss. The Nazis seized the books. Czech and Hungarian translations did not appear because of Hitler's conquests. The French edition was published in 1940 and was actually circulated under the German regime. Now this English translation has been made by Professor Boarman of Bucknell University.

Precisely what the publisher hopes to accomplish by the issuance of this book escapes me. His dustjacket blurb says the book is "designed as either a basic or supplementary introductory text" in economics. For this purpose, there are many more satisfactory alternatives. As a restatement of economic orthodoxy it is inferior to the works of the founding fathers themselves or to the more rigorous books of contemporary proponents of this viewpoint. This reviewer hopes that at least the Intercollegiate Society of Individualists, whose assistance "in the publication of this book" is acknowledged, will be pleased.

## -Irving Bernstein

Institute of Industrial Relations University of California (Los Angeles)

## Education and Training

Education for a Changing World of Work: Report of the Panel of Consultants on Vocational Education. Washington, U.S. Department of Health, Education, and Welfare, Office of Education, 1963. 296 pp., bibliography. $\$ 1.25$, Superintendent of Documents, Washington.

Vocational Education and Federal Policy. By Sar A. Levitan. Kalamazoo, Mich., W. E. Upjohn Institute for Employment Research, 1963. 30 pp., bibliography.

A Guide to Programmed Instruction. By Jerome P. Lysaught and Clarence M. Williams. New York, John Wiley \& Sons, Inc., 1963. 180 pp., bibliography. $\$ 3.95$.

Programmed Instruction Saves Time-and Grows. By R. David Niebler. (In Personnel Journal, Swarthmore, Pa., May 1963, pp. 239-243. 75 cents.)
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Programed Instruction for Schools and Industry. By J. L. Hughes. Chicago, Science Research Associates, Inc., 1962. 299 pp., bibliography. $\$ 6$.

College Graduates Assess Their Company Training. By Stephen Habbe. New York, National Industrial Conference Board, Inc., 1963. 80 pp . (Personnel Policy Study 188.)

How Training Directors Can Use Manpower Development and Training Act's On-the-Job (OJT) Provisions for Training the Unemployed, Underemployed, and Youth. By Elliott French. (In Training Directors Journal, American Society of Training Directors, New York, May 1963. pp. 3-5. \$1.)

The New York Rehabilitation Program. By S. E. Senior. (In Journal of Occupational Medicine, New York, June 1963, pp. 291-296. \$1.)

## Employee Benefits

Corporate Pension Funds, 1962. Washington, U.S. Securities and Exchange Commission, 1963. 8pp. (Statistical Series Release 1902.)

The Kaiser-Steel Union Sharing Plan. By Harold Stieglitz. New York, National Industrial Conference Board, Inc., 1963. 48 pp. (Personnel Policy Study 187.)

The Portable Pension Experiment. (In Labor Gazette, Canadian Department of Labor, Ottawa, May 1963, pp. 368-371. 50 cents, Queen's Printer, Ottawa.)

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How to Negotiate the Labor Agreement: An Outline Summary of Tested Bargaining Practice. By Bruce Morse. Detroit, Mich., Trends Publishing Co., 1963. 62 pp. $\$ 3.65$.

Management Initiative in the Ethics of Industrial Relations. By Ralph A. Rothstein. (In Personnel Journal, Swarthmore, Pa., May 1963, pp. 232-238. 75 cents.)

A Layman's Guide to Basic Law Under the National Labor Relations Act. (An address at the Information Program for Labor and Management at Southern Methodist University, October 17, 1962.) By Stuart Rothman. Washington, National Labor Relations Board, 1962. 52 pp .

Collective Bargaining: Shift for the Sixties. By Thomas R. Brooks. (In Dun's Review and Modern Industry, New York, July 1963, pp. 30-32. 75 cents.)

Craft Severance Under the Wagner and Taft-Hartley Acts, 1935-1962. By Paul R. White. (In Industrial Labor Relations Research, Cornell University, New York State School of Industrial and Labor Relations, Ithaca, N.Y., Vol. IX, No. 1, 1963, pp. 10-19.)

Labor Arbitration and Federal Pre-emption: The Overruling of Black v. Cutter Laboratories. By Irving Kovarsky. (In Minnesota Law Review, Minneapolis, March 1963, pp. 531-555. \$2.)

State Seizure in Public Interest Disputes. By Herbert R. Northrup and Richard L. Rowan. (In Journal of Business, University of Chicago, Graduate School of Business, April 1963, pp. 210-227. \$2.25, University of Chicago Press, Chicago.)

Seniority Rights and Industrial Change: Zdanok v. Glidden Co. By Alfred W. Blumrosen. (In Minnesota Law Review, Minneapolis, March 1963, pp. 505-529. \$2.)

Foreign Flags on U.S.Ships: Convenience or Necessity? By Edward B. Shils and Sidney L. Miller, Jr. (In Industrial Relations: A Journal of Economy and Society, University of California, Insititute of Industrial Relations, Berkeley, May 1963, pp. 131-152. \$1.50.)

Labor Organization at Du Pont: A Study in Independent Local Unionism. By Julius Rezler. (In Labor History, Tamiment Institute, New York, Spring 1963, pp. 178-195. \$1.50.)

Work Stoppages in California, 1962. San Francisco, California Department of Industrial Relations, Division of Labor Statistics and Research, 1963. 24 pp.

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Employment and Earnings Statistics for States and Areas, 1939-62. Washington, U.S. Department of Labor, Bureau of Labor Statistics, 1963. 633 pp . (Bulletin 1370.) \$3.50, Superintendent of Documents, Washington.

A Time for Action: Proceedings of the National Conference on Equal Employment Opportunity, Department of the Army, September 27-28, 1962. Washington, 1963. 70 pp .

South Carolina's Manpower Challenge of the Sixties. Columbia, South Carolina Employment Security Commission, Research and Statistics Section, 1963. 20 pp .
Professional Workers in Industry: Professionalism and Occupational Associations, by George Strauss; Professional Engineers: Salary Structure Problems, by W. Lee Hansen; Will Engineers Unionize? by Eldon J. Dvorak. (In Industrial Relations: A Journal of Economy and Society, University of California, Institute of Industrial Relations, Berkeley, May 1963, pp. 7-65. \$1.50.)

Technicians in Science and Engineering [in Canada]. Ottawa, Canadian Department of Labor, Economics and Research Branch, 1963. 81 pp . (Monograph 48.) 25 cents, Queen's Printer, Ottawa.

Aerospace "Industry" Is Nation's Largest Employer in Manufacturing. By Ernest F. Schroeder. (In Labor Market and Employment Security, U.S. Department of Labor, Bureau of Employment Security, Washington, May 1963, pp. 1-10, 30 cents, Superintendent of Documents, Washington.)

Private Pension Plans and Manpower Policy. By Hugh Folk Washington, U.S. Department of Labor, Bureau of Labor Statistics, 1963. 37 pp . (Bulletin 1359.) 25 cents, Superintendent of Documents, Washington.

Moderate Rise in Interarea Recruitment During First Quarter. (In Labor Market and Employment Security, U.S. Department of Labor, Bureau of Employment Security, Washington, May 1963, pp. 12-17, 43.30 cents, Superintendent of Documents, Washington.)

Work Experience in Puerto Rico, Calendar Year 1962. San Juan, Department of Labor, Bureau of Labor Statistics, 1963. 11 pp. (Special Labor Force Report 32.) In Spanish and English.

Profile of Unemployment. By Ewan Clague. Washington, U.S. Department of Labor, Bureau of Labor Statistics, 1963. 10 pp .

The Future Manpower Situation in India, 1961-76. By V. R. K. Tilak. (In International Labor Review, Geneva, May 1963, pp. 435-446. 75 cents. Distributed in United States by Washington Branch of ILO.)

## Labor Organizations

Unionization of White-Collar Employees: Extent, Potential, and Implications. By Benjamin Solomon and Robert K. Burns. (In Journal of Business, University of Chicago, Graduate School of Business, April 1963, pp. 141-165. $\$ 2.25$, University of Chicago Press, Chicago.)

The Future for Public Employee Unions. By Douglas Weiford and Wayne Burggraaff. (In Public Management, Chicago, May 1963, pp. 102-107. 50 cents.)

Faltering Labor Unions-Can They Get in Step? By A. N. Wecksler. (In Mill \& Factory, New York, April 1963, pp. 66-71. \$1.)

## Personnel Management

Practices for White-Collar Employees. Washington, Bureau of National Affairs, Inc., 1963. 13 pp . (Personnel Policies Forum Survey 69.) \$1.

Minimizing Personality Tensions in Industrial Relations. By Luis Kutner. (In Business Review, Boston University, College of Business Administration, Boston, Spring 1963, pp. 29-45.)

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## Current Labor Statistics

## TABLES

## A. -Employment

$1014 \mathrm{E}-1$. Work stoppages resulting from labor-management disputes
F.-Work Injuries
$\mathrm{F}-1$. Injury-frequency rates for selected manufacturing industries ${ }^{1}$

[^54]
## A.-Employment

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

| Employment status | Estimated number of persons 14 years of age and over ${ }^{\text {1 }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1963 |  |  |  |  |  | 1962 |  |  |  |  |  |  | $\underset{\text { age }}{\text { Annual aver- }}$ |  |
|  | June | May | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | 1961 | 1960 |
|  | Total, both sexes |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total labor force. | 77, 901 | 75, 864 | 74, 897 | 74,382 | 73, 999 | 73, 323 | 74, 142 | 74, 532 | 74, 923 | 74,914 | 76,554 | 76,437 | 76,857 | 74, 175 | 73,126 |
| Civilian labor force | 75, 165 | 73,127 | 72, 161 | 71,650 | 71,275 | 70,607 | 71, 378 | 71,782 | 72, 187 | $\underset{3,179}{512}$ | 73,695 3,932 | 73,582 4,018 | 74,001 4,463 | 71, 603 4,806 | 70,612 3,931 |
| Unemployment. | -7,846 | 4,066 | 4,063 | 4,501 | 4,918 | 4,672 | 3,817 | 3,801 | 3,294 | 3,512 | 3,932 | 4,018 | 4,463 | 4,806 | 3,931 |
| Unemployment rate seasonally adjusted ${ }^{2}$ | 2, 5.7 | 1. $\begin{array}{r}5.9 \\ \hline 83\end{array}$ | 5.7 1,597 | 1,5.63 | 1,814 | 5.8 1,096 | 5.6 1,697 | $\begin{array}{r}\text { 5. } \\ 1,8 \\ \hline\end{array}$ |  | 5.8 1,681 | 1, $\begin{array}{r}5.8 \\ \hline\end{array}$ | 1, 5.3 | -5.5 | 6.7 1,897 | $\begin{array}{r} 5.6 \\ 1,789 \end{array}$ |
| Unemployed 4 weeks or less $\qquad$ Unemployed 5-10 weeks. | 2,802 | 1,833 679 | 1,597 672 | 1,553 963 | 1,814 | 1, 1,162 | 1,697 840 | 1,960 | 1,546 | 1,681 630 | 1,702 | 1,805 | 2, 536 | $\begin{array}{r} 1,897 \\ 964 \end{array}$ | 1,789 823 |
| Unemployed 5-10 weeks------------------------ | 806 <br> 222 | 662 269 | 671 371 | 598 | 1, 485 | 1, 361 | 840 <br> 505 | 692 469 | 229 418 | 295 428 | 358 <br> 341 | $\begin{array}{r}1,255 \\ 345 \\ \hline\end{array}$ | 230 449 | 411 | 353 502 |
| Unemployed 15-26 weeks | 502 | 649 | 743 | 696 691 | 684 619 | ${ }_{541}^{612}$ | ${ }_{4}^{525}$ | 469 397 | 418 | 428 | 341 593 | 345 576 | 449 | 728 804 | 502 454 |
| Unemployed over 26 week | 514 | ${ }_{69} 643$ | 68, 681 | 67,148 | 619 66,358 | 65, 935 | 67, 561 | 67,981 | 68,893 | 68,668 | 69,762 | 69,564 | 69,539 | 66,796 | 66,681 |
| Employment--- | 70,319 64,365 | 69,061 | 68,097 63,424 | 67,148 62,812 | 66,358 62,309 | 65,935 61,730 | 67, 695 | 63,098 | 63, 618 | 63,103 | 63,993 | 63, 500 | 63, 249 | 61, 333 | 60,958 |
| Worked 35 hours or | 49, 804 | 50, 383 | 46, 505 | 48, 669 | 47,063 | 48, 480 | 49, 175 | 45, 107 | 48,047 | 49,684 | 47, 264 | 46,372 | 49,209 | 47, 257 | 46,388 |
| Worked 15-34 hours | 7,015 | 7,261 | 10,455 | 7,588 | 8,573 | 7,235 | 7,932 | 11, 894 | 9,426 | 7,265 | 6,849 | 6,598 | 6,927 | 7,522 | 8,248 |
| Worked 1-14 hours. | 3, 580 | 4,144 | 3, 856 | 4,119 | 4, 238 | 3, 845 | 4, 143 | 4, 074 | 3, 811 | 3, 475 | 3, 222 | 3, 185 | 3, 365 | 3, 610 | 3,279 |
| With a job but not at wor | 3, 966 | 2,093 | 2,608 | 2,436 | 2, 432 | 2,172 | 2,243 | 2,021 | 2,133 | 2,680 | 6,657 | 7,343 | 3, 748 | 2,846 | 3, 042 |
| Agricultural | 5,954 | 5,178 | 4, 673 | 4,337 | 4, 049 | 4, 206 | 4, 066 | 4, 883 | 5,475 | 5,564 | 5,770 | 6, 064 | 6,290 | 5,463 | 6, 723 3,811 |
| Worked 35 hours or | 4,199 | 3,489 | 3,198 | 2,587 | 2,261 | 2,522 | $\begin{array}{r}2,352 \\ 907 \\ \hline\end{array}$ | 1, 2662 | 3,688 | $\mathbf{3}, 693$ 1,310 | 3,900 1,285 | 1,215 | 1,347 | 1, 245 | 1,279 |
| Worked 15-34 hours | 1, 226 | 1,196 | 1,041 305 | 1,042 | 1,040 483 | 987 44 | 907 490 | 1,069 398 | 1, 426 | 1,362 | 1, 2804 | 1,447 | 1,346 446 | 1,247 | 1, 444 |
|  | 119 | 80 | 129 | 241 | 267 | 249 | 316 | 153 | 129 | 101 | 182 | 133 | 122 | 200 | 190 |
|  | Males |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 52, 204 | 50, 483 | 50,010 | 49,675 | 49,508 | 49, 269 | 49, 574 | 49,719 | 49,974 | 50,110 | 51,657 | 51, 733 | 51,832 | 49,918 | 49,507 |
| Clvilian labor force | 49, 500 | 47, 778 | 47, 306 | 46, 975 | 46, 816 | 46, 585 | 46, 841 | 47,001 | 47, 269 | 47, 406 | 48,830 | 48,911 | 49, 009 | 47,378 | 47,025 |
| Unemployment | 2, 779 | 2,434 | 2, 600 | 3,013 | 3,293 | 3, 080 | 2,522 | 2,259 | 1,881 | 1,991 | 2,327 | 2,406 | 2,698 | 3,060 44,318 | 2,541 44,485 |
| Employment. | 46, 722 | 45, 345 | 44, 706 | 43, 962 | 43, 223 | 43,505 | 44,319 40 | 44, 743 | 45,387 <br> 41 <br> 131 | 45,415 41 | 46,503 41,899 | 46,505 41,732 | 46,310 41,421 | 44,318 39,811 | 44,485 39,807 |
| Nonagricultural...-- | 42,078 | 41,205 | 40,762 32,806 | 40,251 | 32, ${ }^{39,94}$ | 39, 339 | 40,782 | 40, 704 | 43,774 | 34,769 | 43, 483 | 32,952 | 34, 624 | 32, 984 | 32, 511 |
| Worked 15-34 hours | 3,256 | 3,161 | 4,941 | 3,439 | 4,026 | 3, 251 | 3,612 | 6, 130 | 4,428 | 3,261 | 3,316 | 3,183 | 3,244 | 3,587 | 4, 100 |
| Worked 1-14 hours. | 1,551 | 1,795 | 1,658 | 1,688 | 1,779 | 1,593 | 1,760 | 1,618 | 1,628 | 1,433 | 1,449 | 1,337 | 1,518 | 1,511 | 1,360 |
| With a job but not at work | 1,988 | 1,193 | 1,357 | 1, 476 | 1,481 | 1,351 | 1, 461 | 1,250 | 1,302 | 1,588 | 3, 652 | 4,261 | 2,035 | 1,729 | 1,836 |
| Agricultural | 4, 644 | 4,140 | 3, 945 | 3,711 | 3, 529 | 3, 666 | 3, 537 | 4,040 | 4, 256 | 4, 363 | 4, 604 | 4,773 | 4, 889 | 4, 508 | 4,678 |
| Worked 35 hours or | 3, 634 | 3, 071 | 2, 888 | 2,383 | 2, 074 | 2, 2851 | 2,181 | 2,908 | 3, 168 | 3, 1880 | 3, 327 | 3,634 | 3,743 | 3,132 827 | 3, 792 |
| Worked 15-34 hours | 637 | 702 | 700 | 730 | 786 423 | 751 | ${ }_{424}$ | 692 <br> 307 | 694 <br> 281 | 780 309 | 819 | ${ }_{332}^{687}$ | 305 | ${ }_{370}$ | 348 |
| With a job but not at work | 276 96 | 296 68 | 1247 | 384 216 | 423 246 | 232 | $\stackrel{424}{276}$ | 133 | 114 | 92 | 165 | 121 | 109 | 179 | 172 |
|  | Females |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total labor force | 25,697 | 25,381 | 24, 886 | 24,707 | 24, 492 | 24, 054 | 24, 568 | 24,812 | 24,949 | 24, 804 | 24,897 | 24,703 | 25,026 | 24,257 | 23,619 |
| Civilian labor fo | 25, 665 | 25,349 | 24, 854 | 24, 675 | 24,460 | 24, 022 | 24,537 | 24,781 | 24, 918 | 24, 773 | 24,865 | 24,671 | 24,993 | 24,225 | 23,587 |
| Unemployment | 2,067 | 1,632 | 1,463 | 1,489 | 1,625 | 1, 592 | 1,295 | 1,543 | 1,413 | 1,520 | 1,605 | 1,611 | 1,764 | 1,747 | 1,390 |
| Employment... | 23,598 | 23,717 | 23,391 | 23,186 | 22, 835 | 22, 430 | 23, 242 | 23,238 | 23, 505 | 23, 253 | 23, 260 | 23, 059 | 23,228 | 22,478 | 22,196 |
| Nonagricultur | 22, 287 | 22, 679 | 22, 663 | 22,560 | 22,315 | 21,890 | 22, 714 | 22, 395 | 22, 287 | 22,051 | 22,094 | 21, 768 | 21,827 | 21, 523 | 21,151 |
| Worked 35 hours or mor | 14, 522 | 15, 327 | 13, 699 | 15, 022 | 14, 356 | 14, 835 | 15, 228 | 13, 404 | 14,273 | 14,914 | 13, 782 | 13, 420 | 14, 583 | 14, 273 | 13, 627 |
| Worked 15-34 hours. | 3, 760 | 4,099 | 5, 515 | 4,149 | 4,547 | 3,983 | 4,319 | 5,763 | 4,998 | 4,004 | 3, 533 | 3,415 | 3, 682 | 3,934 | 4,148 |
| W orked 1-14 hours. | 2, 029 | 2,352 | 2, 198 | 2,430 | 2,459 | 2,252 | 2,383 | 2,457 | 2,184 | 2,042 | 1,773 | 1,848 | 1,847 | 2,098 | 1,919 |
| With a job but not at work | 1,978 | 900 | 1,251 | 960 | 950 | 820 | 782 | 771 | 832 | 1,092 | 3,005 | 3,082 | 1,713 | 1,217 | 1,206 |
| Agricultural | 1,310 | 1, 038 | 728 | 625 | 520 | 540 | 528 | 843 | 1,219 | 1,201 | 1,166 | 1,291 | 1,491 | 955 | 1,045 |
| Worked 35 hours or mo | 564 | 418 | 311 | 204 | 187 | 243 | 172 | 355 | 520 | 512 | 573 | 636 | 634 | 408 | 445 |
| Worked 15-34 hours. | 590 | 493 | 341 | 312 | 255 | 236 | 252 | 377 | 538 | 529 | 466 | 530 | 613 | 419 | 486 |
| Worked 1-14 hours. | 135 | 117 | 59 | 83 | 57 | 44 | 66 | 91 | 145 | 152 | 110 | 116 | 141 | 107 | 96 |
| With a job but not at work |  | 12 | 17 | 26 | 20 | 17 | 40 | 27 | 15 | 9 | 17 | 12 | 13 | 22 | 17 |

${ }^{1}$ Estimates are based on information obtained from a sample of households and are subject to sampling variability. Data relate to the calendar week ending nearest the 15th day of the month. The employed total includes all wage and salary workers, self-employed persons, and unpaid workers in family-operated enterprises. Persons in institutions are not included.
Because of rounding, sums of individual items do not necessarily equal totals.
2 Unemployment as a percent of labor force.
${ }^{3}$ Includes persons who had a job or business but who did not work during the survey week because of illness, bad weather, vacation, or labor dispute. Prior to January 1957, also included were persons on layoff with definite instructions to return to work within 30 days of layoff and persons who had
new jobs to which they were scheduled to report within 30 days. Most of the persons in these groups have, since that time, been classified as unemployed.
Note: For a description of these series, see Explanatory Notes (in Employment and Earnings, U.S. Department of Labor, Bureau of Labor Statistics, current issues).
Figures for periods prior to April 1962 are not strictly comparable with current data because of the introduction of 1960 Census data into the esth ployment totals, which were reduced by about 200,000 . The unemployment totals were virtually unchanged.

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

| Industry | 1963 |  |  |  |  | 1962 |  |  |  |  |  |  |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | June ${ }^{2}$ | May ${ }^{2}$ | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | 1961 | 1960 |
| Total employees..- | 56,802 | 56, 222 | 55, 825 | 55, 068 | 54,780 | 54, 833 | 56, 444 | 56,214 | 56,333 | 56,252 | 55, 709 | 55, 493 | 55,777 | 54, 077 | 54, 347 |
| Mining | 645 | 639 | 627 | 612 | 614 | 617 | 628 | 638 | 645 | 651 | 658 | 648 | 661 | 666 | 709 |
| Metal minin |  | 85.2 | 82.9 | 79.8 | 80.7 | 78.9 | 78.3 | 78.9 | 79.4 | 80.3 | 83.8 | 87.8 | 89.2 | 87.1 | 93.3 |
| Iron ores.- |  | 29.1 | 26.6 | 25.1 | 25.0 | 23.3 | 24.4 | 25.1 | 25. 9 | 26.4 | 28.3 | 29.0 | 29.8 | 27.5 | 83.2 |
| Copper ores |  | 28.4 | 28.5 | 28.0 | 28.0 | 28.0 | 28.0 | 27.8 | 27.7 | 27.9 | 28.8 | 28.8 | 29.2 | 28.9 | 28.3 |
| Coal mining |  | 134.7 | 135.9 | 134. 5 | 139.7 | 140.4 | 140.2 | 142.2 | 143.8 | 142.6 | 141.9 | 129.9 | 142.8 | 155.5 | 182.2 |
|  |  | 126.7 | 127.9 | 126.3 | 131.3 | 131.9 | 131.6 | 133.4 | 135.2 | 134.2 | 133.4 | 120.7 | 134.2 | 145.1 | 168.2 |
| Crude petroleum and natural gas Crude petroleum and natural gas fields. Oil and gas field services. $\qquad$ |  | 302.0 | 296.2 | 294.5 | 294.1 | 295.3 | 301.2 | 300.1 | 303.0 | 307.2 | 309.2 | 310.1 | 307.9 | 308.9 | 313.9 |
|  |  | 171.7 | 171.6 | 170.8 | 171.5 | 171.6 | 171.6 | 172.1 | 172.8 | 175.5 | 178.0 | 178.0 | 177.5 | 176.8 | 181.7 |
|  |  | 130.3 | 124.6 | 123.7 | 122.6 | 123.7 | 129.6 | 128.0 | 130.2 | 131.7 | 131.2 | 132.1 | 130.4 | 132.2 | 132.2 |
| Quarrying and nonmetallic mining. |  | 116.7 | 112.3 | 102.7 | 99.3 | 102.2 | 108.2 | 116.4 | 119.1 | 121.0 | 122.9 | 120.2 | 120.6 | 114.9 | 119.5 |
| Contract construction $\qquad$ <br> General building contractors | 2,902 | 2,766 | 2,585 | 2,315 | 2,241 | 2,349 | 2,532 | 2,801 | 2,936 | 2,978 | 3,031 | 2,982 | 2,839 | 2,760 | 2,882 |
|  |  | 851.2 | 807.9 | 718.0 | 693. 7 | 731.4 | 786.2 | 881.7 | 889.1 | 903.2 | 929.2 | 916.4 | 873.0 | 860.8 | 911.7 |
| Heavy construction.- |  | 597.1 | 512.4 | 412.5 | 383.8 | 409.6 | 471.1 | 579.3 | 648.4 | 667.6 | 685.4 | 675.0 | 624.5 | 565.6 | 581.3 |
| Highway and street co |  | 353.3 | 283.4 | 207. 8 | 185. 5 | 201.4 | 244.9 | 326.9 | 379.0 | 394.5 | 405.2 | 393.6 | 359.6 | 302.8 | 302.4 |
| Other heavy construct |  | 1, 243.8 | 229.0 1 264.4 | 204.7 | 198.3 | 208.2 | 226. 2 | 252.4 | 269.4 | 273.1 | 280.2 | 281.4 | 264.9 | 262.9 | 278.9 |
|  |  | 1,317.9 | 1,264.4 | 1,184. 5 | 1,163.0 | 1,207.8 | 1,274.4 | 1,360.4 | 1,398.8 | 1,407.1 | 1,416.5 | 1,390.9 | 1,341.0 | 1,333.2 | 1,388.8 |
| Manufacturing <br> Durable goods. $\qquad$ <br> Nondurable goods. $\qquad$ | 16,964 | 16,813 | 16,701 | 16,613 | 16,546 | 16,551 | 16,727 | 16,891 | 17,028 | 17,127 | 16,931 |  | 16,870 |  |  |
|  | 9. 668 ${ }^{\text {数 }}$ | 9. 595 | 9, 513 | 9,430 | 9,399 | 9, 407 | 9,473 | 9,533 | 9,562 | 9,571 | 9,402 | 9,463 | 9,547 | $\begin{aligned} & 16,267 \\ & 9,042 \end{aligned}$ | $\left\lvert\, \begin{gathered} 16,762 \\ 9,441 \end{gathered}\right.$ |
|  | 7.296 | 7.218 | 7,188 | 7,183 | 7,147 | 7,144 | 7,254 | 7,358 | 7,466 | 7,556 | 7,529 | 7,319 | 7,323 | $\begin{aligned} & 9,042 \\ & 7,225 \end{aligned}$ | 7,321 |
| Durable goods |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ordnance and accessories | 214.5 | 213.6 | 214.3 | 217.5 | 219.2 | 220.3 | 221.0 | 221.6 | 220.4 | 220.7 | 221.6 | 217.0 | 211.8 | 200.6 | 187.3 |
| Ammunition, except for small arms |  | 112.1 | 111.9 | 113.7 | 114.3 | 114.1 | 114.8 | 114.7 | 114.2 | 114.0 | 115.0 | 113.7 | 110.7 | 103.1 | 187.3 93.9 |
| Sighting and fre control equipment |  | 47.5 | 48.7 | 49.8 | 51.1 | 52.1 | 52.0 | 52.6 | 52.5 | 53.0 | 53.4 | 53.3 | 52.5 | 51.1 | 50.0 |
| Other ordnance and accessories. |  | 54.0 | 53.7 | 54.0 | 53.8 | 54.1 | 54.2 | 54.3 | 53.7 | 53.7 | 53.2 | 50.0 | 48.6 | 46.5 | 43.4 |
| Lumber and wood products, except furniture | 604.1 | 613.5 | 591.0 | 579.1 | 574.7 | 579.2 | 592.0 | 608.6 | 620.7 |  |  |  |  |  |  |
| Logging camps and logging contractors- | 604.1 | 91.9 | 82.0 | 78.7 | 80.6 | 82.4 | 88.1 | +94.0 | 620.7 97.2 | 629.9 | 104.5 | 103.7 | 101.8 | 600.5 | 636.8 92.6 |
| Sawmills and planing mills |  | 272.3 | 265.2 | 261.1 | 257.5 | 259.7 | 261.9 | 269.2 | 273.9 | 277.1 | 280.1 | 279.0 | 281.6 | 268.9 | 294.7 |
| Millwork, plywood, and related products |  | 147.9 | 144.6 | 141.3 | 140.0 | 140.6 | 261.8 | 26.2 | 27.3 | 27.1 | 280.1 | 278.0 | 281.6 | 268.9 | 294.7 |
| Wooden containers |  | 147.9 | 144.6 38.7 | 141.3 | 140.0 37.4 | 140.6 | 143. | 146.4 39.0 | 14 | 150.7 | 9 | 49.2 | 49.6 | 141.3 | 146.6 |
| Miscellaneous wood |  | 61.6 | 60.5 | 60.4 | 59.2 | 59.0 | 59.7 | 60.0 | 60.7 | 39.6 61.3 | 61.6 | 40.8 60.2 | 61.6 | 40.8 58.0 | 43.2 59.6 |
| Furniture and fir | 382.4 | 377.7 | 377.4 | 378.1 | 377.1 | 379.5 | 383.3 | 387.1 | 388.2 | 388.0 | 387.6 | 378.3 | 382.3 | 367.4 | 383.4 |
| Household furn |  | 271.2 | 271.7 | 271.7 | 270.4 | 270.3 | 273.5 | 275.8 | 276.9 | 276.0 | 273.3 | 266. 5 | 269.1 | 259.6 | 271.1 |
| Office furniture.- |  | 28.2 | 28.5 | 28.8 | 28.9 | 30.0 | 30.5 | 30.7 | 28.5 | 28.2 | 30.3 | 29.2 | 29.7 | 27.4 | 28.3 |
| Partitions; office and store fi |  | 34.2 | 33.7 | 34.6 | 34.8 | 35.4 | 34.9 | 35.7 | 37.8 | 38.0 | 37.7 | 37.2 | 37.1 | 36.2 | 39.0 |
| Other furniture and fixtures |  | 44.1 | 43.5 | 43.0 | 43.0 | 43.8 | 44.4 | 44.9 | 45.0 | 45.8 | 46.3 | 45.4 | 46.4 | 44.2 | 45.1 |
| Stone, clay, and glass p | 599.7 | 588.5 | 574.2 | 550.4 | 540.7 | 545.2 | 560.3 | 578.2 | 588.0 | 592.8 | 595.6 | 590.1 | 589.5 |  |  |
|  |  | 29.6 | 29.5 | 28.8 | 29.0 | 29.2 | 30.3 | 31.0 | 30.5 | 30.4 | 30.1 | 29.7 | 29.6 | 27.9 | 31.1 |
| Glass and glassware, pressed or blown. |  | 103.7 | 102.6 | 101.2 | 100.0 | 98.4 | 99.7 | 100.4 | 101.8 | 102.8 | 103.1 | 103.0 | 103.9 | 100.6 | 102.9 |
| Cement, hydraulic...- |  | 40.0 | 39.0 | 35.5 | 34.6 | 36.3 | 37.9 | 40.3 | 40.8 | 41.4 | 41.7 | 41.5 | 41.3 | 40.0 | 42.8 |
| Structural clay products. |  | 71.9 | 69.7 | 65.9 | 64.8 | 65.9 | 68.6 | 70.6 | 71.4 | 72.5 | 73.1 | 72.1 | 71.8 | 70.7 | 76.1 |
| Pottery and related products |  | 44.2 | 44.3 | 43. 6 | 43.4 | 43.4 | 43.7 | 44.5 | 45.3 | 44.8 | 44.2 | 43.5 | 43. 9 | 43.4 | 47.1 |
| Concrete, gypsum, and plaster products- |  | 161.8 | 153.5 | 141.5 | 136.0 | 138.3 | 144.9 | 154.7 | 160.7 | 163. 2 | 165. 1 | 163.0 | 162. 2 | 150.2 | 155.4 |
| Other stone and mineral products... |  | 122.5 | 120.9 | 119.0 | 118.3 | 118.8 | 120.2 | 121.4 | 122.2 | 122. 7 | 123.5 | 123.0 | 122.4 | 119.5 | 124.0 |
| Primary metal industries | 1,209.8 | 1,193.8 | 1, 176.7 | 1,153.5 | 1,137.6 | 1,124. 2 | 1, 124. 4 | 1,118.7 | 1,123.1 | 1,136.4 | 1,134.7 | 1,134.7 | 1,166.0 | 1,142.3 |  |
| Blast furnace and basic steel prod | 1,200.8 | 1, 618.4 | 1, 603.5 | 1, 583.9 | 1, 569.4 | 1, 555.8 | 1, 555.3 | 1,1850.8 | 1,123. | 1, 566.3 | 1, 567.5 | 1, 570.8 | 1,166.0 | 1,142.3 | $652.5$ |
| Iron and steel foundries. |  | 200.4 | 199.1 | 196.9 | 196.2 | 195.3 | 195.3 | 194.9 | 195.5 | 196.6 | 193.8 | 194.0 | 196. 9 | 186.0 | 203. 6 |
| Nonferrous smelting and refining- |  | 68.7 | 68.0 | 67.1 | 66.9 | 67.4 | 68.2 | 68.7 | 69.1 | 69.4 | 68.9 | 67.8 |  |  | 70.8 |
| Nonferrous rolling, drawing, and extruding |  | 178.8 | 178.0 | 177.3 | 176.8 | 176.6 | 68.2 | 68. 176.7 | 69.1 | 69.4 | 68.9 | 67.8 | 68.8 | 67.4 | 70.8 |
| Nonferrous foundries |  | 178.8 | 178.0 | 177.3 | 176.8 | 176.6 | 176.8 | 176.7 | 177.5 | 177.5 | 176.8 | 177.3 | 178.0 | 169.9 | 175.6 |
| Miscellaneous primary metalindustries. |  | 67.9 59.6 | 68.1 60.0 | 68.1 | 68.1 60.2 | 68.4 60.7 | 68.4 60.4 | 67.5 60.1 | 67.1 58.7 | 67.1 59.5 | 67.1 60.6 | 64.7 60.1 | 66.0 61.4 | 61.4 57.8 | 65.1 61.1 |
| Fabricated metal | 1,150.9 | 1,134. 21 |  |  |  | $1,111.31$ | 1,122. 11 |  | 1,134. 11 |  |  |  |  |  |  |
| Metal cans | 1,150. | 1, 63.1 | 1, 62.1 | $1,10.4$ | 1, 59.0 | 1, 58.3 | 1, 57.6 | 1,128.3 | 1, 61.0 | 1, 135.3 | 1, $\begin{array}{r}\text { 65.4 }\end{array}$ | 1, 65.7 | 1,129.0 | 1,076.4 | 1,128. 6 |
| Cutlery, handtools, and general hardware |  | 140.2 | 140.2 | 140.0 | 140.7 | 141.0 | 141.5 | 141.3 | 140.0 | 138.4 | 65.4 134.7 | 133.6 | 138.7 | 129.7 | 62.5 136.0 |
| Heating equipment and plumbing fixtures. |  | 14.2 79.0 | 140.2 77.9 | 14.0 77.2 | 140.7 77.2 | 76.0 | 77.0 | 77.8 | 140.0 | 138.4 | 131.7 78.8 | 130.6 76.7 | 138.7 77.0 | 129.7 | 136.0 79.0 |
| Fabricated structural metal products.- |  | 328.7 | 321.4 | 315.1 | 313.9 | 317.0 | 322.3 | 325.8 | 330.9 | 335.1 | 333.7 | 76.7 334.4 | 77.0 332.3 | 75.2 325.8 | 79.0 334.3 |
| Screw machine products, bolts, etc |  | 87.9 | 88.0 | 88.4 | 88.3 | 87.9 | 88.0 | 87.8 | 87.7 | 87.0 | 87.0 | 86. 1 | 87.1 | 80.4 | 334.3 85.6 |
| Metal stampings ........---.-. |  | 195.0 | 193.4 | 191.8 | 192.2 | 195.3 | 197.1 | 196. 4 | 196.4 | 193.2 | 180.2 | 184.3 | 188.3 | 179.4 | 197.7 |
| Coating, engraving, and allied services.- |  | 68.2 | 67.3 | 65.7 | 66.1 | 66.0 | 67.3 | 70.0 | 69.6 | 69.2 | 67.8 | 67.4 | 68.9 | 63.9 | 64.2 |
| Miscellaneous fabricatedwire products |  | 56.8 | 56.3 | 56.4 | 56.1 | 56.2 | 57.0 | 57.4 | 57.7 | 56.8 | 55.7 | 55.6 | 57.1 | 53.7 | 56.9 |
| Miscellaneous fabricated metal products |  | 115.3 | 114.7 | 114.5 | 114.6 | 113.6 | 114.3 | 113.9 | 111.8 | 112.1 | 112.2 | 112.0 | 114.4 | 107.8 | 112.4 |

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

| Industry | 1963 |  |  |  |  | 1962 |  |  |  |  |  |  |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | June ${ }^{2}$ | May ${ }^{2}$ | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | 1961 | 1960 |
| Manufacturing-Continued |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Machinery | 1,491.6 | 1,484. 3 | 1,485.1 1 | $1,481.5$ | 1,474. 0 | 1, 469.3 | 1,464.2 | 1,462.9 | 1,463.1 | 1,466. 7 | 1,463.8 | 1,468. 1 | 1,479.5 | 1,401. 1 | 1,471.1 |
| Engines and turbin | 1, 991.6 | 1, 87.5 | 88. 1 | 88. 1 | 88.3 | 88.5 | 87.0 | 86.3 | 86.5 | 86.8 | 86.8 | 85.7 | 86. 6 | 80. 0 | 86.8 |
| Farm machinery and equipment.....-. |  | 129.9 | 132.3 | 132.3 | 130.5 | 125.1 | 120.8 | 1174 | 118.0 | 1187 | 117.7 | 119.0 | 120.5 | 112.4 | 114.1 |
| Construction and related machinery...- |  | 211.2 | 210.3 | 209.4 | 208.8 | 208.7 | 209.0 | 208.6 | 207.8 | 211.1 | 212.3 | 211.2 | 212.0 | 198. 1 | 219.7 |
| Metalworking machinery and equipment. |  | 262.8 | 263.0 | 262.1 | 260.7 | 259.5 | 259.5 | 258.3 | 256.4 | 255.0 | 253. 1 | 256.7 | 259.7 | 243.8 | 258.2 |
|  |  | 169.5 | 170.2 | 169.9 | 169.2 | 169. 8 | 1708 | 170.8 | 171. 6 | 171.6 | 172.4 | 172.9 | 173.5 | 167.9 | 173.8 |
| General industrial machinery. Office computing, and accounting machines. |  | 221.7 | 221.8 | 221.8 | 221.2 | 222.2 | 220.5 | 222.6 | 223.4 | 223.2 | 222.9 | 222.0 | 222.8 | 211.1 | 223.0 |
|  |  | 148.1 | 148.2 | 148. 8 | 148.7 | 149.6 | 150. 0 | 150.4 | 150.5 | 151.8 | 152.1 | 151.0 | 151.8 | 149.3 | 145.7 |
|  |  | 100.3 | 99.1 | 97.3 | 95. 9 | 95.3 150.5 | 95 3 <br> 151  | 96.0 | 96.2 | 96.7 151.7 | 96.3 150.3 | 99.7 149.9 | 101.0 | 94. 1 | 99.8 |
|  |  | 153.3 | 152.1 | 151.8 | 150.7 | 150.5 | 151.3 | 152.6 | 152.7 | 151.7 | 150.3 | 149. 9 | 151.6 | 144.6 | 150.4 |
| Electrical equipment and supplies | 1,533.8 | 1,518.7 | 1,519.2 | 1,524. 0 | 1. 533.7 | 1,543. 5 | 1.556. 0 | 1,561. 1 | 1,561. 2 | 1, 556. 7 | 1,538.9 | 1,529.1 | 1,534. 2 | 1,436.0 | 1,445. 6 |
|  |  | 159.8 | 160.3 | 159.9 | 160.7 | 161.9 | 1631 | 163.5 | 163.5 | 163.3 | 163.2 | 161.7 | 162.2 | 160. 9 | 163.2 |
| Electrical industrial apparatus |  | 174.4 | 174.4 | 174.1 | 174.8 | 175.3 | 1764 | 176. 9 | 176.6 | 176.9 | 175. 7 | 177.0 | 178. 3 | 170.5 | 1774 |
| Household appliances....... |  | 158.4 | 156.6 | 154. 0 | 154.4 | 154.6 | 155 | 154.8 | 155.6 | 155.0 | 1519 | 150.7 | 154. 3 | 151.0 | 1572 |
| Electric lighting and wiring equipme |  | 137.0 | 138.0 | 138.3 | 138.2 | 137.6 | 128.6 | 138.9 | 139.4 | 138.8 | 136. 1 | 133.6 | 135. 4 | 128.5 | 132.7 |
| Radio and TV receiving sets. |  | 122.8 | 119.4 | 120.6 | 122. 1 | 124. 6 | 128.2 | 132.9 | 135. 7 | 135.2 422.6 | 132.2 | 129.9 | 127.8 | 113.1 378.4 | 111.5 |
| Communication equipment...........-- |  | 408.6 | 413.5 | 419.4 | 423.9 | 426. 5 | 428. 9 246 | 427.4 | 424.7 247.6 | 422.6 248.0 | 420.0 246.5 | 415.7 246.7 | 416. 24 | 378.4 227.2 | 368.9 225.2 |
| Electronic componente and accessories Miscellaneous electrical equipment |  | 240.7 | 240.4 | 241.1 | 241.8 | 244.5 | 2465 | 247.6 | 247.6 | 248.0 | 246.5 | 246.7 | 245.7 | 227. 2 | 225. 2 |
|  |  | 117.0 | 116.6 | 116.6 | 117.8 | 118.5 | 119.1 | 119.1 | 118.1 | 116.9 | 113.3 | 113.8 | 114.3 | 108.4 | 111.4 |
| Transportation equipment | 1,717.2 | 1,717.1 | 1,710.6 | 1, 698.4 | 1,702. 5 | 1,709. 2 | 1, 705. 6 | 1,695 4 | 1,683.9 | 1, 668.7 | 1,536. 2 | 1, 647. 4 | 1,660. 4 | 1. 5225 | 1.617.3 |
| Motor vehicles and equip |  | 766.8 | 759.9 | 748. 0 | 751.3 | 761.2 | 7624 | 755.1 | 746.8 | 731.8 | 607.3 | 7275 | 7464 | 6479 | 727.6 |
| Aircraft and parts. |  | 721.8 | 722.1 | 724.2 | 728.2 | 730.8 | 729.7 | 7265 | 719.7 | 719.0 | 7097 | 705. 1 | 695. 6 | 669.4 | 6738 |
| Ship and hoat building and rep |  | 151.5 | 152.2 | 152. 2 | 150.1 | 148.5 | 145.1 | 144.0 | 145. 5 | 144.3 | 144.3 | 141.8 | 142. 6 | 142.2 | 141. 0 |
| Railroad equipment .-......- |  | 45.3 | 46.0 | 45.3 | 44.4 | 42.8 | 41. 9 | 42.0 | 43.2 | 44.8 28.8 | 45.5 29.4 | 43.6 29.4 | 45.5 30.3 | 35.8 27.3 | 43.8 |
| Other transportation equipme |  | 31.7 | 30.4 | 28.7 | 28.5 | 25.9 | 26.5 | 27.8 | 28.7 | 28.8 | 29.4 | 29.4 | 30.3 | 27.3 | 31.1 |
| Instruments and related products........- | 366.9 | 364.3 | 363.3 | 362.0 | 361.2 | 361.3 | 3620 | 362.1 | 361.6 | 361.3 | 361.3 | 357.4 | 358. 2 | 346.4 | 354.2 |
| Engineering and scientific instrumentsMechanical measuring and control |  | 72.2 | 72.7 | 73.2 | 73.3 | 74.2 | 744 | 74.3 | 74.4 | 74.1 | 73.6 | 72.3 | 72.6 | 73.9 | 75.7 |
|  |  | 97.6 | 97.6 | 97.6 | 97.6 | 97.0 | 96.5 | 96.3 | 95.8 | 95.7 | 95.8 | 95.0 | 94.7 | 91.8 | 95.1 |
|  |  | 42.6 | 42.1 | 42.0 | 41. 9 | 41.6 | 41.7 | 41.6 | 41.8 | 41.8 | 41.7 | 41.8 | 42.4 | 39.3 | 40. ${ }^{\text {a }}$ |
| Optical and ophthalmic goods. Surgical, medical, and dental equip. |  | 51.0 | 50.7 | 50.3 | 50.3 | 50.0 | 49.7 | 497 | 49.6 | 49.6 | 49.5 | 49.2 | 49.0 | 47.6 | 47.8 |
| Photographic equipment and supplies. |  | 72.0 | 71.4 | 70.8 | 70.3 | 70.6 | 711 | 712 | 71.0 | 71. 0 | 71.8 | 71.4 | 70.5 | 68.4 | 69.0 |
|  |  | 28.9 | 28.8 | 28.1 | 27.8 | 27.9 | 28.6 | 29.0 | 29.0 | 29.1 | 28.8 | 27.7 | 29.0 | 25.3 | 26.6 |
| Miscellaneous manufacturing industries.- | 397.2 | 389.2 | 380.1 | 375.7 | 370.2 | 363.9 | 382.4 | 4090 | 418.1 | 414.5 | 407.3 | 392.4 | 399.9 | 381.6 | 392.1 |
| Jewelry, silverware, and plated ware... |  | 40.6 | 40.6 | 40.6 | 41. 0 | 40.9 | 41.8 | 42.8 116 | 42. 6 | 42.3 | 41. 5 | 40.0 112.4 | 41.2 | 41.8 101.9 | 43.2 |
| Toys, amusement, and sporting goods. |  | 107.9 | 99.8 | 95.0 | 89.1 | $\begin{array}{lll}84 & 1 \\ 32\end{array}$ | 95.3 | 116 34 | 123. 1 | 119.7 | 117. 1 | 112. 4 | 112.2 | 101.9 31.9 | 102.3 |
| Pens, pencts, office and art materials. |  | 34.8 | 34.5 | 34.2 | 33. 5 | 32.5 | 34. 2 | 349 | 35.1 | 34.6 | 34.1 | 32. 6 | 33.2 | 31.2 | 31.0 |
| Costume jewelry, buttons, and notions. |  | 52.9 | 52.1 | 52.9 | 53.3 | 52.8 | 55.2 155.9 | 57.1 158.1 | 56.9 160.4 | 56. 8 161.1 | 56.0 158.6 | 53.1 154.3 | 56.3 157.0 | 54.0 152.7 | 57.5 158.1 |
| Other manufacturing industries........- |  | 153.0 | 153.1 | 153.0 | 153.3 | 152. 6 | 155.9 | 158.1 | 160.4 | 161.1 | 158.6 | 154.3 | 157.0 | 152. 7 | 158.1 |
| Nondurable goods |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1,742.5 | 1,695.6 | 1,677.7 | 1,674. 7 | 1,665. 1 | 1,686. 9 | 1,738.8 | 1,780.7 | 1,858.5 | 1,931. 1 | 1,910. 5 | 1,829.6 | 1,777.9 | 1,780. 2 | 1,792.7 |
| Meat products......-. -- |  | 302.5 | 299.8 | 298.6 | 300.8 | 304.1 | 311.5 | 316.0 | 315. 9 | 3127 | 314.7 | 313.4 | 314.4 | 317.0 | 321.1 |
| Canned and preserved food, except |  | 304.6 | 301.8 | 298.9 | 297.4 | 298.4 | 301.2 | 303.0 | 306.1 | 312.3 | 320.5 | 322.3 | 318.8 | 313.3 | 316.6 |
|  |  | 192.2 | 189.0 | 188.3 | 181. 1 | 187.4 | 202.2 | 227.5 | 298.1 | 379.1 | 359.1 | 286.7 | 236.3 | 243.5 | 241.8 |
| Grain mill prod |  | 126.2 | 123.4 | 124. 3 | 123. 7 | 124.4 | 124.8 | 124.8 | 128.2 | 130.5 | 131.1 | 131.0 | 128.7 | 128. 6 | 128.4 |
| Bakery products |  | 303.9 | 302.3 | 303.3 | 302.3 | 303.2 | 307.0 | 308.9 | 308.0 | 307.3 | 308.0 | 308.1 | 308.8 | 305.7 | 307.5 |
| Sugar |  | 30.9 | 27.8 | 27.0 | 28.5 | 34.8 | 44.1 | 45.7 | 45.1 | 32. 1 | 30.0 | 29.3 | 28.8 | 34.3 | 36.8 |
| Confectionery and relat |  | 73.8 | 74.5 | 78.3 | 78. 7 | 79. 8 | 84.0 | 87.5 | 85. 1 | 83. 0 | 76. 9 | 69.1 | 73. 2 | 80.0 | 79.6 |
| Beverages...........--- |  | 221.4 | 218.0 | 214.5 | 210.1 | 212. 2 | 217.9 | 219.7 | 223.5 | 228.6 | 227.2 | 229.1 | 227.7 | 216.5 | 218.2 |
| Miscellaneous food and kindred prod- <br> ucts |  | 140.1 | 141.1 | 141.5 | 142.5 | 142.5 | 146.1 | 147.5 | 148.5 | 145.5 | 143.0 | 140.6 | 141.2 | 141.4 | 142.8 |
| Tobaceo manufact | 74.1 | 74.9 | 77.4 | 79.5 | 85. 2 | 88.3 | 94.1 | 96.2 | 111.2 | 117.6 | 102. 6 | 76.9 | 76.2 | 90.5 | 94.1 |
| Cigarett |  | 37.1 | 37.2 | 37.2 | 36.8 | 37.1 | 37.2 | 37.0 | 37.0 | 37.9 | 37. 9 | 37.9 | 37.6 | 37.0 | 37.2 |
| Cigars. |  | 21.4 | 21.8 | 22.0 | 22.1 | 22.0 | 23.0 | 22.9 | 22.6 | 22.8 | 22.6 | 22.0 | 22.9 | 24.8 | 27.8 |
| Textile mill products. | 863.9 | 857.4 | 858.2 | 857.3 | 854.4 | 855.2 | 867.5 | 876.2 | 881.3 | 883.7 | 885. 8 | 872.9 | 890.9 | 879.8 | 914.6 |
| Cotton broad woven fabrics. |  | 237.7 | 238.3 | 238.8 | 238.7 | 240.2 | 242.2 | 243.1 | 243.2 | 244.2 | 245.0 | 243.4 | 247.0 | 251.2 | 260.4 |
| Silk and synthetic broad woven fabrics. |  | 70.0 | 69.8 | 69.7 | 69.8 | 70.1 | 70. f , | 70.3 | 70.1 | 70.5 | 70.6 | 68.7 | 70.4 | 69.8 | 73.4 |
| Weaving and finishing broad woolens.. |  | 49.8 | 50.2 | 50.3 | 50.2 | 48.6 | 48.8 | 49.6 | 50.8 | 51.5 | 52.2 | 52.2 | 52.9 | 52.3 | 56.0 |
| Narrow fabrics and smallwares. |  | 26.6 | 26.5 | 26.5 | 26.5 | 26.6 | 27.3 | 27.5 | 272 | 27.4 | 27.3 | 26. 6 | 27.4 | 26. 6 | 27.6 |
| Knitting |  | 203.9 | 202.5 | 201.9 | 199. 2 | 198.1 | 203.5 | 210.3 | 214.4 | 215.3 | 217.2 | 213.0 | 217.6 | 211.1 | 214.4 |
| Finishing textiles, except wool and knit. |  | 70.2 | 70.6 | 70.6 | 70.4 | 70.6 | 71.6 | 71.5 | 71. 6 | 71.2 | 71.1 | 70.6 | 72.2 | 70.8 | 74.3 |
| Floor covering. |  | 33.1 | 33.7 | 33.8 | 34.2 | 34.6 | 350 | 35.1 | 34.7 | 34. 2 | 33.1 | 33. 0 | 33. 4 | 33. | 35.9 |
| Yarn and thread Miscellaneous tex |  | 101.6 64.5 | 101.2 65.4 | 100.7 65.0 | 100.9 64.5 | 100.7 65.7 | 102.2 66.3 | 102.3 66.5 | 102.9 66.4 | 103.0 66.4 | 103.8 65.5 | 101.3 64.1 | 103.6 66.4 | 100.4 64.6 | 103.7 69.0 |

See footnotes at end of table.

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{6}{|c|}{1963} \& \multicolumn{7}{|c|}{1962} \& \multicolumn{2}{|l|}{Annual average} <br>
\hline \& June ${ }^{2}$ \& May ${ }^{2}$ \& Apr. \& Mar. \& Feb. \& Jan. \& Dec. \& Nov. \& Oct. \& Sept. \& Aug. \& July \& June \& 1961 \& 1960 <br>
\hline \multicolumn{16}{|l|}{Manufacturing-Continued} <br>
\hline Nondurable goods-Continued \& \& \& \& \& \& \& \& \& \& \& \& \& \& \& <br>
\hline Apparel and related products \& 1,255. 6 \& 1,253.4 \& 1,246.3 \& 1,267. 0 \& 1,250. 6 \& 1,219. 2 \& 1, 235.6 \& 1, 2527 \& 1, 258.5 \& 1,264. 2 \& 1,266. 7 \& 1,207. 8 \& 1,230. 5 \& 1,199. 5 \& 1.228. 4 <br>
\hline Men's and boys' suits and cos \& \& 118.5 \& 116.9 \& 118.2 \& 1, 118.5 \& 1, 118.5 \& 119.1 \& 118.5 \& 119.3 \& 120.2 \& 119.8 \& 115. 2 \& 119.4 \& 116.4 \& 121. 5 <br>
\hline Men's and boys' furnishings ............- \& \& 338.6 \& 335.7 \& 332.2 \& 330.7 \& 327.5 \& 331.8 \& 334.9 \& 335.2 \& 336.4 \& 336.1 \& 324.7 \& 331.2 \& 302.2 \& 307.5 <br>
\hline Women's, misses', and juntors' outerwear \& \& 347.1 \& 349.9 \& 363.7 \& 356.0 \& 337.9 \& 339.5 \& 343.4 \& 342.3 \& 349.7 \& 356.7 \& 335.5 \& 342.2 \& 348.3 \& 361.3 <br>
\hline Women's and children's undergarments. \& \& 122.4 \& 122.7 \& 122.7 \& 121.7 \& 120.2 \& 123.6 \& 126. 0 \& 126. 7 \& 124.6 \& 123.3 \& 335.5
116.7 \& 120.0 \& 348.3
118.0 \& 361.3
119.7 <br>
\hline Hats, caps, and millinery...- \& \& 32.8 \& 34.5 \& 39.9 \& 39.3 \& 36.8 \& 34. 5 \& 32.9 \& 35. 8 \& 36.2 \& 36.8 \& 116. 32 \& 120. 31.7 \& 118.0 \& 119.7
36.2 <br>
\hline Girls' and children's outerwear \& \& 78.4 \& 73.8 \& 79.5 \& 79.0 \& 76.3 \& 75.1 \& 76.8 \& 77.2 \& 77.2 \& 78.6 \& 78.2 \& 79.2 \& 74.4 \& 76.1 <br>
\hline Fur goods and miscellaneous apparel.-- \& \& 66.4 \& 66.6 \& 66.7 \& 65.0 \& 62.9 \& 68.2 \& 72.3 \& 73.3 \& 72.2 \& 71.6 \& 67.8 \& 68.7 \& 69.5 \& 69.0 <br>
\hline Miscellaneous fabricated textile products. $\qquad$ \& \& 149.2 \& 146.2 \& 144.1 \& 140.4 \& 139.1 \& 143.8 \& 147.9 \& 148.7 \& 147.7 \& 143.8 \& 137.7 \& 138.1 \& 135.8 \& 136.9 <br>
\hline Paper and allled \& 610.3 \& 602.9 \& 600.8 \& 599.8 \& 597.0 \& 600.3 \& 605.7 \& 606.4 \& 608. 8 \& 610.7 \& 610.4 \& 602.2 \& 607.3 \& 589.5 \& 593.3 <br>
\hline Paper and pulp \& \& 225.6 \& 224.7 \& 223. 7 \& 223.4 \& 225.2 \& 226.2 \& 2268 \& 227. 9 \& 229.0 \& 231.4 \& 227. 7 \& 228.5 \& 224.5 \& 224.4 <br>
\hline  \& \& 68.6 \& 67.7 \& 68.3 \& 68.3 \& 68.5 \& 68.5 \& 68.3 \& 68.3 \& 67.7 \& 66.7 \& 66.4 \& 68.1 \& 66.8 \& 69.3 <br>
\hline Converted paper and paperboard products. \& \& 130.4 \& 130.2 \& 129.8 \& 128.6 \& 128.8 \& 130.2 \& 129.7 \& 130.5 \& 130.6 \& 130.4 \& 129.3 \& 130.2 \& 24.3 \& 124.4 <br>
\hline Paperboard containers and boxes \& \& 178.3 \& 178.2 \& 178.0 \& 176.7 \& 177.7 \& 180.8 \& 181.6 \& 182.1 \& 183.4 \& 181.9 \& 178.8 \& 180.5 \& 174.0 \& 178.1 <br>
\hline Printing, publishing, and allied Industrips. \& 938.6 \& 934.9 \& 932.4 \& 913.5 \& 909.2 \& 912.2 \& 920.1 \& 945.7 \& 945.0 \& 941.3 \& 934.0 \& 930.7 \& 933.4 \& 926.3 \& 917.2 <br>
\hline Newspaner publishing and printing------ -- - - - - \& \& 343.9 \& 341.9 \& 322.2 \& 321.0 \& 320.6 \& 323.7 \& 348.8 \& 346. 6 \& 345.1 \& 345.5 \& 343.1 \& 343.7 \& 339.1 \& 332.6 <br>
\hline Periodical publishing and printing \& \& 67.4 \& 67.8 \& 68.8 \& 68.7 \& 69.5 \& 69.1 \& 69.4 \& 68.9 \& 68.3 \& 66.1 \& 66. 4 \& 66.4 \& 71.0 \& 71.0 <br>
\hline Books.. \& \& 77.0 \& 76.5 \& 75.6 \& 75.1 \& 75. 4 \& 75. 4 \& 75.7 \& 76. 0 \& 76. 4 \& 75.8 \& 76.1 \& 75. 4 \& 73.0 \& 71.1 <br>
\hline Commercial printing. \& \& 289.4 \& 289.4 \& 290.6 \& 288. 6 \& 291.2 \& 294. 7 \& 293.8 \& 293.8 \& 292. 2 \& 288.9 \& 289.2 \& 292.0 \& 289.8 \& 289.2 <br>
\hline Bookbinding and related industries.... \& \& 49.4 \& 48.9 \& 48.4 \& 47.8 \& 48.0 \& 48.4 \& 48.4 \& 48.7 \& 49.3 \& 49.5 \& 48.3 \& 48.0 \& 47.1 \& 47.0 <br>
\hline Other publishing and printing industries. \& \& 107.8 \& 107.9 \& 107.9 \& 108.0 \& 107.5 \& 108.8 \& 109.9 \& 111.0 \& 110.0 \& 108.2 \& 107.6 \& 107.9 \& 106.3 \& 106.3 <br>
\hline Chemicals and allied \& 871.8 \& 870.2 \& 871.4 \& 850.6 \& 852.7 \& 850.1 \& 849.9 \& 852.0 \& 853.6 \& 855.9 \& 858.0 \& 855.0 \& 851.2 \& 830.2 \& 829.6 <br>
\hline Industrial chemicals. \& \& 287.5 \& 286.7 \& 285.4 \& 284.4 \& 284. 6 \& 284. 9 \& 2852 \& 284.9 \& 285. 1 \& 287.8 \& 288.9 \& 287.7 \& 284.8 \& 286.8 <br>
\hline Plastics and synt hetics, excep \& \& 166.5 \& 164.7 \& 163.5 \& 163.2 \& 163.4 \& 162.9 \& 1633 \& 163.2 \& 164.3 \& 163.4 \& 162.9 \& 158.4 \& 152.3 \& 153.2 <br>
\hline 1 rugs \& \& 113.7 \& 113.3 \& 112.5 \& 112.0 \& 111.6 \& 111.7 \& 111.3 \& 110.6 \& 110.5 \& 111.4 \& 110.7 \& 110.0 \& 106.6 \& 107.4 <br>
\hline Soan, cleaners, and tollet goods....... \& \& 99.8 \& 100.4 \& 100.7 \& 99.9 \& 99.9 \& 100. 2 \& 101.2 \& 101.8 \& 101.8 \& 101. 2 \& 99.2 \& 99.4 \& 96. 5 \& 92. ${ }^{2}$ <br>
\hline Paints, varnishes, and allied products.. \& \& 63.9 \& 63.4 \& 62.6 \& 62.0 \& 61. 6 \& 61.7 \& 62.0 \& 62.8 \& 63. 6 \& 64.7 \& 64.5 \& 64.2 \& 62.4 \& 63.5 <br>
\hline Agricultural chemfcals \& \& 52.1 \& 56.3 \& 49.3 \& 45.4 \& 43.5 \& 42.3 \& 41.6 \& 42.9 \& 42.7 \& 40.7 \& 40.5 \& 43.3 \& 44.7 \& 44.8 <br>
\hline Other cbemical product \& \& 86.7 \& 86.6 \& 86.6 \& 85.8 \& 85.5 \& 86.2 \& 87.4 \& 87.4 \& 87.9 \& 88.8 \& 88.3 \& 88.2 \& 82.9 \& 81.8 <br>
\hline Petroleum refining and related industries \& 190.6 \& 189.6 \& 187.5 \& 186.3 \& 186.3 \& 185.4 \& 186. 9 \& 189.1 \& 190.7 \& 192.8 \& 199.9 \& 200.9 \& 200.8 \& 203.0 \& 211.7 <br>
\hline Petroleum refining. \& \& 154.2 \& 154.5 \& 155.2 \& 154.6 \& 153.0 \& 153.5 \& 154.3 \& 154.9 \& 156.4 \& 163. 5 \& 165.0 \& 165.3 \& 170.0 \& 177.6 <br>
\hline Otber petroleum and coal products \& \& 35.4 \& 33.0 \& 31.1 \& 31.7 \& 32.4 \& 33.4 \& 34.8 \& 35.8 \& 36.2 \& 36.4 \& 35.9 \& 35.6 \& 33.0 \& 34.1 <br>
\hline \multicolumn{16}{|l|}{} <br>
\hline Tires and Inner tubes \& \& 105.0 \& 104.7 \& 104.3 \& 104.4 \& 105. 3 \& 105. 7 \& 1053 \& 105.3 \& 105. 7 \& 104.5 \& 103.5 \& 1045 \& 101.0 \& 108.8 <br>
\hline Other rubber products. \& \& 161.0 \& 160.4 \& 160.8 \& 161.0 \& 163. 8 \& 164. 4 \& 1644 \& 164.7 \& 164.3 \& 161.4 \& 157.1 \& 161. 5 \& 149.1 \& 153.3 <br>
\hline Miscellaneous plastic product \& \& 129.1 \& 128.1 \& 127.0 \& 126.1 \& 125.5 \& 125. 7 \& 128.5 \& 129.9 \& 127.7 \& 126.2 \& 123.9 \& 123. 4 \& 114.9 \& 113.8 <br>
\hline Leather and leather products. \& 351.1 \& 344.1 \& 342.9 \& 352.2 \& 354.6 \& 351.4 \& 359.3 \& 361.0 \& 358.6 \& 360.8 \& 368.6 \& 358.4 \& 363.5 \& 361.0 \& 365.8 <br>
\hline Leather tanning and finish \& \& 31.8 \& 31.5 \& 31.7 \& 32.1 \& 32.9 \& 33. 1 \& 33.1 \& 32.9 \& 32.8 \& 32.8 \& 31.6 \& 32.7 \& 33.0 \& 34.1 <br>
\hline Footwear, except rubber \& \& 230.4 \& 229.8 \& 235.1 \& 237.6 \& 236.1 \& 238.4 \& 235.8 \& 233.4 \& 236.9 \& 243.5 \& 239.2 \& 241.7 \& 239.3 \& 242.6 <br>
\hline Other leather products. \& \& 81.9 \& 81.6 \& 85.4 \& 84.9 \& 82.4 \& 87.8 \& 92.1 \& 92.3 \& 91.1 \& 92.3 \& 87.6 \& 89.1 \& 88.7 \& 89.1 <br>
\hline Transportation and public utilitie \& 3,973 \& 3,916 \& 3,881 \& 3,868 \& 3,862 \& 3,794 \& 3, 937 \& 3,934 \& 3,959 \& 3,959 \& 3,963 \& 3, 948 \& 3,965 \& 3, 923 \& 4.017 <br>
\hline Railroad transportation...-- -- \& \& 783.8 \& 773.0 \& 765.0 \& 761.4 \& 760. 4 \& 786. 7 \& 781.8 \& 792.5 \& 784. 4 \& 810.2 \& 811.1 \& 819.2 \& 819.5 \& 886.8 <br>
\hline  \& \& 684.5 \& 674.4 \& 666.9 \& 664. 4 \& 663.4 \& 681.6 \& 683.1 \& 692.9 \& 685. 0 \& 710.6 \& 711.8 \& 719.0 \& 717.4 \& 780.5 <br>
\hline Local and Interurban passenger transit...- \& \& 265.8 \& 265.3 \& 267.7 \& 268.8 \& 270.0 \& 269.3
86.9 \& 266.9 \& 267.0 \& 265. 2 \& 253.6 \& 254.4 \& 261.0 \& 270.0 \& 282. 6 <br>
\hline Local and suburban transport \& \& 85.6
106.0 \& 85.4
107.2 \& 86.0
110.0 \& 86.2
110.7 \& 86.5
110.2 \& 86.9
109.4 \& 87.1 \& 87.7 \& 87.9 \& 87.7 \& 87. 8 \& 88. 6 \& 91. 5 \& 94.6 <br>
\hline Intercity and rural buslines \& \& 48.6 \& 47. 5 \& 110.0 46 \& 110.7 \& 110.2
48.2 \& 109.4 \& 107.0 \& 105.7 \& 1050 \& 103.0 \& 102.7 \& 104. 2 \& 109.5 \& 120.4 <br>
\hline Motor freight transportation and stora \& \& 911.4 \& 901.0 \& 890.4 \& 888.2 \& 884.8 \& 925. 4 \& 939.0 \& 947.9 \& 942.1 \& 927.5 \& 920.3 \& 919.2 \& 875. 2 \& 873.8 <br>
\hline Air transportation. \& \& 214.2 \& 213.3 \& 212.6 \& 211.9 \& 212.4 \& 210.5 \& 209.2 \& 210.8 \& 210.0 \& 199.2 \& 193.1 \& 207.6 \& 197.3 \& 191.0 <br>
\hline Air transportation, common carrier \& \& 191.4 \& 190.4 \& 190.2 \& 190.3 \& 190.8 \& 189.1 \& 188.3 \& 189.5 \& 188.5 \& 177.8 \& 172.0 \& 185. 0 \& 175.6 \& 171.6 <br>
\hline Pipeline transportation. \& \& 19.8 \& 19.9 \& 19.9 \& 19.9 \& 20.2 \& 20.5 \& 20.6 \& 20.8 \& 21.2 \& 21. 6 \& 21.6 \& 21.6 \& 22.2 \& 23.1 <br>
\hline Other transportation \& \& 304.0 \& 295.4 \& 299.0 \& 301.0 \& 233.8 \& 306.0 \& 296.6 \& 296.0 \& 300.7 \& 302. 6 \& 299.9 \& 301.2 \& 302.1 \& 308.0 <br>
\hline Communication . .-.-.---- \& \& 815.3 \& 815.2 \& 813.0 \& 811.3 \& 811.5 \& 815.8 \& 816.9 \& 818.8 \& 823.6 \& 8291 \& 829.1 \& 822.3 \& 826.2 \& 838.7 <br>
\hline Telephone communication \& \& 686.8
34.4 \& 686.3
34.4 \& 684.8
34.4 \& 682.7 \& 683.3 \& 685. 9 \& 687
35
35 \& 688.3 \& 693.2 \& 699.1 \& 698.5 \& 682.5 \& 694.8 \& 708.0 <br>
\hline Telegraph communication \& \& 34.4 \& 34.4 \& 34.4 \& 34.7 \& 34. 9 \& 35. 7 \& 35. 7 \& 35. 8 \& 36. 2 \& 36. 6 \& 36.8 \& 36. 7 \& 37.1 \& 38.3 <br>
\hline Radio and television broadcastin \& \& 92.2
601.8 \& 92.6
597.4 \& 91.9
599.9 \& 92.0
599.8 \& 91.4
600.5 \& 92.3
602.5 \& 91.8
6034 \& 92.8
604.9 \& 92.3 612.1 \& 91.5
619.2 \& 91.9
618.3 \& 91.2
612.7 \& 92.4
610.7 \& 92.4
613.0 <br>
\hline Electric companles and systems. \& \& 247.4 \& 243.7

15 \& 247.5 \& 247.4 \& 247.4 \& 247. 7 \& 603. 4 \& 604. 3 \& 251. 4 \& 253.8 \& 618.3
253.8 \& ${ }^{612} 251.6$ \& 610. 252 \& 613. ${ }^{254}$ <br>
\hline Gas companies and systems. \& \& 150.5 \& 150.3 \& 150.0 \& 150.2 \& 150.5 \& 151.2 \& 151.7 \& 151.8 \& 153.4 \& 155.3 \& 154.9 \& 153.7 \& 153.1 \& 153.4 <br>
\hline Comblned ntility systems.-............... \& \& 173.1 \& 172.8 \& 172.4 \& 172.4 \& 172.8 \& 173.6 \& 174.0 \& 174.5 \& 176.8 \& 178.7 \& 178.1 \& 176.5 \& 175.3 \& 175.0 <br>
\hline Water, steam, and sanitary systems.-2. \& \& 30.8 \& 30.6 \& 30.0 \& 29.8 \& 29.8 \& 30.0 \& 30.0 \& 30.3 \& 30.5 \& 31.4 \& 31.4 \& 30.9 \& 30.1 \& 30.3 <br>
\hline
\end{tabular}

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


See footnotes at end of table.

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

| Industry | 1863 |  |  |  |  |  | 1962 |  |  |  |  |  |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | June ${ }^{2}$ | May ${ }^{2}$ | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | 1961 | 1960 |
| Manufacturing-Centinued |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Machiner | 1,034.6 1 | 1,031.1 | 1,032.3 1 | 1,028.3 | 1,023. 5 | 1,020. 9 | 1,017.5 | 016.7 | 1,018. 1 | 1, 020.7 | 1,015.3 | 1,019.6 | 1,034. 5 | 984.5 | 1,030.4 |
| Engines and turb |  | 58.1 | 58.8 | 58.6 | 58.8 | 59.5 | 58.0 | 57.8 <br> 83 <br> 8 | 57.7 | 57.5 | 57.8 | 56.8 | 88. 7 | 51.2 | 56.1 |
| Farm machinery snd equip |  | 95.1 | 97.3 | 97.2 | 95.5 | 91. 1 | 87. 11 | 83.9 | 84.5 | 85.1 | 83. 8 | 84.9 140.3 | 141.7 | 128.2 | 144.8 |
| Construction and related machinery... Metalworking machinery and equipment. |  | 141.1 | 140.0 | 139.4 | 138.5 | 138.6 | 138.7 | 138.3 | 137.6 | 140.8 | 141.3 | 140.3 | 141.7 | 128.2 | 144.8 |
|  |  | 196.6 | 196.1 | 194.5 | 194.3 | 193.2 | 193.5 | 192.5 | 191.2 | 189.8 | 187.4 | 191.1 | 194. 2 | 180.1 | 194.0 |
|  |  | 116.3 | 117.1 | 116.6 | 116.1 | 116.8 | 118.1 | 117.9 | 119.0 | 118.7 | 119.0 | 119.2 | 120.1 | 116.2 | 122.3 |
| General Industrial machinery. Office, computing and accounting machines. Service industry machines. |  | 148.7 | 149.0 | 149.0 | 148.8 | 150.1 | 148.2 | 151.0 | 151.7 | 151.6 | 151.6 | 150.9 | 152.3 |  | 154.9 |
|  |  | 88.3 | 89.1 | 90.1 | 90.5 | 91.9 | 92.8 | 93.3 | 93.4 | 94. 4 | 94.3 | 93.1 | 94.8 | 94. 5 | 96. 2 |
|  |  | 69.1 | 68.0 | 68.2 | 65.3 | 64. 2 | 64.5 | 64.8 | 65.3 | 66. 0 | 65.3 | 68.7 | 70.1 | 63.8 | 69.7 |
| Miscellaneous machinery.. |  | 117.8 | 116.9 | 116.7 | 115.7 | 115.5 | 116.6 | 117.5 | 117.7 | 116.8 | 8 |  | 116.3 | 109.0 | 2 |
| Electrical equipment and supplies...-..-- | 1,035.9 | 1,023.8 | 1,022.2 | 1,023.9 | 1,031.5 | 1,042. 3 | 1,052.9 | 1,080.1 | 1,062.0 | 1,059.2 | 1,041. 1 | 1, 031.4 | 1,038.9 | 963.3 | 986.9 |
| Electric distribution equipment |  | 105.7 | 106.0 | 105.7 | 106.5 | 107.3 | 108. 6 | 109.1 | 109.1 | 109. 0 | 108.8 | 107.0 | 107.6 | 105.3 | 108.3 |
| Electrical Industrial apparatus |  | 119.1 | 119.1 | 118.5 | 119. 1 | 119.7 118.2 | 120.3 | 120.8 118.8 | 120.3 | 120.7 | 119.5 <br> 115.4 | 120.6 | 122.0 | 114.8 | 121.6 |
|  |  | 121.5 | 120.1 | 117.2 107.9 | 117.9 107.9 | 118.2 107.8 | 118.8 108.5 | 118.8 108.9 | 119.5 | 118.8 | 106. 1 | 104.2 | 105.8 | 114.8 99.9 | 103.6 |
| Electric lighting and wiring equipment- Radio and TV receiving sets |  | 106.8 90.6 | 107.8 86 | 107.9 87.7 | 107.9 89.0 | 91.5 | 108.51 | 100.2 | 102.7 | 102.3 | 99.7 | 97.6 | 95.4 | 82.6 | 82.2 |
| Communication equipment |  | 214.8 | 218.4 | 222.4 | 225.1 | 227.4 | 228.1 | 227.7 | 226.7 | 225.3 | 222. 4 | 217.8 | 219.5 | 200.4 | 201.4 |
| Electronic components and accessories. |  | 176.4 | 175.8 | 176.4 | 176.8 | 179.8 | 182.0 | 183.4 | 183.8 | 184.5 | 183.4 | 183.1 | 183.3 | 165.5 | 164.4 |
| Miscellaneous electrical equipment and supplies. |  | 88.9 | 88.3 | 88.1 | 89.2 | 90.6 | 91.1 | 91.2 | 90.4 | 89.4 | 86.0 | 86.8 | 87.6 | 78.9 | 84.9 |
| Transportation equipment.-....------------- | 1,177.5 | 1, 177. 7 | 1, 172.6 | 1, 158. 5 | 1,159. 1 | 1,168.3 | 1,167.8 | 1,159.6 | 1, 149.8 | 1,133.3 | 1,007.7 | 1,120.6 | 1,138,6 | 1,035.0 | 1,132. 7 |
| Motor vehicles and equipment...........- |  | 598.0 | 591.0 | 579.7 | 583.3 | 592.8 | 595.8 | 589.3 | 581.0 | 566.3 | 441.2 | 561.3 | 580.0 | 491.7 | 566.5 |
| Alreraft and parts.... |  | 391.4 | 392.7 | 392.0 | 394.0 | 398.7 | 398.7 | 396.4 | 391.4 | 389.3 | 388.0 | 384.2 | 378.4 | 378.7 | 392.5 |
| Ship and boat building and rep |  | 128.3 | 129.3 | 129.5 | 126.0 | 124.9 | 121.5 | 120.7 | 122.2 | 121.0 | 120.7 | 118.6 32.5 | 119.6 | 117.8 | 116.6 32.0 |
| Railroad equipment. |  | 33.9 | 34.6 | 33.8 | 33.0 | 31.3 | 30.7 | 30.8 | 31.9 23.3 | 33.3 23.4 | 33.8 24.0 | 32.5 24.0 | 38.8. 7 | 24.8 21.9 | 32.0 25.1 |
| Other transportation equipm |  | 26.1 | 25.0 | 23.5 | 22.8 | 20.6 | 21.1 | 22.4 | 23.3 | 23.4 | 24.0 | 24.0 | 24.7 | 21.9 | 25.1 |
| Instrument and related products $\qquad$ Engineering and scientific instrumentsMechanical measuring and control deचices. $\qquad$ | 233.5 | $\begin{array}{r} 231.9 \\ 38.0 \end{array}$ | $\begin{array}{r} 231.0 \\ 38.2 \end{array}$ | $\begin{array}{r} 229.5 \\ 38.5 \end{array}$ | $\begin{array}{r} 228.9 \\ 38.6 \end{array}$ | $\begin{array}{r} 229.2 \\ 39.3 \end{array}$ | $\begin{array}{r} 229.9 \\ 39.5 \end{array}$ | $\begin{array}{r} 230.5 \\ 39.4 \end{array}$ | $\begin{array}{r} 230.5 \\ 39.3 \end{array}$ | $\begin{array}{r} 229.9 \\ 39.1 \end{array}$ | $\begin{array}{r} 229.4 \\ 38.6 \end{array}$ | $\begin{array}{r} 225.8 \\ 37.7 \end{array}$ | $\begin{array}{r} 228.5 \\ 38.4 \end{array}$ | $\begin{array}{r} 221.6 \\ 40.4 \end{array}$ | $\begin{array}{r} 232.0 \\ 42.8 \end{array}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 63.5 | 63.4 | $\begin{aligned} & 63.5 \\ & 30.2 \end{aligned}$ | $\begin{aligned} & 63.4 \\ & 30.3 \end{aligned}$ | $\begin{aligned} & 63.2 \\ & 30.0 \end{aligned}$ | 62.8 | 62.7 | $82.4$ | $62.3$ | $62.2$$30.4$ | 61.2 <br> 30.3 | $\begin{aligned} & 81.3 \\ & 31.1 \end{aligned}$ | $\begin{aligned} & 59.8 \\ & 29.1 \end{aligned}$ | $\begin{aligned} & 63.2 \\ & 30.7 \end{aligned}$ |
|  |  | 30.5 | 30.5 |  |  |  | 30.1 | 30.2 |  |  |  |  |  |  |  |
| Surgical, medical, and dental equipment |  |  |  | $30.2$ | $30.3$ | $30.0$ | $\begin{aligned} & 34.3 \\ & 40.4 \\ & 22.8 \end{aligned}$ |  | $30.5$ | $30.2$ |  |  | 31.1 | $29.1$ | $30.7$ |
| Photographic equipment and supplies.- |  | 40.723.5 | $\begin{aligned} & 35.5 \\ & 40.1 \end{aligned}$ | $\begin{aligned} & 35.2 \\ & 39.5 \\ & 22.6 \end{aligned}$ | $\begin{aligned} & 35.0 \\ & 39.3 \\ & 22.3 \end{aligned}$ | $\begin{aligned} & 34.6 \\ & 39.6 \\ & 22.5 \end{aligned}$ |  | $\begin{aligned} & 34.5 \\ & 40.5 \\ & 23.4 \end{aligned}$ | $\begin{aligned} & 34.4 \\ & 40.5 \\ & 23.4 \end{aligned}$ | $\begin{aligned} & 34.5 \\ & 40.4 \\ & 23.4 \end{aligned}$ | $\begin{aligned} & 34.3 \\ & 40.7 \\ & 23.2 \end{aligned}$ | 40.5 | $\begin{aligned} & 35.8 \\ & 40.4 \end{aligned}$ | 39.4 | 33.41.21.1 |
| Watches and clocks.. |  |  | 23.3 |  |  |  |  |  |  |  |  | 22.2 | 23.5 | 20.1 |  |
| Miscellaneous manufacturing industries.. Jewelry, sllverware, and plated ware Toys, amusement, and sporting goods. . Pens, pencils, office and art materials. Costume fewelry, buttons, and notions Other manufacturing industries. | 320.4 | 312.1 | 304.1 | $\begin{array}{r} 299.5 \\ 31.3 \end{array}$ | 293.1 | $\begin{array}{r} 287.1 \\ 31.7 \end{array}$ | $\begin{array}{r} 305.2 \\ 32.5 \end{array}$ | 832.4 | $\begin{array}{r} 341.8 \\ 33.3 \end{array}$ | 337.833.0 | 330.632.3 | 316.130.8 | 322.432.0 | 300.2 <br> 32.7 | 316.033.9 |
|  |  | 31.290.7 |  |  | $\begin{aligned} & 31.7 \\ & 71.9 \end{aligned}$ |  |  | 38.4 |  |  |  |  |  |  |  |
|  |  |  | 31.5 82.9 | $\begin{aligned} & 31.3 \\ & 77.9 \end{aligned}$ |  | $66.7$ | $\begin{aligned} & 32.5 \\ & 77.6 \end{aligned}$ | 99.0 | $\begin{array}{r} 33.3 \\ 205.8 \end{array}$ | 102.2 | 99.6 | 65.3 | 84.4 | - 85.3 | .3 86.4 |
|  |  | 26.143.7 | $\begin{aligned} & 25.9 \\ & 42.9 \end{aligned}$ | $\begin{aligned} & 25.6 \\ & 43.8 \end{aligned}$ | $\begin{aligned} & 24.9 \\ & 44.0 \end{aligned}$ | $\begin{aligned} & 24.8 \\ & 43.7 \end{aligned}$ | $\begin{aligned} & 25.7 \\ & 45.8 \end{aligned}$ | $26.3$ <br> 47.8 | $\begin{array}{r}26.6 \\ 47.5 \\ \hline\end{array}$ | 47.4 | 25.8 | 24.3 | 24.9 | 23.0 | 23.0 |
|  |  |  |  |  |  |  |  |  |  |  | 46.7 <br> 126.2 | 7 43.8 <br> 2121.8  | 124.6 | 120.7 | 47.3125.1 |
|  |  | 120.4 | 120.9 | 120.9 | 120.6 | 120.2 | 123.6 | 125.9 | 128.4 | 129.0 | 126.2 |  |  |  |  |
| Nondurable goode |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Food and kindred | 1,143.7 | 1,102. 2 | 1,087. 6 | 1,086. 1 | 1,076.8 | 1,098.9 | 1, 146.6 | 1,187.6 | 1,265. 6 | 1,329.7 | 1,303.5 | 1,223.8 | 1,175.8 | 1,190.8 | 1,211.3 |
| Mest products. |  | - 241.6 | 239.2 | 237.8 | 240.1 | 243.3 | 250.9 | 254.7 | 255.0 | 251.0 | 253.1 | 251.5 | 253.0 | 254.3 | 257.8 |
| Dairy products |  | 151.8 | 149.5 | 5147.0 | 145.7 | 146.3 | 148.3 | 149.9 | 152.1 | 156.9 | 162. 4 | 164.8 | 163.2 | 163.0 | 160.7 |
| Canned and preserved lood, exce meats. |  | 155. 6 | 152.5 | 5151.5 | 144.3 | 150.6 | 165.2 | 190. 4 | 260.6 | 338.1 | 318.2 | 246. 4 | 197.8 | 200.2 | 206.1 |
| Grain mill produc |  | 88.0 | 85. 7 | 786.4 | 86.0 | - 86.8 | 86.8 | 86.9 | 90.2 | 81.8 | 92.1 | 82, 0 | 90.1 | 89.6 | 89.8 |
| Bakery products. |  | 174.8 | 173.5 | 5174.5 | 173.3 | 173.6 | 176. 7 | 178. 7 | 179.2 | 177.8 | 177.2 | 177.3 | 176.4 | 174.7 | 176.6 |
| Sugar |  | 24.2 | 21.5 | 5 21.0 | 22.5 | 28.9 | 38.4 | 39.8 | 38.9 | 26.1 | 24.1 81.4 | 23.4 88.7 | 22.8 <br> 57.2 | 28.4 62.8 | 30.2 <br> 83.5 <br> 8 |
| Confectionery and related |  | 58.1 | 58. 6 | 62.4 | 62.8 100.6 | 63.9 110.0 | 67.7 114.2 | 71.0 118.7 | 69.4 118.9 | 67.3 122.4 | 61.4 119.3 | 88.7 121.4 | 57.2 120.9 | 62.8 115.6 | 83.5 118.8 |
|  |  | 115.4 | 113.4 | 4111.2 | 100.6 | 6110.0 | 114.2 | 118.7 | 118.9 | 122.4 | 119.3 | 121.4 | 120.9 | 115.6 | 118.8 |
| Miscellaneous lood and kindred products |  | 92.7 | 93.7 | $7 \quad 94.3$ | 95.6 | 95.5 | 98.4 | 100.5 | 101.3 | 98.3 | 95.7 | 98.3 | 94.4 | 96.2 | 99.0 |
| Tobacco manui | 62.3 | 363.4 | 65.8 | $8 \quad 67.8$ | 73.2 | 76.5 | 81.9 | 84.1 | 98.7 | 105.1 | 90.4 | 65.2 | 64.7 | 79.4 | 83.3 |
| Cigarettes. |  | 30.7 | 30.9 | 31.0 | 30.7 | 31.0 | 31.1 | 30.9 | 30.8 | 31.7 | 31.8 | 31.7 | 31.5 | 31.6 | 32.2 |
| Clgars.-. |  | 20.0 | - 20.3 | 30.5 | 20.5 | $3 \quad 20.5$ | 21.2 | 21.3 | 20.9 | 21.1 | 20.9 | 20.3 | 21.3 | 23.1 | 20.0 |
| Textile mill products. | 774.9 | 769.3 | 769.9 | 969.2 | 786.1 | 1767.0 | 778.9 | 787.7 | 792.5 | 795. 7 | 798.2 | 786.0 | 803.4 | 793.2 | 826. 7 |
| Cotton brosd woven fabrles |  | 220.0 | 220.6 | 6 221.2 | 221.4 | 4223.0 | 224.8 | 225. 4 | 225.5 | 226.8 | 227.8 | 226.0 | 229.7 | 234.7 | 7244.1 |
| Stls and synthetic broad woven fabrics. |  | 63.2 | 22.9 | 962.8 | 62.9 | 93.4 | 63.8 | 63.6 | 63.3 | 63.9 | 63.9 | 62.1 | 63.7 | 63.1 | 66.9 |
| Weaving and finishing broad wookens |  | 44.1 | 144.3 | 344.5 | 44.4 | $4 \quad 42.8$ | 43.0 | 43.8 | 44.9 | 45.7 | 46.3 | 46.3 | 47.2 | 46.2 | 49.5 |
| Narrow fabrics and smallwares. |  | 23.3 | 23.3 | $3 \quad 23.2$ | 23.2 | 23.4 | 24.0 | 24. 2 | 23.9 | 24.1 | 23.9 | 23.3 | 24. 1 | 23.2 | 24.1 |
| Knitting... |  | 183.6 | 182.2 | 2181.7 | 178.8 | 177.2 | 182.4 | 189.4 | 193.2 | 194. 2 | 196.3 | 192.5 | 196.7 | 190.7 | 7184.3 |
| Finishing textlles, except wool and kuit. |  | 59.8 | 80.3 | 3 60.2 | 60.1 | 1.60 .3 | 61.2 | 61.2 | 61.3 | 61.1 | 61.0 | 60.5 | 62.1 27 | 60.9 | 64.1 |
| Floor covering. |  | 27.3 | 37.8 | $8 \quad 27.9$ | 28.2 | 28.6 | 29.2 | 29.2 | 28.8 | 7 28.4 | - 27.4 | 27.4 | 27.8 96.2 | 27.8 98.0 | 8 $\quad$30.4 <br> 8.9 |
| Yarn and thread-- |  | 93.6 54.4 | 6 93.4 <br> 4 55.1 | 4 93.0 <br> 1 54.7 | 783.0 <br> 54.1 | 03.1 <br> 5.2 | 94.6 <br> 55.9 | 94.8 56.1 | 95.4 <br> 56.2 | 95.5 <br> 56.3 | 86.2 <br> 55.4 | 63.9 54.0 | - 55.9 | 98.0 88.7 | 86.9 <br> 87.5 |

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

| Industry | 1963 |  |  |  |  |  | 1962 |  |  |  |  |  |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | June ${ }^{2}$ | May ${ }^{2}$ | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | 1961 | 1960 |
| Manufacturing-Continued |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nondurable goods-Continued |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Apparel and related products.-.-.-------- | 1,111.7 | 1,111. 6 | 1,105.9 | 1,127.5 | 1, 112. 3 | 1,081.3 | 1, 096.8 | 1,113. 1 | 1, 118. 5 | 1,125.3 | 1, 128.7 | 1,071. 2 | 1, 092.6 | 1,066.8 | 1,094.2 |
| Men's and boys' suits and coats.......-- | 1,111.7 | 106.0 | 104.4 | 105.6 | 105.9 | 106.1 | 106.3 | 105.8 | 106.4 | 107.6 | 107.5 | 103.1 | 106.7 | 104.3 | 108.9 |
| Men's and boys' furnishings ........-.-. |  | 307.5 | 305.1 | 301.6 | 300.0 | 297.2 | 300.5 | 303.7 | 304.4 | 305.7 | 305.8 | 294.2 | 300.6 | 273.7 | 279.6 |
| Women's, misses' and juniors' outerwear |  | 309.4 | 313.0 | 327.6 | 320.2 | 301.9 | 304.4 | 307.5 | 305.7 | 313.5 | 320.9 | 300.2 | 306.7 | 313.7 | 325.8 |
| Women's and children's undergarments |  | 108.1 | 108.3 | 108.3 | 107.5 | 106.0 | 109.3 | 111. 5 | 112.0 | 110.2 | 109.2 | 103.0 | 106. 2 | 104.8 | 106. 2 |
| Hats, caps, and millinery .-..----....---- |  | 28.7 | 30.2 | 35.6 | 34.9 | 32.4 | 30.2 | 28.8 | 31.8 | 32.1 | 32.7 | 28.2 | 27.8 | 31.1 | 32.4 |
| Girls' and children's outerweer |  | 69.9 | 65.5 | 71.0 | 70.7 | 68.0 | 67.2 | 68.7 | 69.1 | 69.1 | 70.5 | 69.9 58.8 | 70.5 59.4 | 66.4 | 67.5 |
| Fur goods and miscellaneous apparcl |  | 57.4 | 57.8 | 58.4 | 56.7 | 54.5 | 59.4 | 63.2 | 64.1 | 63.0 | 62.3 | 58.8 | 59.4 | 60.2 | 60.2 |
| Miscellaneous fabricated textile products. |  | 124.6 | 121.6 | 119.4 | 116.4 | 115.2 | 119.5 | 123.9 | 125.0 | 124.1 | 119.8 | 113.8 | 114.7 | 112.6 | 113.6 |
|  | 482.8 | 476.4 | 474.3 | 473.3 | 471.1 | 474.4 | 479.5 | 480.8 | 483.9 | 485.3 | 484. 0 | 476.3 | 482.7 183.9 | 469.5 | 474.0 |
|  |  | 181.7 | 180.8 | 179.7 | 179.8 | 181.3 | 182.5 | 183.1 | 183.9 54.9 | 184.9 54.4 | 186.6 53.4 | 183.0 52.8 | 183.9 55.2 | 181.4 54.0 | 181.9 56.4 |
| Paperboard.... |  | 55.0 | 53.8 | 54.5 | 54.4 | 54.8 | 54.9 | 54.8 | 54.9 | 54.4 | 63.4 | 52.8 | 55. 2 | 54.0 | 56.4 |
| Converted paper and paperboard products. $\qquad$ |  | 98.1 | 98.0 | 97.7 | 96.6 | 96.8 | 97.6 | 97.5 | 88.6 | 98.6 | 98.3 | 97.5 | 98.7 | 94.9 | 95.7 |
| Paperboard containers and boxes |  | 141.6 | 141.7 | 141.4 | 140.3 | 141.5 | 144.5 | 145.4 | 146.5 | 147.4 | 145. 7 | 143.0 | 144.9 | 139.1 | 140.1 |
| Printing, publishing, and allied industries. | 592.6 | 591.6 | 589.5 | 579.9 | 576.3 | 579.2 | 587.3 | 604.3 | 605.6 | 602.6 | 595.9 | 592.1 | 596.8 | 595.7 | 591.5 |
| Newspaper publishing and printing |  | 173.8 | 172.3 | 161.8 | 160.7 | 160.8 | 163.7 | 179.9 | 178.9 | 177.9 | 177.4 | 175.0 | 177.1 | 175.5 | 172.4 |
| Periodical publishing and printing. |  | 27.0 | 27.7 | 27.9 | 27.9 | 28.0 | 27.9 | 28.2 | 28. 2 | 27.8 | 26.7 | 26.4 | 26.4 | 29.7 | 29.8 |
| Books_-------------- |  | 47.1 | 46.4 | 46. 0 | 45.8 | 45.9 | 45. 7 | 46. 2 | 46.7 | 46.7 | 46.0 | 46.4 | 230.8 | 44.4 | 229.5 |
| Commercial printing |  | 227.0 | 226.9 | 228.6 | 226.8 | 229.3 | 232.8 | 232.0 | 232.3 | 231. 38 | 228.0 | 228.0 39.0 | 230.8 38.5 | 230.3 38.0 | 229.5 38.1 |
| Bookbinding and related industries |  | 39.9 | 39.4 | 38.9 | 38.4 | 38.7 | 39.1 | 39.1 | 39.3 | 38.8 | 40.1 | 39.0 | 38.5 | 38.0 | 38.1 |
| Other publishing and printing industries. |  | 76.8 | 76.8 | 76.7 | 76.7 | 76.5 | 78.1 | 78.9 | 80.2 | 79.0 | 77.7 | 77.3 | 77.9 | 77.9 | 78.8 |
| Chemicals and allied products.---------- | 528.2 | 529.9 | 532.2 | 522. 7 | 517.3 | 515.4 | 515.4 | 518.6 | 520.3 | 822.7 | 522.9 | 521.0 | 520.4 | 506.1 | 510.8 |
|  |  | 165.9 | 165.5 | 164.5 | 163.7 | 164.1 | 164.2 | 164. 9 | 164. 6 | 165.3 | 166.9 | 167.6 | 187.3 | 164.7 | 169.0 |
| Plastics and synthetics, except g |  | 111.6 | 110.1 | 109.5 | 109.8 | 110.7 | 110.4 | 111.0 | 110.8 | 111.9 | 110.8 | 110.7 | 107.0 | 102. 6 | 103. 5 |
| Drugs_-.-.-.-.-.-.-.-. |  | 61.5 | 61.2 | 60.6 | 60.5 | 60.3 | 60.1 | 60.1 | 59.4 | 59. 2 | 60.0 | 59.6 60.0 | 69.6 60.9 | 58.2 58.4 | 58.8 56.1 |
| Soap, cleaners, and toilet goods |  | 60.5 | 61.0 | 61.4 | 61.1 | 60.6 | 61.3 | 62.2 | 62.8 35.8 | 62.9 36.6 | 62.2 37.3 | 60.0 37.6 | 60.9 37.3 | 58.4 5 | 56.1 36.7 |
| Paints, varnishes, and allied products -- |  | 36.7 | 36.3 | 35.6 | 35.1 | 34.7 29 | 34.7 28.0 | 35.2 27.5 | 35.8 28.9 | 36.6 | 37.3 26.5 | 37.6 | 37.3 29.0 | 35.5 30.9 | 36.7 31.0 |
|  |  | 37.1 56.6 | 41.6 | 34.7 56.4 | 31.0 56.1 | 29.3 55.7 | 28.0 56.7 | 27.5 57.7 | 28.9 58.0 | 28.4 58.4 | 56.5 59.2 | 20.4 59.1 | 59.3 | 35.8 | 55. 6 |
| Other chemical products |  | 56.6 | 56.5 | 56.4 | 56.1 | 55.7 | 56.7 | 57.7 | 58.0 | 58.4 | 68.2 | 68.1 | 68.3 | 55.8 | 55.6 |
| Petroleum refining and related industries. | 122.2 | 121.5 | 119.4 | 117.7 | 117.7 | 117.2 | 118.7 | 120.4 | 121.3 | 122. 8 | 128. 4 | 129.7 | 129.9 | 130. 6 | 137.7 |
| Petroleum refining |  | 96.0 | 96.3 | 96.7 | 96.1 | 94. 9 | 95.4 | 95.8 | 95.9 | 96.8 | 102.6 | 104. 2 | 104.5 | 107.1 | 113.1 |
| Other petroleum and coal products |  | 25.5 | 23.1 | 21.0 | 21.6 | 22.3 | 23.3 | 24.6 | 25.4 | 25.7 | 25.8 | 25.5 | 25.4 | 23.5 | 24.6 |
| Rubber and miscellaneous plastic products. | 307.3 | 305.0 | 303.4 | 302.3 | 301.6 | 304.8 | 306.4 | 308.9 | 310.9 | 308.5 | 303.4 | 296. 1 | 303.5 | 280.2 | 288.7 |
| Tires and inner tubes |  | 76.4 | 76.0 | 75.7 | 75.7 | 76.7 | 76.9 | 76.5 | 76.5 | 77.0 | 75.8 | 75.0 | 76.1 | 73.0 | 78.2 |
| Other rubber products. |  | 126.3 | 125.9 | 126.1 | 126.2 | 129.0 | 129.8 | 130.1 | 130.7 | 129.9 | 127.5 | 122.9 | 127.7 | 117.0 | 120.8 |
| Miscellaneous plastic products |  | 102.3 | 101.5 | 100.5 | 99.7 | 99.1 | 99.7 | 102.3 | 103.7 | 101.6 | 100. 1 | 98.2 | 99.7 | 90.2 | 89.7 |
| Leather and leather product | 310.1 | 302.9 | 301.1 | 310.2 | 312.8 | 310.2 | 317.6 | 318.8 | 816.6 | 319.1 | 826.6 | 316.4 | 321.3 | 318.8 | 322.9 |
| Leather tanning and finishin |  | 27.9 | 27.6 | 27.7 | 28.2 | 28.9 | 29.3 | 29.1 | 29.0 | 28.8 | 28.8 | 27.7 | 28. 7 | 28.9 | 29.9 |
| Footwear, except rubber |  | 205.0 | 204.2 | 209.5 | 211.9 | 211.1 | 213.1 | 210.3 | 208.1 | 211.6 | 218.1 | 213.8 | 216.4 | 213.8 | 216.4 |
| Other leather products. |  | 70.0 | 69.3 | 73.0 | 72.7 | 70.2 | 75.2 | 79.4 | 79.5 | 78.7 | 79.7 | 74.9 | 76.2 | 76.2 | 76.5 |
| Transportation and public utillies: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Local and interurban passenger transit: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Local and suburban transportation.-.- |  | 81.7 | 81.6 | 82.2 | 82.4 | 82.9 | 83.3 | 83.5 44.4 | 83.9 44.9 | 84.2 46.2 | 83.9 46.6 | 84.1 46.9 | 85.0 46.4 | 86.7 45.0 | 89.2 44.6 |
|  |  | 45. 1 | 43.9 | 43.1 | 43.3 | 44.8 | 44.4 | 44.4 857.8 | 44.9 | 46.2 8027 | 46.6 | 46.9 840.8 | 46.4 840.5 | 45.0 800.0 | 44.6 801.8 |
| Motor freight transportation and storage. |  | 826.0 | 816.4 | 806.3 | 804.1 | 801.5 | 843.1 | 857.8 | 867.1 | 862.7 | 848.7 18.5 | 840.8 18.6 | 840.5 18.5 | 800.0 18.8 | 801.8 19.3 |
|  |  | 17.1 | 17.1 | 17.1 | 17.0 | 17.4 | 17.6 | 17.7 | 17.9 | 18.2 | 18.5 | 18.6 | 18.8 | 18.8 | 19.3 |
| Communication: Telephone communication |  | 556.3 | 555.6 | 554.2 | 553.3 | 554.0 | 556.8 | 558.2 | 559.1 | 563.5 | 569.3 | 568.7 | 563.3 | 568.7 | 581.9 |
| Telegraph communication ${ }^{\text {d }}$ |  | 24.5 | 24.5 | 24. 6 | 24.8 | 25. 2 | 25.9 | 26.0 | 26.0 | 26.4 | 26.7 | 26.9 | 26.7 | 26.9 | 27.9 |
| Radio and television broadcasting |  | 75.5 | 75.4 | 75.6 | 75.5 | 75.3 | 75.4 | 76.1 | 77.3 | 76.8 | 76.6 | 76.1 | 76. 4 | 78.3 | 77.9 |
| Electric, gas, and sanitary services. |  | 525.3 | 521.4 | 523.7 | 524. 1 | 525.9 | 528.5 | 530.1 | 531.7 | 538.7 | 545.8 | 544.8 | 539.3 | 538.7 | 543.6 |
| Electric companies and systems. |  | 210.7 | 208.0 | 211.5 | 211.5 | 211.7 | 212.2 | 212.6 | 213.2 | 216.1 | 218.5 | 218.0 | 215.7 | 216.8 | 220.2 |
| Gas compantes and systems. |  | 132.9 | 132.7 | 132.4 | 132.6 | 133.1 | 133.9 | 134. 5 | 134. 5 | 136.0 | 137.9 | 137.9 | 136.6 | 136. 4 | 137.3 |
| Combined utility systems.. |  | 154.8 | 154.0 | 153.6 | 154.0 | 155.1 | 156.2 | 156.8 | 157.5 | 159.9 | 161.9 | 161.4 | 160.0 | 159.4 | 159.4 |
| Water ${ }^{\text {steam, }}$, and sanitary systems. |  | 26.9 | 26.7 | 26.2 | 26.0 | - 26.0 | 26.2 | 26.2 | 26.5 | 26.7 | 727.5 | 27.8 | 27.0 | 26.1 | 26.7 |

See footnotes at end of table.

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

| Industry | 1963 |  |  |  |  | 1962 |  |  |  |  |  |  |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | June ${ }^{2}$ | May ${ }^{2}$ | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | 1961 | 1960 |
| Wholesale and retail trade 4 Wholesale trade |  | $\begin{array}{r} 8,875 \\ 2,645 \end{array}$ | $\begin{aligned} & 8,960 \\ & 2 \end{aligned}$ | 8,749 | 8,710 | $\begin{array}{r} 8,822 \\ 2,643 \end{array}$ | $\begin{gathered} 9,657 \\ 2,659 \end{gathered}$ | $\begin{array}{r} 9,100 \\ 2,676 \end{array}$ | $\left\lvert\, \begin{array}{r} 8,939 \\ 2,677 \end{array}\right.$ | $\left\lvert\, \begin{gathered} 8,868 \\ 2,668 \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} 8,791 \\ 2,671 \end{gathered}\right.$ | $\left\lvert\, \begin{array}{r} 8,775 \\ 2,657 \end{array}\right.$ | $\begin{array}{r} 8,817 \\ 2,642 \end{array}$ | $\left\|\begin{array}{c} 8,744 \\ 2,597 \end{array}\right\|$ | $\underset{8,810}{8,810}$ |
| Motor vehicles and automotive equipment |  | 193.6 | 192.6 | 191.6 | 2, 191.0 | 189.9 | 191.3 | -190.7 | 191.4 | 191.6 | 191.5 | 191.5 | 189.6 | 182.0 | 181.5 |
| Drugs, chemicals, and allied products.-- |  | 164.8 | 165.0 | 164.7 | 164.3 | 163.8 | 166.1 | 166.2 | 1654 | 164.5 | 165.0 | 163.7 | 162.8 | 158.7 | 155. 6 |
| Dry gonds and apparel............ |  | 111.6 | 111.1 | 111.4 | 110.5 | 111.4 | 112.0 | 112.3 | 113.0 | 112.5 | 113.0 | 113. 0 | 112.1 | 111.1 | 112.0 |
| Grocerles and related pro |  | 427.7 | 427.6 | 431.9 | 430.3 | 433.8 | 445. 6 | 445. 5 | 440.5 | 435.8 | 434.8 | 442.1 | 442.4 | 435.7 | 439. 1 |
| Electrical goods..............---...-....- |  | 190.9 | 190.4 | 189.5 | 189.5 | 189.5 | 189.4 | 188.8 | 188.1 | 187.4 | 188.8 | 188.7 | 187.2 | 179.5 | 183.6 |
| Hardware, plumbing and heating goods. |  | 124.9 | 125.0 | 124.1 | 123.8 | 123.5 | 124.6 | 124.9 | 125.3 | 125.7 | 126.2 | 125.9 | 125.6 | 124.0 | 127.7 |
| Machinery, equipment, and supplies... |  | 446.5 | 446.2 | 442.5 | 439.8 | 438.5 | ${ }^{438.8}$ | 437.2 | 437.2 | 438.3 | 437.4 | 436. 6 | 8 434.1 | 614.1 | 6 412.0 |
| Retall trade |  | 6,230 | 6, 319 | 6,113 | 6,077 | 6,179 | 6, 968 | 6, 424 | 6, 262 | 6, 200 | 6, 120 | 6,118 | 6, 175 | ${ }^{6} 1147$ | 6. 201 |
| General merchandise |  | 1,392.0 | 1,427.2 | 1,352.0 | 1,331.6 | 1,404.0 | 1, 910.3 | 1,567.6 | 1, 482.8 | 1, 430. 2 | 1,388. 2 | 1, 377.1 | 1,402. 4 | 1, 433.5 | 1, 447.9 |
| Department stores. |  | 824.5 292.2 | 842.9 306.4 | 798.6 284.8 | 785.6 278.2 | 837.3 289.0 | 1.163 .8 390.8 1 | 935.2 322.5 | 859.3 307.7 | 834.7 304.9 | 810.2 290 | 802.5 287.3 | 823.0 291.9 | 837.6 309 3 | 843.6 316.8 |
| Food stores. |  | 1,294.0 | 1,305.9 | 1,296. 7 | 1,302. 3 | 1,292. 7 | 1,321. 5 | 1,301.1 | $1,290.4$ | 1, 275.2 | 1,272. 6 | 1,283. 9 | 1,283 1 | 1.273 4 | 1,273 1 |
| Orncery, meat, and vegetable |  | 1, 133.1 | 1, 136.4 | 1, 137.0 | 1, 136.4 | 1, 133. 2 | 1, 152.4 | 1, 139.9 | 1, 131.8 | $1,119.1$ | $1,118.5$ | 1,127. 6 | 1, 126.0 | 1, 109.7 | 1, 106. 5 |
| Apparel and accessorles stores.. |  | 608.9 | 667.7 | 582.9 | 572.1 | 599.3 | 737.7 | 632.7 | 611.9 | 6010 | 569.5 | 569.5 | 601.9 | 586.9 | 582.3 |
| Men's and boy's apparel stor |  | 99.0 237 | 102.9 | 96.9 229.9 | 99.4 | 107.1 | 135.3 | 108. 3 | 100.5 | 98 29 29 | 96.2 218.4 | 98.0 219.4 | 103.1 | 97.9 225 | 95.6 223 |
| Family clothing stores |  | 92.0 | 95.0 | 90.2 | 89.5 | 95. 2 | 123.2 | 992 | 94.2 | 93.1 | 88.5 | 88.2 | 92.5 | 89.8 | 88.1 |
| Shoe stores |  | 108.6 | 142.0 | 100.9 | 97.5 | 100.1 | 118.6 | 105.9 | 106. 4 | 108.3 | 101.5 | 101. 6 | 107.5 | 102.9 | 106.3 |
| Furniture and applianc |  | 368.7 | 368.5 | 369.1 | 367.7 | 370.4 | 387.2 | 373. 9 | 368.9 | 367.8 | 364.0 | 363. 4 | 365. 4 | 364. 2 | 368.9 |
| Other retall trade - |  | 2, 566. 4 | 2,549.5 | 2, 512.4 | 2,503.3 | 2,512.4 | 2,611.4 | 2,548. 4 | 2, 527.7 | 2, 525.7 | 2, 522.1 | 2, 5242 | 2. 522.2 | 2, 489.7 | 2, 528.3 |
| Motor vehtcle deale |  | 621.6 | 618.0 | 616.3 | 614.8 | 611.8 | 607.0 |  | 600.0 |  |  |  |  |  |  |
| Other vehlele and accessory |  | 120.4 | 117.9 | 113.0 | 111.6 | 113.5 | 122.9 | 118.8 | 114.1 | 114.3 | 115. 4 | 116. 2 | 116.3 | 117.7 | ${ }_{347.1}^{123}$ |
| Drug stores. |  | 355.4 | 355.6 | 354.2 | 352.5 | 355.9 | 375.0 | 359.8 | 357.5 | 355.5 | 355.1 | 351.1 | 353.1 | 348.4 | 347.5 |
| Finance, Insurance, and real estate: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Security dealers and |  | 111.0 | 110.4 | 111.1 | 110.5 | 109.8 | 110.6 | 111.5 | 113.3 | 116.1 | 121.4 | 123.1 | 122.7 | 119.0 | 1070 |
| Insurance carriers. |  | 785.2 | 783.6 | 786.0 | 784.1 | 781.0 | 783.2 | 782.8 | 7816 | 783.8 | 789.7 | 786.3 | 779.6 | 777.0 | 763.9 |
| Life Insurance |  | 430.9 | 430.1 | 431.8 | 430.7 | 429.3 | 429.2 | 428.5 | 428.2 | 429.5 | 431.3 | 429.2 | 427.0 | 428.8 | 420.7 |
| Accident and health insurance |  | 47.3 | 46.9 | 47.1 | 46.9 | 46.7 | 46.9 | 47.2 | 47.2 | 47.3 | 47.8 | 47.8 | 47.5 |  | 46.0 |
| Fire, marine, and casualty insurance..-- |  | 270.1 | 269.7 | 270.1 | 269.7 | 268.2 | 270.0 | 270.1 | 269.2 | 270.2 | 272.7 | 271.4 | 267.8 | 265.2 | 260.3 |
| Services and miscellaneous: <br> Hotels and lodging places: <br> Hotels, tourist courts, and motels. <br> Personal ser vices: <br> Laundries, cleaning and dyeing plants_ <br> Motion pletures: <br> Motion picture flming and distributing |  | 558.3 | 541.8 | 533.7 | 531.7 | 525. 2 | 528.0 | 529.7 | 538.3 | 565.4 | 606.3 | 605.0 | 579.9 | 503.8 | 485.0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 367.0 | 365.3 | 356.7 | 355.2 | 360.0 | 361.0 | 364.6 | 368.0 | 369.4 | 369.9 | 378. | 380.3 | 377.9 | 389.2 |
|  |  | 21.6 | 20.9 | 21.6 | 22.2 | 23.4 | 24.7 | 23.9 | 24.1 | 24.1 | 24.2 | 23.9 | 23.6 | 28.1 | 29.0 |

${ }^{1}$ For comparability of data with those publiched in issues prior to December 1961 and coverace of these serles, see footnote 1, table A-2.
For mining, manufacturing, and laundries, cleaning and dyeing plants, data refer to production and related workers; for contract construction, to construction workers; and for all other industries, to nonsupervisory workers.
Production and related workers include workink foremen and all nonsupervisory workers (inciuding leadman and trainees) engaged in fabricating. processing assembling, inspection, recelving, storace, handling, packing, processing assembing, inspertion, recelving, storace, handing, parking, warehousing, shipping, maintenance, repair, janitorial and, watchmen (e.g., power plant), and recordkeeping and other services closely associated with the above production operations.

Construction workers include working foremen, Journeymen, mechanics, apprentices, laborers, etc., engaged in new work, alterations, demolition, repair, and maintenance, etc., at the site of construction or working in shop or yards at jobs (such as precutting and preassembling) ordinarily performed by members of the construction trades.
Nonsupervisory workers include employees (not above the working superVisory level) such as office and clerical workers, repairmen, salespersons, operators, drlvers, attendants, service employees, linemen, laborers, janitors, watchmen, and similar occupational levels, and other employees whose services are closely associated with those of the employees listed.

2 Preliminary.
${ }_{3}$ Data relate to nonsupervisory employees except messengers.
4 Excludes eating and drinking places.

The revised series on employment, hours and earnings, and labor turnover in nonagricultural establishments should not be compared with those published in issues prior to December 1961. (See footnote 1, table A-2, and "Technical Note, The 1961 Revision of the BLS Payroll Employment Statistics," Monthly Labor Review, January 1962, pp. 59-62.) Moreover, if future benchmark adjustments require further revisions, the figures presented in this issue should not be compared with those in later issues which reflect the adjustments.

Comparable data for earlier periods are published in Employment and Earnings Statistics for the United States, 1909-60 (BLS Bulletin 1312), which is available at depository libraries or which may be purchased from the Superintendent of Documents for $\$ 3$. For an individual industry, earlier data may be obtained upon request to the Bureau.

Table A-4. Employees in nonagricultural establishments, by industry division and selected groups, seasonally adjusted ${ }^{1}$
[In thousands]


TABLE A-5. Production workers in manufacturing industries, by major industry group, seasonally adjusted ${ }^{1}$
[In thousands]


[^55]Table A-6. Unemployment insurance and employment service program operations ${ }^{1}$
[All items except average benefit amounts are in thousands]

| Item | 1963 |  |  |  |  | 1962 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | May | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | May |
| Employment service: ${ }^{2}$ | $\begin{aligned} & 911 \\ & 612 \end{aligned}$ | $\begin{aligned} & 904 \\ & 581 \end{aligned}$ | $\begin{aligned} & 861 \\ & 496 \end{aligned}$ | $\begin{aligned} & 904 \\ & 423 \end{aligned}$ | $\begin{array}{r} 1,097 \\ \quad 459 \end{array}$ | $\begin{aligned} & 766 \\ & 434 \end{aligned}$ | $\begin{aligned} & 907 \\ & 533 \end{aligned}$ | $\begin{aligned} & 948 \\ & 643 \end{aligned}$ | 856652 | $\begin{aligned} & 879 \\ & 642 \end{aligned}$ | $\begin{aligned} & 914 \\ & 580 \end{aligned}$ | $1,102$ | $\begin{aligned} & 899 \\ & 656 \end{aligned}$ |
| Nonfarm placements.- |  |  |  |  |  |  |  |  |  |  |  |  |  |
| State unemployment insurance programs: Initial claims ${ }^{3} 4$ | 1,079 | 1,216 | 1,127 | 1,308 | 2,102 | 1,747 | 1,353 | 1,267 | 956 | 1,197 | 1,395 | 1,083 | 1,133 |
| Insured unemployment ${ }^{\circ}$ (average weekly volume) $\qquad$ | 1,624 | 1,918 | 2, 298 | 2,546 | 2, 591 | 2,063 | 1,625 | 1,385 | 1,331 | 1,469 | 1,543 | 1,469 | 1,1380 |
| Rate of insured unemployment 6. | 1, 3.9 | 4.7 | 5.6 | 6.2 | 6.3 | 5.1 | 1.0 | 1,384 | 1,3.3 | 1,469 | 1,543 | 1,469 | 1,570 |
| Weeks of unemployment compensated...- | 6,732 | 7,919 | 9, 091 | 9,025 | 10,002 | 6,307 | 5,702 | 5,207 | 4,695 | 5,781 | 5,563 | 5,507 | 6,391 |
| A verage weekly benefit amount for total unemployment | \$34.91 | \$35. 54 | \$35. 80 | \$35. 70 | \$35. 52 | \$35. 11 |  |  |  |  |  |  |  |
| Total benefits paid | \$235, 851 | \$274, 798 | \$316, 422 | \$313, 272 | \$342, 411 | \$214, 203 | \$193, 551 | \$176,608 | \$160, 559 | \$197, 414 | \$186,965 | $\$ 188,871$ | $\begin{array}{r} \$ 34.04 \\ \$ 215,015 \end{array}$ |
| Unemployment compensation for ex-servicemen: ${ }^{78}$ <br> Initial claims ${ }^{3}$ | 20 |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 23 | 25 | 27 | 39 | 31 | 29 | 31 | 27 | 39 | 30 | 25 | 22 |
| volume) .-... | 47 | 58 | 71 | 77 | 77 | 65 | 57 | 52 | 52 | 52 | 46 | 40 | 40 |
| Weeks of unemployment compensated. | 203 | 267 | 303 | 306 | 338 | 235 | 222 | 214 | 200 | 211 | 175 | 165 | 177 |
| Total benefits paid | \$6, 760 | \$8, 797 | \$9, 932 | \$10,027 | \$11, 100 | \$7,679 | \$7, 298 | \$7,019 | \$6,549 | \$6, 934 | \$5,659 | \$5,420 | \$5,703 |
| Unemployment compensation for Federal civilian employees: 89 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 11 | 13 | 11 | 12 | 20 | 12 | 12 | 14 | 10 | 12 | 15 | 10 | 11 |
| Insured unemployment ${ }^{5}$ (average weekly volume) | 28 | 31 | 35 | 38 | 37 | 31 | 29 | 27 | 25 | 26 | 26 | 24 | 26 |
| Weeks of unemployment compensated.-. | 119 | 137 | 150 | 148 | 156 | 116 | 115 | 111 | 98 | 114 | 97 | 107 | 114 |
| Total benefits paid.- | \$4,678 | \$5,241 | \$5, 591 | \$5,433 | \$5, 744 | \$4, 262 | \$4, 282 | \$4,182 | \$3,797 | \$4,354 | \$3,653 | \$4,172 | \$4, 297 |
| Railroad unemployment insurance: Applications ${ }^{10}$. $\qquad$ | 4 | 4 | 5 | 7 | 19 | 12 | 16 | 16 | 32 | 22 | 65 | 7 | 4 |
| Insured unemployment (average weekly volume) $\qquad$ | 39 | 49 | 57 | 64 | 73 | 61 | 61 | 60 | 65 | 50 | 52 | 44 | 52 |
| Number of payments ${ }^{11}$ | 99 | 118 | 138 | 137 | 173 | 132 | 133 | 148 | 124 | 129 | 98 | 108 | 125 |
| Average amount of benefit payment | \$74.44 | \$77. 11 | \$80.24 | \$80.58 | \$79.97 | \$79,56 | \$78.73 | \$74.47 | \$83. 26 | \$78.53 | \$75. 84 | \$71.91 | \$73. 03 |
|  | \$7,333 | \$9,005 | \$11, 004 | \$10, 881 | \$13, 732 | \$10,358 | \$10, 373 | \$11, 081 | \$10,134 | \$10,081 | \$7, 256 | \$7,825 | \$9,052 |
| All programs: ${ }^{14}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Insured unemployment - | 1,799 | 2,089 | 2,465 | 2,726 | 2,778 | 2,223 | 1,780 | 1,539 | 1,497 | 1,628 | 1,699 | 1,614 | 1,719 |

${ }^{1}$ Includes data for Puerto Rico, beginning January 1961 when the Commonwealth's program became part of the Federal-State UI system.
3 Includes Guam and the Virgin Islands.
8 Initial claims are notices filed by workers to indicate they are starting periods of unemployment. Excludes transitional claims.
periods of unemployment. Excludes transitional cla
: Includes interstate claims for the Virgin Islands. ${ }^{8}$ Numbe
oyment. the average covered employment in a 12 -month period.
${ }^{7}$ Excludes data on claims and payments made jointly with other programs.
8 Includes the Virgin Islands.

- Excludes data on claims and payments made Jointly with State programs.
${ }^{10}$ An application for benefits is filed by a railroad worker at the beginning of his first period of unemployment in a benefit year; no application is required for subsequent periods in the same year.
${ }_{11}$ Payments are for unemployment in 14-day registration periods.
adjusted for recovery of overpayments or fer all compensable periods, not adjusted for recovery of overpayments or settlement of underpayments.
${ }^{18}$ Adjusted for recovery of overpayments and settlement of underpayments.
${ }^{14}$ Represents an unduplicated count of insured unemployment under the State, Ex-servicemen and UCFE programs and the Railroad Unemployment Insurance Act.
Source: U.S. Department of Labor, Bureau of Employment Security for all items except railroad unemployment insurance, which is prepared by the all items except railroad unemploy


## B.-Labor Turnover

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

| Major industry group | 1963 |  |  |  | 1962 |  |  |  |  |  |  |  |  | Annual a verage |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | May ${ }^{2}$ | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | May | 1961 | 1960 |
|  | Accessions: Total ${ }^{8}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Manufacturing: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Seasonally adjusted | 3.9 | 4.2 | 4.1 | 3. 9 | 3. 8 | 3.5 | 3. 6 | 4.0 | 8.8 | 4.0 | 4.1 | 8. 9 | 4.8 | 4.1 | 3.8 |
| Durable goods--.-.----- | 3. 8 | 3.8 | 3. 5 | 3.2 | 3. 5 | 2. 3 | 2.8 | 3.6 | 4. 5 | 4.6 | 3.8 | 4. 5 | 4.1 | 3.9 | 3.5 |
| Ordnance and accessories......-.......- | 2.3 | 2.2 | 2.0 | 2.2 | 2.4 | 1.6 | 1.9 | 2.4 | 2.5 | 2.6 | 3.0 | 3.9 | 2.9 | 2.8 | 2.6 |
| Lumber and wood products, except furniture | 8.6 | 6. 6 | 5.9 | 4.5 | 4.7 | 2.5 | 3.2 | 4.5 | 5.4 | 5.4 | 6.3 | 8.8 | 7.5 | 5.3 | 4.8 |
| Furniture and fix tures .-.-.-...-.-.-...- | 4.2 | 4.4 | 3.7 | 3. 9 | 4. 1 | 2.5 | 3.3 | 4.3 | 5. 0 | 6.0 | 5.2 | 4.7 | 5.1 | 4.1 | 3.9 |
| Stone, clay, and glass products | 4.2 | 5.6 | 4.7 | 3.4 | 3. 5 | 1.9 | 2. 4 | 2.8 | 3.3 | 4.0 | 3. 8 | 4.8 | 4. 6 | 3. 6 | 3.4 |
| Primary metal industries. | 3. 5 | 3. 8 | 3.6 | 3. 6 | 3.4 | 2.3 | 2.5 | 2.7 | 2.7 | 3.3 | 2.8 | 2.8 | 2.5 | 3.4 | 2.4 |
| Fabricated metal products | 4. 1 | 4.3 | 3.8 | 3. 2 | 3.7 | 2.5 | 3.0 | 3.9 | 4. 5 | 5.5 | 4.0 | 4.6 | 4.5 | 4.4 | 3.9 |
| Machinery-.-.-.-.-.-.-.-.- | 2.5 3.1 | 2.7 2.9 | 2.8 2.7 | 2.7 | 3. 0 3.0 | 2.1 2.1 | 2.3 2.7 | 2.8 3.4 | 2.9 3.8 | 3.2 4.0 | 2.9 3.5 | 3.7 4.4 | 3.1 3.8 | 3.0 3.6 | 2.9 3.2 |
| Transportation equipment. | 3.6 | 3.8 | 3.4 | 3.2 | 3.7 | 2.8 | 3.5 | 4.5 | 8.0 | 6.1 | 4.2 | 4.4 | 3.8 4.3 | 4.7 | 3.3 4.3 |
| Instruments and related products | 2.5 | 2.5 | 2.4 | 2.4 | 2.6 | 1.7 | 2.4 | 2.6 | 2.6 | 3.4 | 2.8 | 3.9 | 2.7 | 2.6 | 2.4 |
| Miscellaneous manufacturing industries. | 5.0 | 5.8 | 5.2 | 5.1 | 6.3 | 2.4 | 3.6 | 5.8 | 6.8 | 6.9 | 6.0 | 6.2 | 6.4 | 5.6 | 5.3 |
| Nondurable goods. | 4.1 | 3.8 | 3.5 | 3.4 | 3.7 | 2.5 | 3.1 | 4.2 | 5.3 | 5.8 | 5.4 | 5.7 | 4.5 | 4.2 | 4.1 |
| Food and kindred products | 5.5 | 4.9 | 4. 2 | 3. 8 | 4.1 | 3. 2 | 3. 9 | 6.4 | 9. 2 | 10.0 | 9.1 | 9.0 | 6.6 | 5.9 | 6.0 |
| Tobacco manufactures. | 2.1 | 1.7 | 2.7 | 2.6 | 3.7 | 5.9 | 5. 5 | 4. 4 | 16.0 | 18.8 | 8.9 | 3.2 | 3.0 | 6.1 | 5.6 |
| Textile mill products | 3.9 | 3.6 | 3.5 | 3.3 | 3.3 | 1.9 | 2.7 | 3.5 | 3.8 | 4.2 | 3.9 | 4.2 | 4.1 | 3.5 | 3.2 |
| Apparel and related product | 5. 8 | 5. 1 | 4.6 | 5.3 | 5. 8 | 3.1 | 4.4 | 5.3 | 5. 2 | 6.2 | 6.7 | 6. 6 | 6.1 | 5. 6 | 5.3 |
| Paper and allied products-.---1------ | 2.7 | 2.7 | 2.4 | 2.1 | 2.2 | 1.6 | 1.9 | 2.4 | 2.8 | 3.0 | 2.9 | 4.1 | 2.8 | 2.6 | 2.6 |
| dustries .-.-.-........-. | 2.8 | 2.7 | 2.6 | 2.6 | 2.9 | 2.0 | 2.5 | 3.2 | 3.7 | 3.4 | 3.2 | 4.1 | 2.9 | 2.9 | 3.0 |
| Ohemicals and allied products- | 2.0 | 2.6 | 2.4 | 1.9 | 2.0 | 1.3 | 1.4 | 1.8 | 2.1 | 2.0 | 2.0 | 3.3 | 2.2 | 2.1 | 2.0 |
| Petroleum refining and related industries. | 1.7 | 2.1 | 1.6 | . 9 | 1.3 | . 6 | . 8 | 1.2 | 1.5 | 1.7 | 1.5 | 2.7 | 1.6 | 1.3 | 1.2 |
| Rubber and miscellaneous plastic products. | 3.5 | 3.7 | 3.3 | 2.9 | 3.1 | 2.2 | 3.0 | 3.7 | 4.5 | 4.3 | 4.1 | 4.4 | 4.1 | 3.8 | 3.1 |
| Leather and leather products.--- | 5. 6 | 4.4 | 4.1 | 4.2 | 5.9 | 3.5 | 4.4 | 4.8 | 4.7 | 5.5 | 6.1 | 6.1 | 5.3 | 5.0 | 4.8 |
| Nonmanufacturing: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Metal mining | 2.8 | 5.9 | 3.0 | 2.9 | 3.2 | 2.0 | 2.9 | 2.7 | 2.9 | 2.4 | 2.4 | 3.8 | 3.4 | 2.7 | 3.4 |
| Coal mining | 1.9 | 2.2 | 2.4 | 2.2 | 2.2 | 1.4 | 1.5 | 1.7 | 2.5 | 2.5 | 1.4 | 1.2 | 1.8 | 2.1 | 1.6 |
|  | Accessions: New hires |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Actual | 2.4 2.5 | 2.3 | 2.0 2.4 | 1.8 | 1.8 | 1.2 8.2 | 1.8 | 2.5 | 3.1 | 3.2 2.4 | 2.9 2.5 | 3.4 | 2.8 2.9 | 2.2 | 2.2 |
| Durable goods. | 2.2 | 2.1 | 1.8 | 1.7 | 1.7 | 1.1 | 1.6 | 2.2 | 2.6 | 2.6 | 2.4 | 3.1 | 2.6 | 1.9 | 1.9 |
| Ordnance and accessories | 1.3 | 1.3 | 1.1 | 1.3 | 1.4 | . 9 | 1.2 | 1.5 | 1.8 | 1.8 | 2.2 | 2.9 | 2.0 | 1.9 | 1.8 |
| Lumber and wood products, except furniture | 5.9 | 4.6 | 3.7 | 3.0 | 2.7 | 1.7 | 2.5 | 3.6 | 4.4 | 4.6 | 4.7 | 6.2 | 5.4 | 3.3 | 3.4 |
| Furniture and fixtures..... | 3.5 | 3.3 | 2.7 | 2.7 | 2.7 | 1.5 | 2.5 | 3.4 | 4.3 | 4.8 | 4.2 | 3.9 | 4.1 | 2.7 | 2.8 |
| Stone, clay, and glass products | 2.6 | 2.7 | 2.1 | 1.5 | 1.3 | . 9 | 1.3 | 1.8 | 2.1 | 2.5 | 2.5 | 3.3 | 3.1 | 1.8 | 2.0 |
| Primary metal industries. | 1.7 | 1.4 | 1.0 | . 9 | . 9 | . 6 | . 7 | . 9 | 1.0 | 1.0 | . 9 | 1.3 | 1.1 | . 9 | . 8 |
| Fabricated metal products. | 2.6 | 2.4 | 2.0 | 1.7 | 1.9 | 1.3 | 1.8 | 2.6 | 3.0 | 2.9 | 2.5 | 3.2 | 2.9 | 2.1 | 2.1 |
| Machinery | 1.8 | 1.9 | 1.8 | 1.8 | 1.9 | 1.1 | 1.4 | 1.7 | 1.9 | 1.9 | 1.9 | 2.7 | 2.2 | 1.6 | 1.7 |
| Electrical equipment and supplies. | 1.7 | 1.6 | 1.5 | 1.5 | 1.6 | 1.2 | 1.7 | 2.2 | 2.7 | 2.6 | 2.2 | 3.2 | 2.6 | 2.0 | 2.0 |
| Transportation equipment.- | 1.6 | 1.9 | 1.7 | 1.6 | 1. 6 | 1.2 | 1.8 | 2.4 | 2.9 | 2.1 | 2.0 | 2.5 | 2.2 | 1.6 | 1.7 |
| Instruments and related products----- | 1.7 | 1.7 | 1.7 | 1.6 | 1.8 | 1.1 | 1.7 | 2.0 | 2.0 | 2.2 | 2.2 | 3.3 | 2.1 | 1.7 | 1.7 |
|  | 3.2 | 3.2 | 2.6 | 2.6 | 2.6 | 1.5 | 2.4 | 4.3 | 5.3 | 5.2 | 4.2 | 4.7 | 4.3 | 3.6 | 3.4 |
| Nondurable goods. | 2.6 | 2.4 | 2.1 | 1. 9 | 2.1 | 1.3 | 1.9 | 2.8 | 3.7 | 3.9 | 3.5 | 3.9 | 2.9 | 2.5 | 2.5 |
| Food and kindred produc | 3.4 | 2.8 | 2.1 | 1. 9 | 2.1 | 1.7 | 2.2 | 4.1 | 6.0 | 6.5 | 5. 8 | 6. 0 | 3. 9 | 3.4 | 3.5 |
| Tobacco manufactures. | 1.0 | 1.0 | 1. 6 | 1.1 | 2. 0 | 3.3 | 2. 3 | 3.1 | 10.5 | 7.8 | 2.5 | 1. 6 | 1.3 | 3. 2 | 2.9 |
| Textile mill products.. | 2.8 | 2.4 | 2.2 | 2.0 | 1.9 | 1.2 | 1.8 | 2.5 | 2.8 | 3.2 | 2.7 | 3.1 | 3.0 | 2.2 | 2.0 |
| Apparel and related products...------- | 3.6 | 3.4 | 3.1 | 3.1 | 3.2 | 1.5 | 2.7 | 3.6 | 3.8 | 4.5 | 4.2 | 4.0 | 3. 9 | 3.1 | 3.2 |
| Paper and allied products----7.------ | 1.8 | 1.7 | 1.4 | 1.2 | 1.3 | . 9 | 1.2 | 1.8 | 2.2 | 2.2 | 2.1 | 3.2 | 2.0 | 1.7 | 1.8 |
| Printing, publishing, and allied industries. | 2.1 | 2.0 | 1.9 | 1.8 | 2.1 | 1.3 | 1.9 | 2.5 | 3.0 | 2.7 | 2.6 | 3.3 | 2.3 | 2.1 | 2.4 |
| Chemicals and allied products.-- | 1.4 | 1.8 | 1.6 | 1.2 | 1.2 | . 7 | 1.0 | 1.2 | 1.5 | 1.4 | 1.5 | 2.6 | 1.6 | 1.4 | 1.4 |
| Petroleum refining and related industries. | 1.2 | 1.3 | . 9 | . 5 | . 7 | . 4 | . 6 | . 9 | 1.1 | 1.3 | 1.2 | 2.2 | 1.2 | . 9 | . 8 |
| Rubber and miscellaneous plastic products. | 2.2 | 2.0 | 1.8 | 1.7 | 1.6 | 1.1 | 1.7 | 2.5 | 3.3 | 3.0 | 2.3 | 3.1 | 2.6 | 1.9 | 1.7 |
| Leather and leather products...........-- | 3.2 | 2.6 | 2.3 | 2.4 | 3.3 | 2.1 | 2.8 | 3.1 | 3.2 | 3.9 | 3.7 | 4.1 | 3.2 | 2.9 | 2.9 |
| Nonmanufacturing: | 1.3 | 1.7 | 1.5 | 1.3 | 1.6 | 1.1 | 1.2 | 1.4 | 1.4 | 1.3 | 1.3 | 2.8 | 2.0 | 1.2 | 1.9 |
|  | . 8 | . 8 | . 7 | 1.0 | . 6 | . 4 | . 6 | . 8 | . 7 | . 7 | . 5 | . 4 | . 5 | . 6 | . 4 |

Ses footnotes at end of table.

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

| Major industry group | 1963 |  |  |  |  | 1962 |  |  |  |  |  |  |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | May ${ }^{2}$ | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | May | 1961 | 1960 |
|  | Separations: Total ${ }^{\text {\% }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Seasonally adjusted | 3. 8 | ${ }_{3.6}{ }^{\text {a }}$ | 8.7 | 3.7 | 3.9 | 3.8 S. | 8.9 | 8.8 | 4.1 | 4.8 | 4.6 | 4.8 | 4.1 |  |  |
|  | 3.2 | 3.3 | 3.3 | 3.1 | 3.7 | 3.4 | 3.6 | 3. 9 | 4.3 | 5.4 | 4.4 | 3. 8 | 3. 6 | 3.9 | 4.3 |
| Ordnance and accessories .-..-.-........ | 2.5 | 2.6 | 4.2 | 3.1 | 3.2 | 2.1 | 2.7 | 2.7 | 3.4 | 2.9 | 2.2 | 2.7 | 2.5 | 2.3 | 2.4 |
| Lumber and wood products, except furniture | 4.8 | 5.3 | 5. 5 | 4.7 | 5.0 | 5. 5 | 6.2 | 5.6 | 6. 7 | 6. 8 | 5. 7 | 4.7 | 4.7 | 5. 5 | 6.1 |
|  | 4.4 | 4.4 | 4. 4 | 3.8 | 4.5 | 3. 6 | 4.2 | 4. 6 | 5. 2 | 5.7 | 5.2 | 4. 6 | 4.7 | 4. 3 | 4.6 |
| Stone, clay, and glass products | 2.8 | 3.0 | 2.9 | 3.3 | 4.9 | 5.1 | 4.0 | 4.1 | 4. 9 | 4.5 | 3. 5 | 33 | 3.7 | 3. 8 | 4.1 |
| Primary metal industries...-. | 2.2 | 2. 1 | 2. 1 | 2.2 | 2. 6 | 2. 5 | 2. 9 | 3. 5 | 3. 8 | 3. 6 | 4.1 | 4.4 | 4.5 | 2.8 | 4.0 |
| Fabricated metal products | 3. 6 | 3. 5 | 3. 8 | 3. 6 | 4.2 | 3. 5 | 3. 9 | 4. 7 | 4. 9 | 4.7 | 5. 4 | 41 | 36 | 4.5 | 4.8 |
| Machinery-..-.......-...--. | 2.8 3.0 | 2. ${ }^{2} 1$ | 2.5 3.5 | 2.3 3.0 | 2.8 3.6 | 2.1 2.8 | 2. ${ }^{2} 18$ | 2. 94 | 3.5 4.0 | 3.8 <br> 3 | 3. 0 | 3. 0 | 2. 31 | 3 3 3 3 2 | 3. ${ }^{4}$ |
| Transportation equipment.. | 3. 6 | 3.8 | 3. 4 | 3.3 | 3.7 | 3.0 | 3. 4 | 3.8 | 4.1 | 10.6 | 6.5 | 3. 9 | 3. 6 | 5. 0 | 5.2 |
| Instruments and related products....... Miscellaneous manufacturing indus- | 2.5 | 2.3 | 2.4 | 2.4 | 2.6 | 2.1 | 2.8 | 3.0 | 3.3 | 3.1 | 2.4 | 2.6 | 2.3 | 2.6 | 2.7 |
|  | 4.3 | 4.7 | 4.2 | 3.8 | 5.6 | 12.2 | 8.2 | 5.6 | 5.6 | 6.1 | 5.4 | 5. 2 | 4.8 | 5.8 | 5.9 |
|  | 3.8 | 3.9 | 3.7 | 3.3 | 4.3 | 4.3 | 4.5 | 5.0 | 5.8 | 4.8 | 4.3 | 3.8 | 4. 1 | 4.2 | 4.4 |
| Food and kindred products...-....-. -- | 4.3 | 4. 8 | 4.8 | 4.6 | 6.3 | 6. 2 | 6. 8 | 8.2 | 9.3 | 6. 7 | 5. 9 | 5. 0 | 5. 1 | 5. 9 | 6.0 |
| Tobacco manufactures..- | 4.1 | 4.0 | 7.2 | 9.5 | 7.0 | 10.8 | 16.9 | 10.8 | 5. 4 | 2. 9 | 2. 3 | 2.4 | 2.7 | 5. 9 | 5. 9 |
| Textile mill products_ | 3.7 | 3.7 | 3.5 | 3.1 | 3.9 | 3. 4 | 3. 7 | 3. 8 | 4.5 | 4. 5 | 3. 9 | 3.4 | 3. 6 | 3. 4 | 3. 7 |
| Apparel and related produc | 5.7 2.4 | 6. 2.5 | 4.8 2.4 | 4.2 2.3 | 5. 2.8 2.8 | 5. <br> 2. 5 | 5. 2.7 | 5.7 2.8 | 5. 4.2 | 5.8 3.4 | 6.3 2.5 | 5. 2.4 | 6.2 2.6 | 5.7 2.7 | 6. 2.9 |
| Printing, publishing, and allied industries. $\qquad$ | 2.8 | 2.6 | 2.7 | 2.3 | 2.9 | 2.7 | 2. 9 | 3.1 | 4.1 | 3. 5 | 2.5 | 3. 0 | 2. 9 | 2. 9 | 2.8 |
| Chemicals and allied products ----...-- | 2.6 | 1.9 | 1.7 | 1.4 | 1.7 | 1.6 | 2.0 | 1.8 | 3.1 | 2.4 | 1.9 | 2.3 | 2.5 | 2.0 | 2.1 |
| Petroleum refining and related industrles. | 1.4 | 1.6 | 1.8 | 1.9 | 1.8 | 2.1 | 2.2 | 1.8 | 2.7 | 2.5 | 1.5 | 1.6 | 1.6 | 1.6 | 1.6 |
| Rubber and miscellaneous plastic products. $\qquad$ | 3.1 | 3.1 | 3.5 | 2.9 | 3.5 | 2.8 | 3.5 | 3.9 | 4.5 | 4.1 | 4.0 | 3.2 | 3.2 | 3.5 | 3.9 |
| Leather and leather products......-.....- | 4.6 | 5. 9 | 4.7 | 3.8 | 5. 2 | 5. 4 | 4.5 | 5. 4 | 5. 9 | 5. 9 | 5.3 | 4.2 | 5.2 | 5.0 | 5. 0 |
| Nonmanufacturing: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 2.9 2.3 | 3.0 2.7 | 3.1 2.5 | 2.6 2.0 | 3.5 2.1 | 5.6 1.8 | 3.8 3.2 | 3.6 2.6 | 6.0 2.0 | 4.9 2.3 | 3. 2 | 3.2 3.4 | 2.6 4.5 | 3.1 2.5 | 3.8 <br> 3.8 |
|  | Separations: Quits |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Seasonally adjusted | 1.5 | 1.3 | 1.5 | 1.4 | 1.4 | 1.2 | 1.5 | 1.4 | 1.4 | 1.5 | 1.5 | 1.5 | 1.6 |  |  |
| Durable goods. | 1.2 | 1.1 | 1.0 | . 8 | . 9 | . 7 | . 9 | 1.2 | 2.0 | 1.8 | 1.2 | 1.3 | 1.3 | 1.0 | 1.1 |
| Ordnance and accessorles. <br> Lumber and wood products except furniture. | 9 | . 8 | . 9 | . 8 | . 9 | . 6 | . 8 | 1.0 | 1.7 | 1.5 | 1.1 | 1.3 | 1.0 | 1.0 | 1.0 |
|  | 2.7 | 2.6 | 2.2 | 1.6 | 1.7 | 1.3 | 1.9 | 2.6 | 4.2 | 3.7 | 2.6 | 2.5 | 2.6 | 1.9 | 2.3 |
| Furniture and fixturesStone, clay, and glass products...............- | 2.3 | 2.2 | 1.9 | 1.5 | 1.7 | 1.1 | 1.6 | 2.1 | 3. 0 | 3.1 | 2.2 | 2.1 | 2.5 | 1.5 | 1.7 |
|  | 1.1 | 1.1 | . 9 | . 7 | . 8 | . 6 | . 8 | 1.2 | 2.0 | 1.9 | 1.2 | 1.2 | 1.3 | 1.0 | 1.1 |
| Primary metal industries..................- | . 7 | . 6 | . 5 | . 4 | . 4 | . 3 | . 4 | . 5 | . 9 | . 9 | . 6 | . 6 | . 6 | . 5 | . 6 |
|  | 1.3 | 1.2 | 1.1 | . 8 | . 9 | . 6 | . 9 | 1.3 | 2. 2 | 1. 9 | 1.2 | 1.4 | 1.4 | 1.0 | 1.1 |
| Fabricated metal products Machinery | 1.0 | 1.0 | . 9 | . 7 | . 8 | . 6 | . 8 | . 9 | 1. 5 | 1.4 | . 9 | 1.15 | 1.1 | . 8 | . 9 |
| Electrical equipment and supplies....-. | 1.2 | 1.1 | 1.1 | 1.0 | 1.0 | . 8 | 1.1 | 1. 3 | 2. 2 | 1.9 | 1.3 | 1.5 | 1.4 | 1.1 | 1.2 |
|  | . 9 | . 8 | . 8 | . 7 | . 7 | . 5 | . 7 | 1. 0 | 1. 6 | 1. 4 | . 9 | 1.0 | 1.0 | . 8 | . 9 |
| Instruments and related products Miscellaneous manufacturing indus- | 1.1 | 1.0 | 1.0 | 1.0 | 1.1 | . 8 | 1.1 | 1.4 | 1.9 | 1.6 | 1.2 | 1.3 | 1.2 | 1.0 | 1.1 |
|  | 1.8 | 1.6 | 1.5 | 1.3 | 1.3 | 1.0 | 1.6 | 2.2 | 3.0 | 3.0 | 1.9 | 2.2 | 1.9 | 1.8 | 1.8 |
| Nondurable goods | 1.6 | 1.5 | 1.4 | 1.2 | 1.3 | 1.0 | 1.3 | 1.8 | 2.9 | 2.5 | 1.7 | 1.7 | 1.7 | 1.4 | 1.6 |
| Food and kindred prod | 1.6 | 1.4 | 1.4 | 1.2 | 1.3 | 1.1 | 1.3 | 2.1 | 4.0 | 2. 9 | 1.9 | 1.8 | 1.8 | 1.6 | 1.7 |
|  | . 6 | . 8 | . 7 | . 7 | ${ }^{-9}$ | . 6 | . 8 | . 9 | 2. 1 | 1. 4 | . 8 | . 6 | .$^{6}$ | . 9 | 1.0 |
| Textile mill products.- | 2.1 | 2.0 | 1.7 | 1.4 | 1.6 | 1.1 | 1. 6 | 2. 0 | 2. 6 | 2.8 | 2. 1 | 2. 0 | 2.1 | 1. 6 | 1.6 |
| A pparel and related products. Paper and allied products. | 2.5 | 2.3 | 2.1 | 1.9 | 2.0 | 1.4 | 1.9 | 2.4 | 3. 1 | 3. 2 | 2.6 | 2.4 | 2.5 | 2. 0 | 2. 3 |
|  | 1.0 | 1.0 | . 9 | . 7 | . 8 | . 6 | . 8 | 1.1 | 2.5 | 1.8 | 1.0 | 1.1 | 1.1 | 1.0 | 1.2 |
| Printing, publishing, and allied industries. | 1.4 | 1.3 | 1.2 | 1.1 | 1.2 | . 9 | 1.3 | 1.5 | 2.5 | 2.1 | 1.4 | 1.7 | 1.5 | 1.4 | 1.5 |
| Chemicals and allied productsPetroleum refining and related indus-tries | . 7 | . 7 | . 6 | . 5 | . 6 | . 5 | . 5 | . 7 | 1.8 | 1. 2 | . 6 | . 8 | . 8 | . 7 | . 8 |
|  | . 6 | . 6 | . 5 | . 5 | . 4 | . 4 | . 6 | . 7 | 1.4 | 1.2 | . 6 | . 7 | . 6 | . 5 | . 5 |
|  | 1.3 | 1.2 | 1. 1 | . 9 | 1.0 | . 8 | 1.0 | 1.5 | 2.2 | 1.9 | 1.3 | 1.5 | 1.5 | 1.1 | 1.3 |
|  | 2.3 | 2.3 | 2.0 | 1.6 | 2.0 | 1.5 | 1.9 | 2.5 | 3.1 | 3. 3 | 2.4 | 2.4 | 2.4 | 2.1 | 2.2 |
| Nonmanufacturing: Metal mining |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1.6 | 1.4 | 1.2 | 1.1 | 1.2 | . 8 | . 9 | 1.1 | 2.2 | 1.8 | 1.3 | 1.1 | 1.2 | 1.0 | 1.5 |
| Coal mining | . 5 | . 5 | . 3 | . 3 | . 3 | . 3 | . 3 | . 4 | . 5 | . 6 | . 4 | . 3 | . 3 | . 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 | 1963 |  |  |  |  | 1962 |  |  |  |  |  |  |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | May ${ }^{2}$ | Apr. | Mar. | Feb. | Jsn. | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | May | 1861 | 1980 |
|  | Separations: Layoffs |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Manulacturing: Actual | 1.4 | 1.6 |  |  |  | 2.5 | 2.3 | 2.2 | 1.9 | 2.3 | 2.2 | 1.6 | 1.6 | 2.2 | \%. 4 |
|  | 1.6 | 1.6 | 1.6 | 1.8 | 2.0 | 2.0 | 1.9 | 1.8 | 2.0 | 2.6 | 2.4 | 8.0 | 1.8 |  |  |
|  | 1.3 | 1.4 | 1.6 | 1.6 | 2. 0 | 2.2 | 2. 0 | 1.8 | 1.6 | 2.8 | 2.4 | 1.7 | 1. 6 | 2. 2 | 2.6 |
| Ordnance and accessories | 1.1 | 1.3 | 2.6 | 1.8 | 1.7 | 1.1 | 1.3 | 1.1 | 1.1 | 1.0 | . 5 | . 7 | 1.0 | . 7 | . 9 |
| Lumber and wood products, except furniture. | 1.2 | 1.8 | 2.5 | 2.4 | 2. 6 | 3.6 | 3.5 | 2. 1 | 1.6 | 2.2 | 2. 2 | 1.3 | 1.3 | 2.8 | 3.1 |
|  | 1.3 | 1.4 | 1.7 | 1.7 | 2.1 | 1.9 | 2. 0 | 1.6 | 1.4 | 1.7 | 2.2 | 1.8 | 1.3 | 2.1 | 2.1 2.4 |
| Stone, clay, and glass products | 1.1 | 1.2 | 1.4 | 2.1 | 3. 4 | 40 | 2.7 | 2.2 | 2. 1 | 1.9 | 1.7 | 1.4 | 1.7 | 2.2 | 2.4 |
| Primary metal industries...... | . 8 | . 8 | 1. 0 | 1.1 | 1. 4 | 1.7 | 2.0 | 2.4 | 2.3 | 2.1 | 2.8 | 3.1 | 3. 2 | 1.7 | 3.0 |
| Fabricated metal products. | 1.6 | 1.7 | 2.0 | 2.1 | 2. 5 | 2.3 | 2. 4 | 2.7 | 2.0 | 2.0 | 1.4 | 1. 3 | 1.1 | 1.9 1.7 | 3. 19 |
| Machinery .-.-......------- | 1.2 | 1.0 | . 9 | . 9 | 1. 3 | 1. 9 | 1.2 | 1.3 | 1.3 | 1. 1.2 | 1.3 | 1.3 | 1. 9 | 1. 1.4 | 1.9 |
| Electrical equipment and supplies...-- | 1.1 | 1. 3 | 1.7 | 1.4 | 1.8 | 1.4 | 1. 3 | 1.3 1.9 | 1.0 1.8 | 1.2 | 1.3 4.4 | .9 2.0 | 1.7 | 1.4 3.5 | 1.6 3.6 |
| Transportation equipment......-.-.---- | 1.8 | 2.2 | 1.8 | 1.9 .9 | 2.1 .9 | 1.8 .8 | 1. 1.1 | 1.9 .9 | 1.8 .7 | 8.3 .8 | 4.4 .7 | 2.0 .7 | 1.5 | 3.5 .8 | 1.0 |
| Instruments and related products....-- | 8 | 7 | . 7 | . 9 | .9 | . 8 | 1.1 | . 9 | . 7 | . 8 | . 7 | . 7 | . 6 | . 8 |  |
| Miscellaneous manufacturing indus- | 1.9 | 2.4 | 2.0 | 1.8 | 3.6 | 10.6 | 5.8 | 2.4 | 1.7 | 2.0 | 2.4 | 2.0 | 2.0 | 3.2 | 3.2 |
| Nondurable goods. | 1.6 | 1.8 | 1.7 | 1.6 | 2. 4 | 2. 8 | 2. 7 | 2.6 | 2.2 | 1.6 | 1.9 | 1.4 | 1.7 | 2. 2 | 2.2 |
|  | 2.1 | 2.8 | 2.8 | 2. 8 | 4. 4 | 4.7 | 5. 0 | 5.4 | 4.5 | 3.1 | 3.2 | 2.4 | 1.7 1.6 | 3. 4. 4 | 3. 6 |
| Tobacco manufactures...-.-.----------- | 3.0 | 2. 6 | 6. 0 | 8.4 | 5. ${ }_{1} 6$ | 9.8 | 15.7 1.6 | 9.3 1.2 | 1.2 | 1.0 | 1.2 | 1.8 | 1.6 | 4.3 | 1.5 |
| Textile mill products.-.-.-.-.-.---------- | 1.0 2.5 | 1.1 3.0 | 1.2 | 1.1 | 1.6 2.6 | 4.0 | 1.6 | 2.5 | 2.2 | 1.7 | 2.9 | 2.1 | 2.9 | 3.1 | 3.2 |
| A pparel and related products Paner and allied products. | 2.5 .8 | 1.0 .9 | 1.1 | 1.1 | 1.5 | 1.3 | 1.3 | 1.2 | 1.2 | . 9 | . 9 | . 7 | . 8 | 1.1 | 1.2 |
| Printing, publishing, and allied industries. | . 9 | . 9 | . 9 | . 8 | 1.2 | 1.3 | 1. 2 | 1.1 | 1.1 | .9 | . 78 | .8 1.0 | .8 1.2 | 1.0 .9 | . 8 |
| Chemicals and allied products---.--- | 1.4 | . 7 | . 6 | . 5 | . 7 | . 8 | 1.1 | . 8 | . 8 | . 7 | . 8 |  |  | . 9 |  |
| Petroleum refining and related industries. | . 3 | . 5 | . 7 | . 9 | . 8 | . 9 | 1.0 | . 6 | . 7 | . 6 | . 5 | . 3 | . 5 | . 6 | . 6 |
| Rubher and miscellaneous plastic products. | 1.2 | 1.2 | 1.7 | 1.2 | 1.8 | 1.6 | 1. 9 | 1.6 | 1.5 | 1.4 1.6 | 1.9 1.9 | 1.0 1.1 | 2. 9 | 1.7 2.3 | 2.2 2.1 |
|  | 1.5 | 2.9 | 2.0 | 1.6 | 2.5 | 3.4 | 2.0 | 2.3 | 2.0 | 1.6 | 1.9 | 1.1 | 2.1 | 2.3 |  |
| Nonmanufacturing: |  |  |  |  |  | 4.2 | 2.3 | 1.8 | 3.0 | 2.4 | 1.2 | 1.4 | . 7 | 1.4 | 1.8 |
|  | 1.3 | 1.6 | 1. 6 | 1.3 | 1.4 | 1.1 | 2.2 | 1.7 | 1.0 | 1.4 | 4.2 | 2.6 | 3.7 | 1.7 | 2.9 |

[^56]calendar month, while the employment serles measures changes from midmonth to midmonth; and (2) the turnover series excludes personnel changes caused by strikes, but the employment series reflects the influence of such stoppages.

Preliminary
8 Beginning with January 1959, transiers between establishments of the same firm are included in total accessions and total senarations; therefore rates for these ftems are not strictly comparable with prior data. Transfers comprise part of "other accessions" and "other separations," the rates for which are not shown separately.
C.-Earnings and Hours

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

| Industry | 1963 |  |  |  |  | 1962 |  |  |  |  |  |  |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | May ${ }^{\prime}$ | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | May | 1961 | 1960 |
|  | A verage weekly earnings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | \$114.81 \$113.16 |  | \$111.38 | \$112.88 | \$112.34 | \$112.07 | \$110.43 | \$111.78 | \$112.88 | \$111.90 | \$110. 02 | \$111.10 | \$109. 61 | \$107. 18 | \$105. 44 |
|  | \$114. 81 <br> 116.97 | $117.22$ | 118.49 | 117.26 | 116.16 | 116.57 | 116.44 | 116.16 | 118.12 | 116.00 | 116.88 | 118.86 | $\begin{aligned} & 119.28 \\ & 126.28 \end{aligned}$ | $113.44$ | 111.19 |
| Metal mining <br> Iron ores | $\begin{aligned} & 116.97 \\ & 118.89 \end{aligned}$ |  | 116. 73 | 116.05121.69 | 118.95 | 115.36 | 119.56 | 117.87 | 122. 61 | 119.87 | 124.43 | 127.51 |  | $\begin{array}{r} 115.44 \\ 115.80 \end{array}$ | 114.73 |
| Copper ore | $121.84$ | 124.12 | 125.71 |  |  |  | 120.13 |  | 120.98 | 117.99 | 117.46 | 121. 24 | 120.40 | 119.03 | 116. 77 |
| Coal mining. | 124.26126.00 | 119.18 | 114.87115.29 | 122.46123.56 | 121.29 | 119.57 | 111.24 | 114.39 | 113.62 | 113.15 | 102.30 | 115.69 | 108.15 | 111. 34 | $\begin{aligned} & 110.76 \\ & 112.77 \end{aligned}$ |
| Bituminous |  |  |  |  | 121.76 | 120.71 | 111.65 | 115.13 | 114.39 | 114.25 | 103.60 | 117.06 | 109.47 | 112.73 |  |
| Crude petroleum and natural gas | 111.04 | 111.45 | 110.77 | 110.51 | 110.51 | 112.04 | 109.30 | 109.20 | 110.99 | 109.56 | 110.83 | 107.74 | 108.52 | 105. 75 | 103.34 |
| Crude petroleum and natural gas fields | 117.33 | 119.89 | 117.45 | 117.33 | 120.38 | 118. 28 | 114.37 |  |  | 113.98 |  |  |  |  |  |
|  | 105.16 | 103.94 | 104. 49 | 103. 76 | 100.67 | 105. 71 | 104.40 | 113.00 | 118. 69 | 104.84 | 118.14 | 112.72 | 105.03 | 113.15 | 108. 54 |
| Quarrying and nonmetallic mining. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Contract construction. | $\begin{aligned} & 127.25 \\ & 117.85 \end{aligned}$ | $\begin{aligned} & 124.17 \\ & 115.84 \end{aligned}$ | $\begin{array}{\|l\|} 121.99 \\ 113.34 \end{array}$ | 117.29 | 120.01 | 117.97 | 120.88 | 126.82 | 128.21 | 127.26 | 125. 57 | 121.45 | $\begin{aligned} & 123.44 \\ & 114.14 \end{aligned}$ | $\begin{aligned} & 117.71 \\ & 108.83 \end{aligned}$ | $\begin{aligned} & 112.67 \\ & 103.72 \end{aligned}$ |
| General building cont |  |  |  | $\begin{aligned} & 108.85 \\ & 108.12 \end{aligned}$ | 111.11 | 108.55 | 113.34 | 117.12 | 117.81129.38 | 116.92 | 115. 92 | 111.91 |  |  |  |
| Heavy construction-.----.-.-.-- Highway and street construction | $125.16$ |  | 114.95 |  | 113. 54 | 109. 20 | 117.61 | 127.20 |  | 130.50 | 127. 67 | $\begin{aligned} & 122.13 \\ & 119.13 \end{aligned}$ | $\begin{aligned} & 124.07 \\ & 120.70 \end{aligned}$ | $\begin{aligned} & 118.48 \\ & 113.40 \end{aligned}$ | $\begin{aligned} & 103.72 \\ & 114.77 \end{aligned}$ |
| Highway and street construction Other heavy construction | 123.25 128.13 | 121.30 118.02 | $\begin{aligned} & 120.96 \\ & 129.60 \end{aligned}$ | $\begin{array}{r} 108.12 \\ 99.64 \end{array}$ | 120.05 | 115. 63 | $\begin{aligned} & 115.02 \\ & 121.13 \end{aligned}$ | $\begin{aligned} & 126.58 \\ & 128.86 \end{aligned}$ | $\begin{aligned} & 129.38 \\ & 128.62 \end{aligned}$ | 131. 04 | 128.54 | 126:48 | $128.86$ | $125.11$ | $119.60$ |
| Special trade contractors..--- | 134.28 | $\begin{aligned} & 125.76 \\ & 130.31 \end{aligned}$ |  | 125.24 | 128.13 | 127.41 | 127. 45 | 133.16 | 134. 23 | 132.38 | 131.65 | 127.72 | 129.46 | 123.08 | 118.11 |
| Manufacturing. | $\begin{array}{r} 99.47 \\ 108.62 \\ 87.91 \end{array}$ | $\begin{array}{r} 97.76 \\ 106.37 \\ 86.19 \end{array}$ | $\begin{array}{r} 98.09 \\ 106.49 \\ 87.07 \end{array}$ | $\begin{array}{r} 97.20 \\ 106.23 \\ 86.24 \end{array}$ | 97.44 105.82 86.2 | $\begin{array}{r} 98.42 \\ 107.53 \\ 86.94 \end{array}$ | $\begin{array}{r} 97.36 \\ 106.19 \\ 86.72 \end{array}$ | $\begin{array}{r} 96.72 \\ 105.37 \\ 85.72 \end{array}$ | $\begin{array}{r} 97.68 \\ 105.88 \\ 86.80 \end{array}$ | $\begin{array}{r} 95.75 \\ 103.89 \\ 86.18 \end{array}$ | $\begin{array}{r} 96.80 \\ 104.45 \\ 86.80 \end{array}$ | $\begin{array}{r} 97.27 \\ 105.47 \\ 87.02 \end{array}$ | 96.80 | 92.34 | 89.72 |
| Durable goods. |  |  |  |  |  |  |  |  |  |  |  |  | 105.22 | 100.10 | 97.44 |
| Nondurable good |  |  |  |  |  |  |  |  |  |  |  |  | 86.37 | 82.92 | 80.36 |
|  |  |  |  |  |  |  | A verage | weekly | y hours |  |  |  |  |  |  |
| Mining | $\begin{aligned} & \text { Wid } \\ & 41.9 \end{aligned}$ | 41.3 | 40.5 | 40.9 | 41.0 | 40.9 | 40.9 | 41.4 | 41.5 | 41. 6 | 40.9 | 41.3 | 40.9 | 40.6 | 40.4 |
| Metal mining | 40.9 | 40.7 | 41.0 | 41.0 | 40.9 | 40.9 | 41.0 | 41.4 40.9 | 41.3 | 40.7 | 41.3 | 42.0 | 40.9 42.0 | 40.6 41.4 | 40.4 41.8 |
| Iron ores | 38.6 | 38.0 | 37.9 | 37.8 | 39.0 | 37.7 | 39.2 | 38.9 | 40.2 | 39.3 | 40.4 | 41.4 | 41.0 | 38.6 | 39.7 |
| Copper ore | 42.9 | 43.4 | 43.8 | 43.0 | 42.8 | 42.9 | 42.6 | 42.1 | 42.3 | 41.4 | 41.8 | 43.3 | 43.0 | 43.6 | 44.4 |
| Coal mining. | 39.7 | 38.2 | 36.7 | 39.0 | 39.0 | 38.2 | 36.0 | 36.9 | 36.3 | 36.5 |  | 37.2 | 35.0 | 35.8 | 35. 5 |
| Bituminou | 40.0 | 38.4 | 36.6 | 39.1 | 38.9 | 38.2 | 35.9 | 36.9 | 36.2 | 36.5 |  | 37.4 | 35.2 | 35.9 | 35.8 |
| Crude petroleum and natural gas.-...- | 41.9 | 41.9 | 41.8 | 41.7 | 41.7 | 42.6 | 42.2 | 42.0 | 42.2 | 42.3 | 42.3 | 41.6 | 41.9 | 41.8 | 42.0 |
| Crude petroleum and natural gas fields | 40.6 | 41.2 | 40.5 | 40.6 | 41.8 | 41.5 | 40.7 | 40.5 | 41.5 |  |  |  |  |  |  |
| Oil and gas field services. | 43.1 | 42.6 | 43.0 | 42.7 | 41.6 | 43.5 | 43.5 | 43.4 | 42.9 | 43.5 | 42.9 | 42.6 | 43.4 | 42.9 | 43.5 |
| Quarrying and nonmetallic mining....-- | 45.3 | 44.4 | 42.6 | 41.5 | 41.9 | 40.6 | 44.3 | 46.0 | 46.6 | 46.7 | 46.3 | 45.6 | 45.5 | 43.9 | 43.7 |
| Contract construction | 38.1 | 37.4 | 36.2 | 34.7 | 35.4 | 34.8 | 36.3 | 38.2 | 38.5 | 38.8 | 38.4 | 37.6 | 38.1 | 36.9 | 36.7 |
| General building contractor | 36.6 | 36.2 | 35.2 | 33.7 | 34.4 | 33.4 | 35.2 | 36.6 | 36.7 | 37.0 | 36.8 | 36.1 | 36.7 | 35.8 | 35.4 |
| Heavy construction. | 42.0 | 41.4 | 39.1 | 36.9 | 38.1 | 36.4 | 39.6 | 42.4 | 42.7 | 43.5 | 42.7 | 41.4 | 42.2 | 40.3 | 40.7 |
| Highway and street const | 42.5 | 42.0 | 38.8 | 36.1 | 37.6 | 35.7 | 39.8 | 43.2 | 43.6 | 44.4 | 43.6 | 41.8 | 42.8 | 40.5 | 41.2 |
| Other heavy construction | 41.2 | 40.7 | 39.4 | 37.7 | 38.6 | 37.3 | 39.2 | 41.3 | 41.3 | 42.0 | 41.2 | 40.8 | 41.3 | 40.1 | 40.0 |
| Special trade contractors. | 37.3 | 36.4 | 35.8 | 34.5 | 35.2 | 35.1 | 35.6 | 37.3 | 37.6 | 37.5 | 37.4 | 36.7 | 37.2 | 36.2 | 35.9 |
| Manufacturing. | 40.6 | 39.9 | 40.2 | 40.0 | 40.1 | 40.5 | 40.4 | 40.3 | 40.7 | 40.4 | 40.5 | 40.7 | 40.5 | 39.8 | 39.7 |
| Durable goods | 41.3 | 40.6 | 40.8 | 40.7 | 40.7 | 41.2 | 41.0 | 41.0 | 41.2 | 40.9 | 40.8 | 41.2 | 41.1 | 40.2 | 40.1 |
| Nondurable good | $39.6$ gol | 39.0 | 39.4 | 39.2 | 39.2 | 39.7 | 39.6 | 39.5 | 40.0 | 39.9 | 40.0 | 40.1 | 39.8 | 39.3 | 39.2 |
|  |  |  |  |  |  |  | Average | hourly | earnings |  |  |  |  |  |  |
| Mining | \$2.74 | \$2.74 | \$2.75 | \$2. 76 | \$2.74 | \$2. 74 | \$2.70 | \$2.70 | \$2.72 | \$2.69 | \$2. 69 | \$2. 69 | \$2. 68 | \$2. 64 | \$2. 61 |
| Metal mining | 2.86 | 2.88 | 2.89 | 2.86 | 2.84 | 2.85 | 2.84 | 2.84 | 2.86 | 2.85 | 2.83 | 2.83 | 2.84 | 2.74 | 2.66 |
| Iron ores | 3.08 | 3.10 | 3.08 | 3.07 | 3. 05 | 3.06 | 3.05 | 3.03 | 3.05 | 3.05 | 3.08 | 3.08 | 3.08 | 3.00 | 2.89 |
| Copper ores | 2.84 | 2. 86 | 2. 87 | 2.83 | 2.83 | 2.83 | 2. 82 | 2.83 | 2.86 | 2. 85 | 2.81 | 2.80 | 2.80 | 2.73 | 2.63 |
| Coal mining | 3.13 | 3.12 | 3.13 | 3.14 | 3.11 | 3.13 | 3.09 | 3.10 | 3.13 | 3.10 |  | 3.11 | 3.09 | 3.11 | 3.12 |
| Bituminous | 3.15 | 3.14 | 3.15 | 3.16 | 3.13 | 3.16 | 3.11 | 3.12 | 3.16 | 3.13 |  | 3.13 | 3.11 | 3.14 | 3.15 |
| Crude petroleum and natural gas.-...- | 2.65 | 2.66 | 2. 65 | 2.65 | 2.65 | 2.63 | 2. 59 | 2. 60 | 2. 63 | 2. 59 | 2. 62 | 2. 59 | 2. 59 | 2. 53 | 2.46 |
| Crude petroleum and natural gas fields | 2.89 | 2. 91 | 2. 90 | 2. 89 | 2.88 | 2.85 | 2.81 | 2. 79 | 2. 86 | 2. 78 | 2.84 | 2.79 | 2.78 | 2.78 | 2.68 |
| Ofl and gas field services...- | 2.44 | 2.44 | 2.43 | 2.43 | 2.42 | 2.43 | 2.40 | 2.44 | 2.42 | 2.41 | 2.42 | 2.41 | 2.42 | 2.30 | 2. 28 |
| Quarrying and nonmetallic mining.--- | 2.43 | 2.41 | 2.41 | 2.38 | 2.39 | 2.43 | 2.42 | 2.41 | 2. 43 | 2. 42 | 2.39 | 2.36 | 2.36 | 2.28 | 2. 21 |
| Contract construction. | 3.34 | 3. 32 | 3. 37 | 3.38 | 3.39 | 3.39 | 3.33 | 3.32 | 3.33 | 3. 28 | 3.27 | 3.23 | 3.24 | 3. 19 | 3.07 |
| General building contractor | 3.22 | 3.20 | 3.22 | 3.23 | 3.23 | 3.25 | 3.22 | 3.20 | 3.21 | 3.16 | 3.15 | 3.10 | 3.11 | 3. 04 | 2. 93 |
| Heavy construction...-..---.-.-.-. | 2.98 | 2.93 | 2.94 | 2. 93 | 2.98 | 3.00 | 2.97 | 3.00 | 3.03 | 3.00 | 2.99 | 2.95 | 2.94 | 2.94 | 2.82 |
| Highway and street construction | 2.90 | 2.81 | 2. 81 | 2.76 | 2.85 | 2. 92 | 2.89 | 2.93 | 2.95 | 2.92 | 2.90 | 2.85 | 2.82 | 2. 80 | 2.67 |
| Other heavy construction. | 3.11 | 3.09 | 3. 07 | 3.09 | 3.11 | 3.10 | 3.09 | 3.12 | 3.14 | 3.12 | 3.12 | 3.10 | 3.12 | 3.12 | 2.99 |
| Special trade contractors. | 3. 60 | 3. 58 | 3.62 | 3.63 | 3. 64 | 3.63 | 3. 58 | 3. 57 | 3. 57 | 3. 53 | 3. 52 | 3. 48 | 3.48 | 3.40 | 3.29 |
| Manufacturing. | 2.45 | 2.45 | 2. 44 | 2.43 | 2.43 | 2.43 | 2. 41 | 2.40 | 2.40 | 2.37 | 2.39 | 2.39 | 2.39 | 2. 32 | 2.26 |
| Durable goods. | 2. 63 | 2. 62 | 2. 61 | 2.61 | 2.60 | 2. 61 | 2. 59 | 2. 57 | 2. 57 | 2. 54 | 2. 56 | 2. 56 | 2. 56 | 2.49 | 2.43 |
| Nondurable goods | 2. 22 | 2.21 | 2. 21 | 2. 20 | 2.20 | 2.19 | 2.19 | 2.17 | 2.17 | 2.16 | 2.17 | 2.17 | 2.17 | 2.11 | 2.05 |

See footnotes at end of table.

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

| Industry | 1963 |  |  |  |  | 1962 |  |  |  |  |  |  |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | May ${ }^{3}$ | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | May | 1961 | 1980 |
|  | Average weekly earnings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Manufacturing-Continued |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Durable goods | $\$ 118.4$ <br> 117.6 <br> 122.0 <br> 116.90 | 9 \$115. 26 | \$119.19 \$ | \$120.35 \$ | \$120.64 \$ | \$120.96 | \$118. 69 | \$117.01 \$ | \$117.01 | \$115.34 | \$115.18\$ | \$116.88 | \$117.16 | \$113.42 |  |
| Ordnance and accessorles |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ammunition except for small arms |  | 116.24 | 117.86 | 119.31 | 119.02 | 120.06 | 118.37 | 116.69 | 117.38 | 116.00 | 114.97 | 116.00 | 116.72 | 115. 49 | 110.29 |
| Sighting and fire control equipment. |  | $\begin{aligned} & 119.20 \\ & 112.19 \end{aligned}$ | $\begin{aligned} & 127.98 \\ & 116.05 \end{aligned}$ | 128.29 | $\begin{aligned} & 128.35 \\ & 117.74 \end{aligned}$ | 131.24116.06 | 128.87113.44 | $\begin{aligned} & 125.58 \\ & 111.79 \end{aligned}$ | 125.40112.06 | 122.78110.70 | 122.36 | 126. 48 |  | $\begin{aligned} & 117.27 \\ & 108.39 \end{aligned}$ | 113.16103.17 |
|  |  |  |  |  |  |  |  |  |  |  | 110. 70 |  | 126.60 111.65 |  |  |
| Lumber and wood products, except furniture $\qquad$ | 80.40 | 78.2171.82 | 77.42 | 77.03 | 76.83 | 78.01 | 79. 00 | 79. 60 | 82. 0175.30 | 81.80 74.48 | 80.4073.75 | 80.4073.60 | $\begin{aligned} & 79.59 \\ & 73 \\ & 79 \end{aligned}$ | $77.03$$68.99$ | $\begin{aligned} & 73.71 \\ & 67.20 \end{aligned}$ |
|  | 73.20 |  | 71.16 | 70.80 | 70.77 | 71.02 |  | 72. 98 |  | 74. 48 |  |  |  |  |  |
| Millwork, plywood, and related products. |  | 87.53 | 87.12 | $\begin{aligned} & 86.48 \\ & 64.91 \end{aligned}$ | $86.48$$64.02$ | $\begin{aligned} & 87.53 \\ & 64.12 \end{aligned}$ | $\begin{aligned} & 86.90 \\ & 65.76 \end{aligned}$ | $\begin{aligned} & 86.48 \\ & 67.06 \end{aligned}$ | $\begin{aligned} & 88.81 \\ & 68.21 \end{aligned}$ | $\begin{aligned} & 88.82 \\ & 68.30 \end{aligned}$ | 87.12 <br> 68.71 | $\begin{aligned} & 87.56 \\ & 67.89 \end{aligned}$ | $\begin{aligned} & 88.81 \\ & 67.73 \end{aligned}$ | 84.03 <br> 63.12 | $\begin{aligned} & 81.19 \\ & 62.17 \end{aligned}$ |
|  |  | 66.9072.36 | 65. 0173.12 |  |  |  |  |  |  |  |  |  |  |  |  |
| Miscellaneous wood products | 68.31 73.89 |  |  | 72.90 | 73.08 | 72.80 | 73.71 | 73.44 | 74.62 |  |  | 73. 49 |  |  |  |
| urniture and fixtures | 79.19 | 78.01 | $\begin{array}{r} 79.19 \\ 75.36 \\ 93.15 \\ 101.20 \\ 79.98 \end{array}$ | $\begin{array}{r} 78.79 \\ 74.96 \\ 92.29 \\ 100.58 \\ 81.18 \end{array}$ | $\begin{array}{r} 78.60 \\ 74.19 \\ 94.07 \\ 101.85 \\ 80.99 \end{array}$ | $\begin{aligned} & 81.58 \\ & 78.02 \\ & 95.40 \\ & 99.04 \\ & 82.21 \end{aligned}$ | $\begin{array}{r} 80.16 \\ 76.63 \\ 91.77 \\ 100.65 \\ 81.20 \end{array}$ | $\begin{array}{r} 81.34 \\ 77.38 \\ 91.39 \\ 107.01 \\ 81.61 \end{array}$ | $\begin{array}{r} 81.54 \\ 77.15 \\ 92.57 \\ 107.87 \\ 82.41 \end{array}$ | $\begin{array}{r} 80.54 \\ 75.99 \\ 92.34 \\ 108.38 \\ 81.79 \end{array}$ | $\begin{array}{r} 78.18 \\ 73.38 \\ 92.52 \\ 105.16 \\ 80.39 \end{array}$ | $\begin{array}{r} 79.95 \\ 74.85 \\ 93.61 \\ 106.01 \\ 83.43 \end{array}$ | $\begin{array}{r} 78.38 \\ 73.75 \\ 92.80 \\ 104.17 \\ 81.20 \end{array}$ | $\begin{array}{r} 76.21 \\ 71.46 \\ 90.54 \\ 100.53 \\ 80.20 \end{array}$ | $\begin{aligned} & 75.20 \\ & 7.20 \\ & 90.42 \\ & 96.72 \\ & 78.78 \end{aligned}$ |
| Household furnitur | $\begin{aligned} & 74.99 \\ & 95.40 \\ & 99.82 \\ & 82.01 \end{aligned}$ | $\begin{aligned} & 78.01 \\ & 74.03 \\ & 92.63 \\ & 98.39 \\ & 81.19 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Office furniture |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Partitions, office and store fixtures-- Other furniture and fixtures..---- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other furniture and fixtures.------- | Average weekly hours |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 41.0 | 40.3 | 41. 1 | 41.541.0 | 41.640.9 | 42.0 | 41.541.1 | 41.240.8 | 41.240.9 | 40.9 | 40.7 | 41.340.7 | 41.441.1 | 40.841.1 | 40.741.0 |
| Ordnance and accescept for small arms |  | 40.5 |  |  |  |  |  |  |  | 40.7 | 40.2 |  |  |  |  |
| Sighting and fire control equip- | $\begin{aligned} & 40.4 \\ & 41.6 \end{aligned}$ | $\begin{aligned} & 39.6 \\ & 40.5 \end{aligned}$ | $\begin{aligned} & 42.1 \\ & 41.3 \end{aligned}$ | 42.241.7 | 42.541.9 | $\begin{aligned} & 43.6 \\ & 41.6 \end{aligned}$ | $\begin{aligned} & 43.1 \\ & 41.1 \end{aligned}$ | 42.0 | 41.8 | 41.2 | 41.2 | 42.341.4 | 42.241.2 | 40.340.9 | 41.040.3 |
|  |  |  |  |  |  |  |  | 41.1 | 41.2 | 41.0 | 41.0 |  |  |  |  |
| Lumber and wood products except furniture | 40.0 | 39.5 | 39.3 | 39.3 | 39.2 | 39.2 |  |  | 40.840.7 |  | 40.4 | 40.4 | 40.4 | 39.5 | 39.0 |
| Sawmills and planing milis.-.--------- | 40.0 | 39.9 | 39.1 | $38.9$ |  |  | 39.5 39.3 | 40.0 40.1 |  | 40.9 40.7 | 40.4 40.3 | 40.0 | 40.4 | 39.2 | 39.3 |
| Millwork, plywood, and related products | 41.8 | 40.9 | 40.9 | 40.6 |  |  |  | 40.6 | $\begin{aligned} & 41.5 \\ & 40.6 \end{aligned}$ | $\begin{aligned} & 41.7 \\ & 40.9 \end{aligned}$ | $\begin{aligned} & 40.9 \\ & 40.9 \end{aligned}$ |  | 41.5 | 40.4 | 39.8 |
|  | 41.4 | 40.3 | 39.4 | 39.1 | 38.8 | 39.1 | 40.1 | 40.4 |  |  |  | 40.9 | 40.8 | 39.7 | 39.6 |
| Miscellaneous wood products------- | 40.6 | 40.2 | 40.4 | 40.5 | 40.6 | 40.0 | 40.5 | 40.8 |  | 40.6 |  |  | 40.7 | 40.1 | 40.3 |
|  | 40.2 | 39.8 | 40.2 | 40.2 | 40.1 | 41.2 | 40.9 | 41.5 | 41.6 | 41.3 | 40.3 | 41.0 | 40.4 | 39.9 | 40.0 |
| Furniture and Household furniture | 40.1 | 39.8 | 40.3 | 40.3 | 40.1 | 41.5 | 41.2 | 41.6 | 41.7 | 41.3 | 40.1 | 40.9 | 40.3 | 39.7 | 38.8 |
|  | 41.3 | 40.1 | 40.5 | 40.3 | 40.9 | 41.3 | 39.9 | 40.8 | 40.6 | 40.5 | 40.4 | 40.7 | 40.7 | 40.6 | 41.1 |
| Partitions, office and store fixtures. | 39.3 | 39.2 | 40.0 | 39.6 | 40. 1 | 39.3 | 40.1 | 41.8 40 | 42.3 | 42.5 | 41.4 40.6 | 41.9 41.3 | 41.5 40.2 | 40.7 40.3 | 40.3 40.4 |
| Other furniture and fixtures..--.--- | 40.4 | 39.8 | 39.4 | 39.6 | 39.7 | 40.3 |  | 40.4 | 41.0 | 41.1 | 40.6 | 41.3 | 40.2 | 40.3 |  |
|  |  |  |  |  |  |  | Average | hourly | earning |  |  |  |  |  |  |
| Ordnance and accessories | \$2.89 | \$2. 86 | \$2. 90 | \$2.90 | \$2.90 | \$2.88 | \$2.86 | \$2. 84 | \$2. 84 | \$2. 82 | \$2. 83 | \$2. 83 | \$2. 83 | \$2. 78 | \$2. 67 |
| Ammunition except for small arms. | 2.89 | 2.87 | 2.91 | 2.91 | 2.91 | 2.90 | 2.88 | 2.86 | 2.87 | 2.85 | 2.86 | 2.85 | 2.84 | 2.81 | 2.69 |
| Sighting and fire control equip- | 3.02 | 3.01 | 3.04 | 3.04 | 3.02 | 3.01 | 2.99 | 2.99 | 3.00 | 2.98 | 2. 97 | 2. 99 | 3. 00 | 2. 91 | 2.76 |
|  | 2.81 | 2.77 | 2.81 | 2.82 | 2.81 | 2. 78 | 2.76 | 2. 72 | 2. 72 | 2.70 | 2.70 | 2. 71 | 2. 71 | 2. 65 | 2.56 |
| Lumber and wood products except |  |  |  |  |  |  |  |  | 2.01 | 2.00 | 1.99 | 1.99 | 1.97 | 1. 95 | 1.89 |
|  | 2.01 1.83 | 1.98 1.80 | 1.97 1.82 | 1.96 1.82 | 1.81 | 1.84 | 1.84 | 1. 82 | 1. 85 | 1.83 | 1.82 | 1.84 | 1.81 | 1.76 | 1.71 |
| Sawmills and planing mills --1ated | 1.83 | 1.80 2.14 | 1.82 2. 13 | 1.82 2.13 | 2.13 | 2.14 | 2.13 | 2.13 | 2.14 | 2.13 | 2.13 | 2.12 | 2.14 | 2.08 | 2.04 |
| products-.--.-.-- | 1.65 | 1.66 | 1.65 | 1.66 | 1.65 | 1.64 | 1.64 | 1.66 | 1.68 | 1.67 | 1.68 | 1.66 | 1. 66 | 1. 59 | 1. 57 |
| Miscellaneous wood products-------- | 1.82 | 1.80 | 1.81 | 1.80 | 1.80 | 1.82 | 1.82 | 1.80 | 1.82 | 1.81 | 1.80 | 1.81 | 1.79 | 1.74 | 1.72 |
| Furniture and fixtures. | 1.97 | 1.96 | 1.97 | 1.96 | 1.96 | 1.98 | 1.96 | 1.96 | 1.96 | 1.95 | 1.94 | 1.95 | 1.94 | 1.91 | 1.88 |
| Household furniture. | 1.87 | 1.86 | 1.87 | 1.86 | 1.85 | 1.88 | 1. 86 | 1.86 | 1.85 | 1.84 | 1.83 | 1.83 | 1.83 | 1.80 | 1.77 |
| Office furniture...-- | 2.31 | 2.31 | 2.30 | 2.29 | 2.30 | 2.31 | 2. 30 | 2. 24 | 2. 28 | 2. 28 | 2. 29 | 2.30 | 2. 28 | 2. 23 | 2. 20 |
| Partitions, office and store fixtures. | 2.54 | 2.51 | 2. 53 | ${ }_{2}^{2.54}$ | 2.54 | 2. 52 | 2. 51 | 2. 56 | 2. 55 | 2. 55 | 2. 54 | 2. 53 | 2.51 2.02 | 2.47 <br> 1.99 | 2.40 1.95 |
| Other furniture and fixtures.-.-..-- | 2.03 | 2.04 | 2.03 | 2.05 | 2.04 | 2.04 | 2.02 | 2.02 | 2.01 | 1. 99 | 1.98 | 2.02 | 2.02 | 1.99 | 1.95 |

See footnotes at end of table.

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

| Industry | 1963 |  |  |  |  | 1962 |  |  |  |  |  |  |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | May ${ }^{2}$ | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | May | 1961 | 1960 |
|  | A verage weekly earnings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Manulacturing-Continued |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Durable goods-Continued |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Stone, clay, and glass products | \$103.25 \$101.11 |  | \$99. 23 | \$97. 36 | \$97.11 | \$97. 84 | \$100. 28 | \$100. 85 | \$101. 50 | \$101. 57 | \$100. 67 | \$100. 43 | \$99. 60 | \$95. 24 | $\begin{aligned} & \$ 92.97 \\ & 127.35 \end{aligned}$ |
| Flat glass |  | 131.66 | 130.65 |  | 129. 26 | 130. 42 | 133.06 | 127. 59 | 126. 94 | 125.78 | 126.81 | 127.92 | 125.02 | 122. 68 |  |
| Glass and glassware, pressed or blown |  |  | 100. 40 | 100.40 |  |  |  | 98.49 |  | 98.09 | 98.00 |  |  |  | 91.84 |
| Cement, hydraulic. | $\begin{array}{r} 98.95 \\ 116.48 \end{array}$ | 119.99 | 112.87 | 111.63 | 112.16 | 111. 50 | 115. 21 | 114. 26 | 116. 62 | 115.93 | 11760 | 114. 12 | 113.85 | 106. 52 | 102 97 |
| Structural clay products....- | $\begin{array}{r} 91.12 \\ 90.85 \end{array}$ | 90.06 | 86.67 | 84.56 | 85.41 | 85.81 | 86. 90 | 87.56 | 87. 34 | 87. 97 | 87.54 | 88.17 | 88. 60 | 84.45 | 8221 |
| Pottery and related products.....-- Concrete, |  | 89.15 | 89.70 | 88.53 | 88.08 | 89.67 | 90. 45 | 90.68 | 89.82 | 87.64 | 87.69 | 86.85 | 85. 58 | 82.30 | 81.37 |
| Concrete, gypsum, and plaster products. | $\begin{aligned} & 108.62 \\ & 102.42 \end{aligned}$ | 103.92 | 99.07 | 93.93 | 94.40 | 95. 60 | 102.96 | 105. 36 | 108.14 | 108. 66 | 105. 67 | 104.28 | 103. 60 | 97. 10 | 9304 |
| Other stone and mineral products.-- |  | 101.18 | 100.28 | 100.04 | 98.15 | 09.14 | 99.88 | 99. 55 | 99.80 | 100.12 | 100.60 | 99.87 | 99. 29 | 96.05 | 93. 79 |
| Primary metal industries. <br> Blast furnace and basic steel products | 127.60 | 127.82 | 122.91 | 122.21 | 120.80 | 120.39 | 117.91 | 116.92 | 118.80 | 116.23 | 116.62 | 119.10 | 118.50 | 114.95 | 109. 59 |
|  |  | 141.70 | 131. 27 | 129.89 | 128.44 | 126.68 | 123.39 | 122. 42 | 125.00 | 122.68 | 12177 | 123.71 | 124.68 | 122.92 | 116.13 |
|  | $\begin{aligned} & 138.20 \\ & 111.76 \end{aligned}$ | 110.15 | 110.56 | 110.83 | 108. 54 | 109.88 | 107. 73 | 106. 52 | 107. 45 | 103.34 | 106. 90 | 109.41 | 106.90 | 98.81 | 96.61 |
| Nonferrous smelting and refining-- | 111.76 119.68 | 119.83 | 116.62 | 116.05 | 116.20 | 117.04 | 116.47 | 114. 52 | 116. 47 | 116. 03 | 114.80 | 116.05 | 113.85 | 109. 48 | 108. 09 |
| Nonferrous rolling, drawing, and extruding. | $\begin{aligned} & 119.28 \\ & 105.47 \end{aligned}$ | 115.23 | 116. 62 | 116. 34 | 116.47 | 118.00 | 116. 62 | 115.09 | 116. 05 | 113. 98 | 115.35 | 118.80 | 115. 90 | 111.76 | 105. 01 |
|  |  | 103.79 | 104.96 | 105. 63 | 105. 88 | 105.73 | 103. 79 | 103. 94 | 103.12 | 101.30 | 101. 25 | 104. 42 | 103.73 | 100.35 | 97.51 |
| Miscellaneous primary metal industries | $127.20$ | 124.75 | 126.99 | 128.02 | 130.09 | 128.94 | 125. 14 | 123.60 | 128.12 | 123.49 | 121.88 | 124.38 | 123.19 | 116. 98 |  |
|  |  |  |  |  |  |  | Aver | week | hours |  |  |  |  |  |  |
| Stone, clay, and glass products-.-.-..-- | 41.8 | 41.1 | 40.5 | 39.9 | 39.8 | 40.1 | 41.1 | 41.5 | $\begin{aligned} & 41.6 \\ & 38.7 \end{aligned}$ | 41.8 | $41.6$ | $\begin{aligned} & 41.5 \\ & 39.0 \end{aligned}$ | 41.5 | $\begin{aligned} & 40.7 \\ & 38.7 \end{aligned}$ | 40.640.3 |
| Glass and glassware, pressod or blown | $39.9$ | $\begin{aligned} & 39.3 \\ & 39.2 \end{aligned}$ | 40.0 | 38.3 | 38.7 | 38.7 | $39.6$ |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | 40.2 | 38.7 | 40.2 | 38.9 | 39.0 | 38.0 | 38.7 40.1 |  |
|  | 41.641.839.5 | $\begin{aligned} & 42.1 \\ & 41.5 \end{aligned}$ | $\begin{aligned} & 40.6 \\ & 40.5 \end{aligned}$ | $\begin{aligned} & 40.3 \\ & 39.7 \end{aligned}$ | $\begin{aligned} & 40.2 \\ & 40.1 \end{aligned}$ | $\begin{aligned} & 40.4 \\ & 40.1 \end{aligned}$ | $\begin{aligned} & 41.0 \\ & 40.8 \end{aligned}$ | $\begin{aligned} & 41.1 \\ & 41.3 \end{aligned}$ | $\begin{aligned} & 41.5 \\ & 41.2 \end{aligned}$ | 41.741.3 | $\begin{aligned} & 42.0 \\ & 41.1 \end{aligned}$ | 41.241.2 | 41.441.4 | 40.540.6 | 40.540.3 |
| Structural clay products. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pottery and related products |  | 39.1 | 39.0 | $39.0{ }^{38.8}$ |  | 32.5 | 40.2 | 40.3 | 40.1 | 39.3 | 38.8 | 38.6 | 38.9 | 38.1 | 38.2 |
| Concrete, gypsum, and plaster products. | 44.741.3 |  |  |  |  | 40.0 | 42.9 | 43.9 |  |  |  | 44.0 |  |  |  |
| Other stone and minera products.-- |  | 40.8 | 40.6 | $40.5$ | 39.9 | 40.3 | 40.6 | 40.8 | 40.9 | 41.2 | 41.4 4 | 41.1 | 41.2 | 40.7 | 40.6 |
| Primary metal industries - | 41.7 | 41.5 | 40.7 | 40.6 | 40.4 | 40.4 | 39.7 | 39.5 | 40.0 | 39.4 | 38.4 | 40.1 | 39.9 | 39.5 | 39.0 |
| Blast furnace and basic steel products |  |  |  | $\begin{aligned} & 39.6 \\ & 41.2 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |
| Iron and steel foundries. | $\begin{aligned} & 41.5 \\ & 41.7 \end{aligned}$ | $\begin{aligned} & 41.8 \\ & 41.1 \end{aligned}$ |  |  | $\begin{aligned} & 39.4 \\ & 40.5 \end{aligned}$ | 39.1 41.0 | 38.2 40.5 | $37.8$ $40.5$ | $\begin{aligned} & 387 \\ & 40.7 \end{aligned}$ | $\begin{aligned} & 38.1 \\ & 39.9 \end{aligned}$ | $\begin{aligned} & 37.7 \\ & 40.8 \end{aligned}$ | 38.3 41.6 | 38.6 40.8 | 38.9 38.9 | 38.2 38.8 |
| Nonferrous smeiting and refining.-- | 41.7 |  | $\begin{aligned} & 41.1 \\ & 41.5 \end{aligned}$ | 41.2 41.3 | 40.5 41.5 | 41.8 | 41.3 | 40.9 | 41.3 | 41.0 | 41.0 | 41.3 | 41.1 | 40.7 | 41.1 |
| Nonferrous rolling, drawing, and extruding. | $42 .$ |  |  |  | 42.2 |  |  |  |  |  |  |  |  |  |  |
| Nonferrous foundrles. | $\begin{aligned} & 41.2 \\ & 41.3 \end{aligned}$ | $\begin{aligned} & 41.6 \\ & 40.7 \\ & 40.9 \end{aligned}$ | 42.1 <br> 41.5 | 42.0 <br> 41.1 <br> 41.7 | $\begin{aligned} & 42.2 \\ & 41.2 \\ & 42.1 \end{aligned}$ | $\begin{aligned} & 42.6 \\ & 41.3 \\ & 42.0 \end{aligned}$ | $\begin{aligned} & 42.1 \\ & 40.7 \\ & 41.3 \end{aligned}$ | 41.7 <br> 40.6 <br> 41.2 | $\begin{aligned} & 42.2 \\ & 40.6 \\ & 41.9 \end{aligned}$ | $\begin{aligned} & 41.6 \\ & 40.2 \\ & 41.3 \end{aligned}$ | $\begin{aligned} & 42.1 \\ & 40.5 \\ & 40.9 \end{aligned}$ | $\begin{aligned} & 43.2 \\ & 41.6 \\ & 41.6 \end{aligned}$ | 42.3 <br> 41.0 <br> 41.2 | $\begin{aligned} & 41.7 \\ & 40.3 \\ & 40.2 \end{aligned}$ |  |
| dustries. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | A verage hourly earnings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Stone, clay, and glass products...---..- | $\begin{array}{r} \$ 2.47 \\ 3.38 \end{array}$ | $\$ 2.46$3.35 | $\begin{array}{r}\$ 2.45 \\ 3.35 \\ \hline\end{array}$ | $\begin{array}{r} \$ 2.44 \\ 3.34 \end{array}$ | $\begin{array}{r} \$ 2.44 \\ 3.34 \end{array}$ | $\begin{gathered} \$ 2.44 \\ 3.37 \end{gathered}$ | $\begin{array}{r} \$ 2.44 \\ 3.36 \end{array}$ | $\begin{array}{r} \$ 2.43 \\ 3.28 \end{array}$ |  | \$2.43 | \$2. 42 | \$2. 42 | \$2. 40 | \$2. 34 | \$2. 29 |
|  |  |  |  |  |  |  |  |  | $\begin{array}{r} 2.24 \\ 3.28 \end{array}$ | 3. 25 | 3.26 | 3. 28 | 3. 29 | 3.17 | 3. 16 |
| Glass and glassware, pressed or blown. | 2.48 | 2.50 | 2.51 | 2.51 |  | 2. 46 |  | 2. 45 | 2.45 | 2.44 | 2.45 | 2. 46 | 2.44 |  |  |
| Cement, hydraulic | 2.80 | 2.85 | 2.78 | 2.77 | 2. 79 | 2. 76 | 2. 81 | 2. 78 | 2.81 | 2.78 | 2.80 | 2.77 | 2.75 | 2.63 | 2. 54 |
| Structural clay products | 2.18 | 2.17 | 2. 14 | 2.13 | 2. 13 | 2. 14 | 2. 13 | 2.12 | 2.12 | 2.13 | 2. 13 | 2.14 | 2. 14 | 2.08 | 2.04 |
| Pottery and related products | 2.30 | 2.28 | 2.30 | 2.27 | 2. 27 | 2. 27 | 2.25 | 2. 25 | 2.24 | 2. 23 | 2. 26 | 2. 25 | 2. 20 | 2.16 | 2. 13 |
| Concrete, gypsum, and plaster products | 2.43 | 2.40 | 2.37 | 2.36 | 2.36 | 2.39 | 2. 40 | 2.40 | 2.43 | 2.42 | 2.38 | 2. 37 | 2.36 | - | 2. |
| Other stoneand mineral products--- | 2.48 | 2.48 | 2.47 | 2.47 | 2.46 | 2. 46 | 2. 46 | 2.44 | 2. 44 | 2. 43 | 2. 43 | 2. 43 | 2.41 | 2. 36 | 2. 31 |
| Primary metal industries .-....- | 3.06 | 3.08 | 3.02 | 3.01 | 2. 09 | 2. 98 | 2.97 | 2. 96 | 2.97 | 2. 95 | 2.96 | 2.97 | 2.97 | 2.91 | 2.81 |
| Blast furnace and basic steel products | 3.33 | 3.39 | 3.29 | 3.28 | 3. 26 | 3.24 | 2. 23 | 3. 23 | 3.23 |  |  |  |  |  |  |
| Iron and steel foundries. | 2.68 | 2.68 | 2.69 | 2.69 | 2.68 | 2.68 | 2.66 | 2. 63 | 2. 64 | 3. 59 | 2. 26 | 3. 23 | 2. 62 | 2. 54 | 3. 244 |
| Nonferrous smelting and refining--- | 2.87 | 2.86 | 2.81 | 2.81 | 2.80 | 2.80 | 2.82 | 2.80 | 2.82 | 2. 83 | 2.80 | 2.81 | 2. 77 | 2. 69 | 2. 63 |
| Nonferrous rolling, drawing, and extruding. | 2.80 |  | 2.77 | 2.77 | 2.76 | 2.77 | 2.77 | 2.76 | 2.75 | 2.74 | 2. 74 | 2.75 | 2.74 | 2. 68 | 2. 58 |
|  | 2.56 | 2.55 | 2.56 | 2.57 | 2.57 | 2. 56 | 2.55 | 2.56 | 2. 54 | 2. 52 | 2. 50 | 2. 51 | 2. 53 | 2. 28 | 2. 45 |
| Miscellaneous primary metal in- | 3.08 | 3.05 | 3.06 | 3.07 | 3.09 | 3.07 | 3.03 | 3.00 | 3.01 | 2.99 | 2.98 | 2.99 | 2.99 | 2.91 | 2.88 |

See footnotes at end of table.

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

| Industry | 1963 |  |  |  |  | 1962 |  |  |  |  |  |  |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | May ${ }^{2}$ | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | May | 1961 | 1960 |
|  | A verage weekly earnings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Durable goods-Continued |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fabricated metal products | \$108. 32 | \$104. 75 | \$105. 67 | \$105. 26 | \$105.78 | \$106. 30 | \$105. 63 | \$105. 73 | \$106. 66 | \$105. 32 <br> 131.50 | \$104. 30 133.15 | $\$ 106.75$ 131.67 | $\$ 105.73$ 127.02 | $\$ 100.85$ 121.80 | $\begin{aligned} & \$ 98.82 \\ & 114.68 \end{aligned}$ |
| Metal cans. | 127.62 | 125. 14 | 122.59 | 120.88 | 122. 29 | 122.48 | 119.99 | 123. 26 | 133.11 | 131.50 | 133.15 | 131.67 | 127.02 | 121.80 | 114.68 |
| Cutlery, handtools, and general hardware | 103.82 | 100.35 | 102.00 | 101.59 | 102.84 | 103. 50 | 103.34 | 101.27 | 100.37 | 96.88 | 97.53 | 101. 43 | 100.70 | 93.93 | 83.03 |
| Heating equipment and plumbing fixtures | 99.50 | 97.46 | 98.46 | 98.31 | 98.80 | 98.21 | 98.80 | 100.94 | 101. 34 | 100.69 | 98.65 | 100.78 | 97.27 | 94.56 | 91.26 |
| Fabricated structural metal products | 107.94 | 105. 04 | 104. 52 | 104. 26 | 103.86 | 105. 04 | 104.75 | 106. 19 | 107. 38 | 107. 49 | 105.37 | 106. 40 | 105. 37 | 102. 47 | 99.47 |
|  | 108.38 | 105. 50 | 108.68 | 107.19 | 108. 46 | 108.89 | 106. 09 | 104. 75 | 107. 60 | 105.00 | 104.75 | 105.58 | 105.33 | 98.90 | 95. 58 |
| Metal stampings...................-- | 116.33 | 111.65 | 113.30 | 112.74 | 113.01 | 113.40 | 113.13 | 112.56 | 112.56 | 111.45 | 109.21 | 111.72 | 113.25 | 105.01 | 107. 74 |
| Coating, engraving, and allied services. | 95.87 | 92.80 | 94. 12 | 91.53 | 92.39 | 93.98 | 92.70 | 93. 79 | 92.55 | 20.94 | 91.62 | 95.67 | 94.02 | 90.32 | 86.43 |
| Miscellaneous fabricated wire prodnets $\qquad$ | 98.29 | 95.51 | 97.34 | 97.34 | 98.06 | 97.70 | 96.17 | 96. 64 | 87.29 | 96.64 | 95.94 | 98. 65 | 97.53 | 94.48 | 90.50 |
| Miscellaneous fabricated metal products | 106. 45 | 103. 83 | 104.60 | 103.83 | 104. 49 | 105. 41 | 104.75 | 105.41 | 105.67 | 102. 51 | 100.15 | 104.30 | 102. 72 | 100.19 | 96.96 |
| Machinery...- | 115.79 | 113.85 | 115.51 | 114.82 | 113. 98 | 114.26 | 112.75 | 112.61 | 112. 74 | 112.32 | 112.59 | 114.09 | 114.09 | 107. 16 | 104. 55 |
| Engines and turbin | 122.01 | 118.60 | 323.82 | 122. 70 | 120.58 | 121.99 | 120.80 | 120.80 | 120.80 | 119.69 | 115.34 | 120.77 | 121.06 | $\begin{array}{lll}114 & 11 \\ 103 & 46\end{array}$ | 109.69 99.85 |
| Farm machinery and equipment.-- | 109.47 | 112.07 | 113.03 | 113.58 | 112.07 | 110.84 | 108. 94 | 108.81 | 107.87 112.61 | 107.33 112.88 | 106.67 113.42 | 107.46 113.42 | 107.45 113.42 | 103 106.52 | 99.85 102.66 |
| Construction and related machinery -- | 115.79 | 113.57 | 113.85 | 113.44 | 112.75 | 112.48 | 111.66 | 112.75 | 112.61 | 112.88 | 113.42 | 113.42 | 113.42 | 106.52 | 102.66 |
| Metalworking machinery and | 129.20 | 127, 74 | 130. 52 | 128. 33 | 126. 58 | 126. 44 | 123.25 | 122. 26 | 123. 12 | 123.12 | 125. 86 | 128.04 | 128. 48 | 116.90 | 117.27 |
| Special industry machinery | 109.13 | 107.17 | 108.88 | 107.94 | 108. 71 | 109.06 | 106. 43 | 106. 43 | 108.38 | 106. 01 | 106. 43 | 108. 46 | 108. 03 | 101.43 | 99.72 |
| General industrial machinery. | 112.61 | 110.16 | 111.38 | 111.38 | 110.84 | 112.06 | 111.52 | 111.79 | 111.38 | 111.24 | 111.37 | 112.86 | 112.17 | 105.04 | 101. 71 |
| Office, computing and accounting machines | 114.33 | 113.93 | 114.90 | 114.21 | 113.81 | 114. 09 | 112.84 | 112.31 | 113.68 | 111.78 | 114.96 | 112.06 | 111.78 | 111.24 | 106. 23 |
| Service industry machines | 103.82 | 101.15 | 102.31 | 100.90 | 100.50 | 100. 35 | 100.75 | 99.94 | 100. 04 | 99.55 | 102.01 108.45 | 103.57 <br> 108.29 | 99.87 108.63 | 95.84 104.00 | $\begin{array}{r}93.43 \\ 101.28 \\ \hline\end{array}$ |
| Miscellaneous machinery. | 111.35 | 108.94 | 110.30 | 109.62 | 110.66 | 112.14 | 109.72 | 109.82 | 109.39 | 108. 291 | 108.45 | 108. 29 | 108.63 | 104.00 | 101.26 |

Fabricated metal products
Metal cans.
Cutlery, hand tools, and general hardware
Heating equipment and plumbing
 Fabricated structural metal prodScrew machine products, bolts, etc. Metal stampings.......
Coating, engraving, and allied Miscellaneous fabricated wire Miscellaneous fabricated metal Miscellaneous
products
Machinery
Engines and turbines.
Farm machinery and equipmentConstruction and related machinery. Metalworking machinery and

Special industrial machinery
General industrial machinery-...... Office, computing, and accounting Service industry machines Miscellaneous machinery

Fabricated metal products.
Metal cans.-
Cutlery, hand tools, and general Heating equ Fabricated structural metal prodScrew machine products, bolts, etc
 Miscellaneous fabricated wire Miscellaneous fabricated metal products.
Machinery.-
Engines and turbines
Farm machinery and equipment
Construction and related machinery Metalworking machinery and equipment.-............................... Special industry machinery .-....... General industrial machinery...... Office, computing, and accounting Service industry machines
Miscellaneous machinery



|  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 8 | 41.0 | 41.2 | 41.1 | 41.3 | 41.5 | 41.3 | 40.9 | 41.7 | 41.3 | 40.5 | 40.5 |
| 8 | 40.9 | 41.1 | 40.4 | 41.5 | 43.5 | 43.4 | 43.8 | 43.6 | 42.2 | 42.0 | 41.4 |
| 8 | 41.3 | 41.4 | 41.5 | 41.0 | 40.8 | 40.2 | 40.3 | 41.4 | 41.1 | 39.8 | 40.1 |
| 1 | 40.0 | 39.6 | 40.0 | 40.7 | 40.7 | 40.6 | 40.1 | 40.8 | 39.7 | 39.4 | 39.0 |
| 2 | 40.1 | 40.4 | 40.6 | 41.0 | 41.3 | 41.5 | 41.0 | 41.4 | 41.0 | 40.5 | 40.6 |
| 6 | 42.7 | 42.7 | 42.1 | 41.9 | 42.7 | 42.0 | 41.9 | 42.4 | 42.3 | 40.7 | 40.5 |
| 5 | 42.0 | 41.9 | 42.0 | 42.0 | 41.9 | 40.6 | 42.0 | 42.1 | 40.7 | 41.6 |  |
| 9 | 40.7 | 41.4 | 41.2 | 41.5 | 41.5 | 40.6 | 40.9 | 42.1 | 41.6 | 40.5 | 40.2 |
| 9 | 41.2 | 41.4 | 41.1 | 41.3 | 41.4 | 41.3 | 41.0 | 41.8 | 41.5 | 40.9 | 40.4 |
| 4 | 40.5 | 40.7 | 40.6 | 40.7 | 40.8 | 40.2 | 39.9 | 40.9 | 40.6 | 40.4 | 39.9 |
| 6 | 41.6 | 41.7 | 41.3 | 41.4 | 41.6 | 41.6 | 41.7 | 42.1 | 42.1 | 40.9 | 41.0 |
| 9 | 40.6 | 40.8 | 40.4 | 40.4 | 40.4 | 40.3 | 39.5 | 40.8 | 40.9 | 39.9 | 39.6 |
| 3 | 40.9 | 40.6 | 40.2 | 40.3 | 40.4 | 40.5 | 40.1 | 40.4 | 40.7 | 40.1 | 40.1 |
| 1 | 41.0 | 40.9 | 40.9 | 41.3 | 41.4 | 41.5 | 41.7 | 41.7 | 41.7 | 40.5 | 40.1 |
| 5 | 43.2 | 43.3 | 42.5 | 42.6 | 42.9 | 42.9 | 43.4 | 44.0 | 44.0 | 41.9 | 42.8 |
| 0 | 42.3 | 42.6 | 41.9 | 41.9 | 42.5 | 41.9 | 41.9 | 42.7 | 42.7 | 41.4 | 41.9 |
| 8 | 40.9 | 41.2 | 41.0 | 41.1 | 41.1 | 41.2 | 41.4 | 41.8 | 41.7 | 40.4 | 40.2 |
| 5 | 40.5 | 40.6 | 40.3 | 40.4 | 40.6 | 40.5 | 41.5 | 40.6 | 40.5 | 41.2 | 40.7 |
| 2 | 40.2 | 40.3 | 40.3 | 40.3 | 40.5 | 40.8 | 41.3 | 42.1 | 41.1 | 40.1 | 40.1 |
| 0 | 42.4 | 42.8 | 42.2 | 42.4 | 42.4 | 42.3 | 42.2 | 42.3 | 42.6 | 41.6 | 41.5 |

Average hourly earnings

| verage hourly earnings |  |
| :--- | :--- | :--- | :--- |


| $\$ 2.57$ |  |  |
| :---: | :---: | :---: |
| 2.97 | 2.97 | 3.06 |
| 2.49 | 2.47 | 2.46 |
| 2.47 | 2.48 | 2.49 |
| 2.58 | 2.59 | 2.60 |
| 2.52 | 2.50 | 2.52 |
| 2.70 | 2.68 | 2.68 |
| 2.25 | 2.26 | 2.23 |
| 2.34 | 2.34 | 2.35 |
|  |  |  |
| 2.58 | 2.59 | 2.59 |
| 2.73 | 2.72 | 2.71 |
| 2.99 | 2.99 | 2.99 |
| 2.71 | 2.70 | 2.67 |
| 2.73 | 2.73 | 2.72 |
| 2.90 | 2.87 | 2.87 |
| 2.54 | 2.54 | 2.55 |
| 2.72 | 2.72 | 2.71 |
| 2.80 | 2.78 | 2.80 |
| 2.50 | 2.48 | 2.47 |
| 2.60 | 2.59 | 2.5 |


| $\$ 2.55$ | $\$ 2.56$ | $\$ 2.56$ | $\$ 2.49$ | $\$ 2.44$ |
| ---: | ---: | ---: | ---: | ---: |
| 3.04 | 3.02 | 3.01 | 2.90 | 2.77 |
| 2.42 | 2.45 | 2.45 | 2.36 | 2.32 |
| 2.46 | 2.47 | 2.45 | 2.40 | 2.34 |
| 2.57 | 2.57 | 2.57 | 2.53 | 2.45 |
| 2.50 | 2.49 | 2.49 | 2.43 | 2.36 |
| 2.69 | 2.66 | 2.69 | 2.58 | 2.58 |
| 2.24 | 2.27 | 2.26 | 2.23 | 2.15 |
| 2.34 | 2.36 | 2.35 | 2.31 | 2.24 |
|  |  |  |  |  |
| 2.51 | 2.55 | 2.53 | 2.48 | 2.43 |
| 2.70 | 2.71 | 2.71 | 2.62 | 2.55 |
| 2.92 | 2.96 | 2.96 | 2.86 | 2.77 |
| 2.66 | 2.66 | 2.64 | 2.58 | 2.49 |
| 2.72 | 2.72 | 2.72 | 2.63 | 2.56 |
| 2.90 | 2.91 | 2.92 | 2.79 | 2.74 |
| 2.54 | 2.54 | 2.53 | 2.45 | 2.38 |
| 2.69 | 2.70 | 2.69 | 2.60 | 2.53 |
| 2.77 | 2.76 | 2.76 | 2.70 | 2.6 |
| 2.47 | 2.46 | 2.43 | 2.39 | 2.3 |
| 2.57 | 2.58 | 2.55 | 2.50 | 2.4 |

See footnotes at end of table.

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

| Industry | 1963 |  |  |  |  | 1962 |  |  |  |  |  |  |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | May ${ }^{2}$ | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | May | 1961 | 1960 |
| Manufacturing-Continued Average weekly earnings | A verage weekly earnings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Durable goods-Continued |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Electrical equipment and supplies.-..-Electric distribution equipment.--Electrical industrial apparatus...Household appliances. | \$98.74 | \$96.87 | \$97.84 | \$98.33 | \$97.93 | \$99.96 | \$98. 66 | \$98. 49 | \$99. 22 | \$97. 20 | \$96.72 | \$98. 16 |  |  |  |
|  | 106. 11 | 103.08 | 104.78 | 104. 23 | 102.91 | 107.12 | 104. 75 | 104.60 | 105. 22 | 102.97 | 103. 94 | 104.81 | 102. 72 | 101. 00 | \$90. 74 |
|  | 105. 22 | 102. 77 | 103.38 | 104.81 | 103.48 | 103.38 | 103. 63 | 103.07 | 103.98 | 102.41 | 102.16 | 104. 33 | 103. 57 | 101.00 99 | 97.77 |
|  | 108.79 | 106. 25 | 107.71 | 104.92 | 104.14 | 108.36 | 105. 41 | 105.67 | 105.67 | 106. 08 | 105.04 | 105.15 | 103.72 | 101.30 | 95.44 96.23 |
| Electric lighting and wiring equipment |  |  |  |  |  | 92.52 | -92.52 | 91.66 | 93.25 | 100.08 | 105.04 | 105.15 | 103. 72 | 101.30 | 96. 23 |
| Radto and TV recelving sets.-- | 86. 85 | 83.60 | 85.97 | 86. 63 | 90.52 85.75 | 92.52 87.34 | 82. 82 | 91.66 | 93.25 89.76 | 90.68 87 | 89.95 | 91.30 | 90. 45 | 87. 91 | 84.71 |
| Communication equipment-........ | 104.92 | 103.08 | 105.04 | 106. 49 | 106.86 | 108.05 | 106.86 | 107.12 | 107.90 | 105.26 | 103.94 | 81.89 105.47 | 84.32 106.66 | 102.31 | 80.11 98.82 |
| Electronic components and accessories | 82.76 | 82.35 | 83.79 | 82. 56 | 82.37 |  |  |  |  |  |  |  |  |  |  |
| Miscellaneous electrical equipment and supplies |  |  | 83.79 | 82. 56 | 82.37 | 83.20 | 82.80 | 82.40 | 83.02 | 81. 39 | 80.58 | 83.03 | 82.82 | 80. 40 | 76. 24 |
|  | 104. 23 | 102.14 | 102.54 | 106.19 | 108.94 | 110.30 | 107. 33 | 108.26 | 105.98 | 100.35 | 105. 41 | 105. 92 | 105.41 | 96.32 | 93.93 |
| Transportation equipment | 126. 35 | 121.95 | 123.85 | 123. 55 | 124.74 | 129.73 | 128. 27 | 126.10 | 124.49 | 119.19 | 121. 93 | 121.09 |  |  |  |
| Motor vehicles and equAircraft and parts.... | 133.11 | 125.44 | 128.71 | 127. 38 | 129.63 | 138.40 | 137.33 | 132.24 | 131.02 | 121. 47 | 127.25 | 125.38 | 128.01 | 113.81 | 115. 21 |
|  | 120.30 | 119.31 | 120.18 | 121.76 | 122.64 | 123.94 | 123.08 | 122.80 | 120.38 | 119.11 | 118. 40 | 118.56 | 118.14 | 115.09 | 110.43 |
| Ship and boat building and repairing | 121. 47 | 118. 84 | 119.66 | 118.15 | 118.20 | 119.02 | 115.49 | 116.06 | 116.35 | 118.49 | 118.40 | 114. 7. | 118.14 | 115.09 | 110.43 |
| Railroad equipment Other transportation equipment.-.- | 119. 50 | 119.10 | 121.47 | 115. 44 | 118.48 | 115. 15 | 114.07 | 115.63 | 118.89 | 119.99 | 118.60 | 121.99 | 122.70 | 108.39 | 107.75 107.86 |
|  | 92.10 | 90.76 | 88.66 | 87.38 | 85.46 | 86.51 | 83.85 | 88.07 | 88.78 | 89.01 | 86.24 | 89.24 | 87.33 | 83.71 | 80.13 |
|  | A verage weekly hours |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Electrical equipment and supplies- | 40.3 | 39.7 | 40.1 | 40.3 | 40.3 | 40.8 | 40.6 | 40. 7 | 41.0 | 40.5 | 40.3 | 40.9 | 40.7 | 40.2 | 39.8 |
| Electric distribution equipment | 40.5 | 39.8 | 40.3 | 40.4 | 40.2 | 41.2 | 40.6 | 40.7 | 41.1 | 40.7 | 40.6 | 41.1 | 40.6 | 40.4 | 40.4 |
| Electrical industrial apparatus. | 41.1 | 40.3 | 40.7 | 41.1 | 40.9 | 40.7 | 40.8 | 40.9 | 41.1 | 40.8 | 40.7 | 41.4 | 41.1 | 40.4 | 40.1 |
| Household appliances <br> Electric lighting and wiring equipment | 40.9 | 40.4 | 40.8 | 40.2 | 39.9 | 41.2 | 40.7 | 40.8 | 40.8 | 40.8 | 40.4 | 40.6 | 40.2 | 40.2 | 39.6 |
|  | 40.3 | 39.3 | 39.7 | 39.6 | 39.7 | 40.4 | 40.4 | 40.2 | 40.9 | 40.3 | 39.8 | 40.4 | 40.2 | 39.6 | 39.4 |
| ment <br> Radio and TV recelving sets. | 39.3 | 38.0 | 38.9 | 39.2 | 38.8 | 39.7 | 39.3 | 40.2 | 40.8 | 40.4 | 39.7 | 40.5 | 39.4 | 39.1 | 38.7 |
|  | 40.2 | 39.8 | 40.4 | 40.8 | 41.1 | 41.4 | 41.1 | 41.2 | 41.5 | 40.8 | 40.6 | 41.2 | 41. 5 | 40.6 | 40.5 |
| Electronic components and accessories | 39.6 | 39.4 | 39.9 | 39.5 | 39.6 | 40.0 | 40.0 | 40.0 | 40.3 | 39.7 | 39.5 | 40.5 | 40.4 |  |  |
| Miscellaneous electrical equipment |  |  | . 0 |  | 39.6 |  | 40.0 | 40.0 | 40.3 | 39.7 | 39.5 | 40.5 | 40.4 | 40.2 | 39.5 |
|  | 40.4 | 39.9 | 39.9 | 41.0 | 41.9 | 42.1 | 41.6 | 41.8 | 41.4 | 40.3 | 41.5 | 41.7 | 41.5 | 39.8 | 39.8 |
| Transportation equipment | 42.4 | 41.2 | 41.7 | 41.6 | 42.0 | 43.1 | 42.9 | 42.6 | 42.2 | 41.1 | 41.9 | 41.9 | 42.2 | 40.5 | 40.7 |
| Motor vehicles an | 43.5 | 41.4 | 42.2 | 41.9 | 42.5 | 44.5 | 44.3 | 43.5 | 43.1 | 40.9 | 42.7 | 42.5 | 43.1 | 40.1 | 41.0 |
| Aircraft and parts.---1iding and | 41.2 | 41.0 | 41.3 | 41.7 | 42.0 | 42.3 | 42.3 | 42.2 | 41.8 | 41.5 | 41.4 | 41.6 | 41.6 | 41.4 | 40.9 |
|  | 41.6 | 40.7 | 40.7 | 40.6 | 40.9 | 40.9 |  | 40.3 | 40.4 | 41.0 |  |  |  |  |  |
| repairing Rallroad equipment | 40.1 | 40.1 | 40.9 | 39.4 | 40.3 | 39.3 | 39.2 | 39.6 | 40.3 | 40.4 | 40.8 39.8 | 40.4 40.8 | 40.6 40.9 | 39.9 38.3 | 39.3 38.8 |
|  | 41.3 | 40.7 | 40.3 | 39.9 | 39.2 | 39.5 | 39.0 | 40.4 | 41.1 | 41.4 | 40.3 | 41.7 | 41.0 | 39.3 | 38.9 |
|  | Average hourly earnings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Electrical equipment and supplies.-.-- | \$2.45 | \$2. 44 | \$2.44 | \$2. 44 | \$2.43 | \$2. 45 | \$2.43 | \$2. 42 | \$2. 42 | \$2. 40 | \$2. 40 | \$2. 40 | \$2. 40 | \$2.35 | \$2. 28 |
| Electric distribution equipment...-- | 2.62 | 2.59 | 2.602.54 | 2.58 <br> 2.55 | 2.562.53 | 2.602.54 | 2.58 <br> 2.54 | 2. 2.52 | $\begin{aligned} & \text { 2. } 56 \\ & \text { 2. } 53 \end{aligned}$ | 2.532.512.51 | 2. 2.51 |  |  |  | 2.422.382. |
| Electrical industrial apparatus. | 2. 56 | 2. 55 |  |  |  |  |  |  |  |  |  | $\begin{aligned} & 2.55 \\ & 2.52 \end{aligned}$ | $\begin{aligned} & 2.53 \\ & 2.52 \end{aligned}$ | 2.50 2.46 |  |
| Household appliances.-.....------- | 2.66 | 2.63 | 2.64 | 2.61 | 2.61 | 2. 63 | 2.59 | 2. 59 | 2. 59 | 2.60 | 2.60 | 2.59 | 2. 58 | 2.52 | 2. 43 |
| Electric lighting and wiring equipment. | 2.31 | 2.29 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 2.21 | 2.20 | 2.21 | 2.21 | 2.21 | 2. 2.20 | 2. 2.18 | 2. 28 | 2. 2.28 | 2.25 2.17 | 2. 2.16 | ${ }_{2}^{2.17}$ | 2.25 2 2 14 | 2. 2.11 | 2.15 |
| Communication equipment | 2.61 | 2. 59 | 2.60 | 2.61 | 2.60 | 2.61 | 2.60 | 2.60 | 2.60 | 2.58 | 2. 56 | 2. 56 | 2.57 | 2. 52 | 2. 44 |
| Electronic components and accessories |  |  | 2.10 |  |  |  |  |  |  |  |  |  |  | 2.52 2.00 |  |
| Miscellaneous electrical equipment | 2.09 | 2.09 |  | 2.09 | 2.08 | . 08 | 07 | 2.06 | 2.06 | 2.05 | 2.0 | 2.05 | 2.05 |  | 1.932.36 |
| and supplies. | 2. 58 | 2. 56 | 2.57 | 2.59 | 2.60 | 2.62 | 2.58 | 2.59 | 2.56 | 2.49 | 2.54 | 2. 54 | 2. 54 | $2.42$ |  |
| Transportation equipmentMotor vehicles and equipArcraft and parts.- | $\begin{aligned} & 2.98 \\ & 3.06 \\ & 2.99 \end{aligned}$ | $\begin{aligned} & 2.96 \\ & 3.03 \\ & 2.91 \end{aligned}$ | $\begin{aligned} & 2.97 \\ & 3.05 \\ & 2.91 \end{aligned}$ | $\begin{aligned} & \text { 2. } 97 \\ & \text { 3. } 04 \\ & 2.92 \end{aligned}$ | 2.97 | 3.01 | 2. 99 | 2. 96 | 2.95 | 2.90 | 2.91 | 2.89 | 2.89 | 2.81 | $\begin{aligned} & 2.74 \\ & 2.81 \\ & 2.70 \end{aligned}$ |
|  |  |  |  |  | 3.05 | 3.11 | 3. 10 | 3. 04 | 3. 04 | 2.97 | 2. 98 | 2.95 | 2.97 | 2.87 |  |
|  | $\begin{aligned} & 2.92 \\ & 2.92 \\ & 2.98 \\ & 2.23 \end{aligned}$ |  |  |  | 2.92 | 2.93 | 2.91 | 2. 91 | 2.88 | 2.87 | 2.86 | 2.85 | 2.84 | 2.78 |  |
| pairing boat building and re- |  | $\begin{aligned} & 2.92 \\ & 2.97 \\ & 2.23 \end{aligned}$ | $\begin{aligned} & 2.94 \\ & 2.97 \\ & 2.20 \end{aligned}$ | $\begin{aligned} & 2.91 \\ & 2.93 \\ & 2.19 \end{aligned}$ | $\begin{aligned} & 2.89 \\ & 2.94 \\ & 2.18 \end{aligned}$ | $\begin{aligned} & 2.91 \\ & 2.93 \\ & 2.19 \end{aligned}$ | $\begin{aligned} & 2.88 \\ & 2.91 \\ & 2.15 \end{aligned}$ | $\begin{aligned} & 2.88 \\ & 2.92 \\ & 2.18 \end{aligned}$ | $\begin{aligned} & 2.88 \\ & 2.95 \\ & 2.16 \end{aligned}$ | $\begin{aligned} & 2.88 \\ & 2.97 \\ & 2.15 \end{aligned}$ | $\begin{aligned} & 2.85 \\ & 2.98 \\ & 2.14 \end{aligned}$ | $\begin{aligned} & 2.84 \\ & 2.99 \\ & 2.14 \end{aligned}$ | 2.803.002.13 | $\begin{aligned} & 2.78 \\ & 2.83 \\ & 2.13 \end{aligned}$ | $\begin{aligned} & 2.64 \\ & 2.78 \\ & 2.06 \end{aligned}$ |
| Railroad equipment |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other transportation equipment.- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

See footnotes at end of table.

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


See footnotes at end of table.

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


[^57]Table C-1. Gross hours and earnings of production workers, ${ }^{1}$ by industry-Continued

| Industry | 1963 |  |  |  |  | 1962 |  |  |  |  |  |  |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | May ${ }^{2}$ | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | May | 1961 | 1960 |
| Manufacturing-Continued A verage weekly earnings | A verage weekly earnings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nondurable goods-Continued |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Apparel and related | $\$ 60.96$74.03 | \$59.45 | \$61.85 | \$60. 82 | \$59.64 | \$60. 12 | \$60. 62 | \$59. 95 | \$61. 32 | \$62. 16 | $\begin{aligned} & \$ 60.76 \\ & 73.53 \end{aligned}$ | $\$ 61.09$74.09 | $\$ 60.59$73.50 | $\$ 57.70$67.78 | $\begin{aligned} & \$ 56.45 \\ & 68.27 \\ & 48.55 \end{aligned}$ |
| Men's and boys' sults and cos |  | 70.76 | 73.48 | 7293 | 71.57 | 73.13 | 53.77 | 53.77 | 54. 48 | 54.81 |  |  |  |  |  |
| Men's and boys' furnishings. | 53.91 | 85 | 53.28 | 53.14 | $\checkmark 5$ | 53. 20 |  |  |  |  | 53. 58 | 54.95 | 53.58 | 49.87 |  |
| Women's, misses', aud outerwear. | 63.98 | 64.33 | 68.00 | 65. 93 | 63.46 | 62. 60 | 63.17 | 62.32 | 65. 23 | 67.16 | 65. 74 | 63.64 | 64.73 | 61.61 | 58.78 |
| Women's and chlldren's undergarments. | 56. 67 | 53.8660.3252.44 | $\begin{aligned} & 56.36 \\ & 69.56 \end{aligned}$ | $\begin{aligned} & 55.23 \\ & 67.12 \end{aligned}$ | 54.32 | $\begin{aligned} & 55.18 \\ & 65.34 \end{aligned}$ | $\begin{aligned} & 57.22 \\ & 62.46 \end{aligned}$ | $\begin{aligned} & 56.92 \\ & 63.68 \end{aligned}$ | $\begin{aligned} & 57.07 \\ & 66.79 \end{aligned}$ | $56.47$$69.00$ | $\begin{aligned} & 55.12 \\ & 68.26 \\ & 5 K \\ & 68 \end{aligned}$ | 55.02 <br> 65. 70 | 54.7761.60 | $\begin{gathered} 53.87 \\ 63.19 \end{gathered}$ | $\begin{aligned} & 51.91 \\ & 60.54 \\ & 51 \end{aligned}$ |
| Hats, caps, and mililnery...........- | 62.6656.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Oirls' and childiren's nuterwear. |  |  | 55.69 | 55.85 | 54.67 |  |  | 53.35 | 54.72 | 55. 69 | 55. 63 | 56.30 | 54.51 | 52.75 |  |
| Fur goods and miscellaneous apparel | 61.23 | 57.44 | 61.05 | 59.81 | 61.05 | 64. 61 | 64.79 | 63.89 | 64. 05 | 62. 59 | 62. 29 | 63.70 | 61.23 | 60.86 | 58. 74 |
| Miscellaneous fabricated textlle products. | 64. 94 | 63.24 | 63.88 | 63. 34 | 62. 53 | 6473 | 64. 90 | 64. 68 | 63. 96 | 63. 03 | 61.38 | 63. 96 | 63.71 | 61.45 | 60. 48 |
|  | 104.80 | 102. 90 | 104.55 | 103.21 | 103.64 | 10468 | 103. 28 | 103. 28 | 104.49 | 103.82 | 103.58 | 102.96 <br> 112 <br> 15 | 101.34 11.10 | 99. 109 1096 | 95. 37 105.46 |
| Paper and pulp | 116.16116.95 | 115. 01 | 117.40 | 115.02 | 114.93 | 119.08 | 115.01 | 113.45 | 116.77 | 117.64 | 116.59 | 115.58 | 112.46 | 109.44 | 105.46 105.16 |
| Paper brard ....... |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 10 |
| Converted paper and products. | $\begin{aligned} & 91.02 \\ & 94.58 \end{aligned}$ | $\begin{aligned} & 89.69 \\ & 92.34 \end{aligned}$ | $\begin{aligned} & 91.02 \\ & 93.25 \end{aligned}$ | $\begin{aligned} & 90.58 \\ & 92.34 \end{aligned}$ | $\begin{aligned} & 91.43 \\ & 91.98 \end{aligned}$ | 91.9494.24 | 90. 20 |  |  | 91.10 | 89. 60 | 90. 69 |  |  | 83. 23 |
| Paperboard |  |  |  |  |  |  |  | $95.15$ | 97.13 | 94.73 | 94.05 | 94.08 | $92.74$ | 90.47 | 86.10 |
| ntling, publishing, and allied indus. | 110.21 | 108. | 110.21 | 108. 20 | 106. 38 |  | 108. 49 | 107.82 | 109.62 | 108. 29 | 107.34 | 107.62 | 10 | 105. 05 | 102. 80 |
| Newspaper publishing and printing. | 113.15 | 110.83 | 109.38 | 10506 | 107.10 | 112.85 | 113.04 | 111.08 | 111.38 | 10999 | 109.87 | 110.23 | 110.90 | 107.38 | 105. 33 |
| Periodical publishing and printing. | 113.26 | 114.16 | 116.87 | 11337 | 106. 92 | 11383 | 111.83 | 114. 11 | 118. 55 | 115.83 | 111.95 | 114.62 | 108. 58 | 110.09 | 109.18 |
| Books. | 106.40 | 103.28 | 103.57 | 100.98 | 10084 | 10004 | 97.64 | 98.11 | 102. | 111. 18 | 98.64 | 10000 | 101. 75 |  | 95. 82 |
| Commercial printing | 111.83 | 110. 58 | 113.18 | 110.87 | 109. 52 | !11. 50 | 110.37 | 10970 | 111.11 | 110.54 87.30 | 84.75 | 109.87 85.31 | 86.36 | 82. 13 | 78.87 |
| Book bindling and relat | 89.08 | 87.55 | 88.01 | 86.56 | 86.71 | 87.01 | 85. 19 | 85.63 | 88. 53 | 87.30 | 84.75 | 85. | 86.36 |  | 78.87 |
| Other publishing and printing industries. | 111.34 | 111.43 | 115.33 | 114. 17 | 113.30 | 111.84 | 110.01 | 108.77 | 110.21 | 109.35 | 110.11 | 110.11 | 109.16 | 108.19 | 106.37 |
|  | A verage weekly hours |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 36.5 <br> 37.2 <br> 37.7 <br> 34.4 | $\begin{aligned} & 35.6 \\ & 36.1 \\ & 36.7 \end{aligned}$ | 36.637.337.0 | 36.237.436.9 | 35.536.7 | 3 3. 037.5 | $\begin{aligned} & 36.3 \\ & 37.2 \end{aligned}$ | 35.9 <br> 36.7 <br> 3.6 | $\begin{aligned} & 36.5 \\ & 37.8 \end{aligned}$ | $\begin{aligned} & 37.0 \\ & 37.7 \\ & 38.6 \end{aligned}$ | 36.638.138.0 | $\begin{aligned} & 36.8 \\ & 37.8 \\ & 38.7 \end{aligned}$ | $\begin{aligned} & 36.5 \\ & 37.5 \\ & 38.0 \end{aligned}$ | $\begin{aligned} & 35.4 \\ & 35.3 \\ & 0 \end{aligned}$ | 35.538.936.5 |
| Men's and boys' suits and co |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Men's and boys' furnishings |  |  |  |  | 36.7 | 37.2 | 37.6 | 37.6 |  |  |  |  |  |  |  |
| Women's, misses', and juntors' outerwear |  | 34.4 | 35.6 | 34.7 | 33.4 | 33.3 | 33.6 | 32.8 | 33.8 | 34.8 | 34.6 | 34.4 | 34.8 | 33.3 | 33.2 |
| Women's and children's underparments. | $\begin{aligned} & 36.8 \\ & 35.4 \end{aligned}$ | 35. 2 | 36.6 | 1 | 5 | 36.3 | 37.4 | 37.2 | 37.3 | 37.4 | 36.5 | 36.2 | 35.8 | 36.4 | 5. 8 |
| Hats, caps, and milinery...........-- |  | 33.7 34 | 37.0 36.4 | 35.7 36.5 | 35.5 35.5 | 36.5 35.0 | 34.7 35.5 | 34.8 35.1 | 36.3 36.0 | 37.5 36.4 | 36.5 36.6 | 36.5 36.8 | 35.8 36.1 | 35.7 35.4 | 35.8 85.3 |
| Gtrls' and children's outerwear. |  | 34.5 | 36.4 | 36.5 | 35.5 | 35.0 | 35.5 | 35.1 | 36.0 | 36.4 | 36.6 | 36.8 | 36.1 | 35.4 | 85.3 |
| Fur gonds and miscellaneous apparel. | 35.6 | 34.6 | 35.7 | 35.6 | 35.7 | 36.3 | 36.4 | 36.3 | 36.6 | 36.6 | 35.8 | 36.4 | 35.6 | 35.8 | 35.6 |
| Miscellaneous fabrleated products | 38.2 | 2 | 37.8 | 7 | 37.0 | 38.3 | 38.4 | 38. 5 | 38.3 | 38. 2 | 37.2 | 38. 3 | 37.7 | 37.7 | 7. 8 |
| Paper and allied prod | 42.6 | 42.0 | 42.5 | 423 | 42.3 | 429 | 42.5 | 42. 5 | 43. 0 | 42.9 | 42.8 | 42.9 | 42.4 | 42.5 | 42.2 |
| Papur and pul | 44.0 | 43.6 | 44.1 | 43.9 | 43. 9 | 43.9 | 43.6 43.4 | 43.3 | 43.7 44 | 43.6 44 | 43.9 44.5 | 43.7 44.8 | 43.4 | 43.7 43.6 | 43.4 43.1 |
| Paperboard. | 43.8 | 43.4 | 44.3 | 43.9 | 43.7 | 44.6 | 43.4 | 43.3 | 44.4 | 44.9 | 44.5 | 44.8 | 44.1 | 43.6 | 43.1 |
| Converted paper and paperboard products. | 41.0 | 4 | . 0 | 40.8 | 41.0 | 41.6 | 41.0 | 41.1 | 41.6 | 41.6 | 41.1 | 41.6 | 41.1 | 41.1 | 40.8 |
| Paperboard contalners and boxes.--- | 41.3 | 40.5 | 40.9 | 40.5 | 40.7 | 41.7 | 41.8 | 42.1 | 42.6 | 42.1 | 41.8 | 42.0 | 41.4 | 41.5 | 41.0 |
| Printing, publishing, and allied indus- | 38 | 0 | 38.4 | 38.1 | 37.9 | 38.6 | 38.2 | 38.1 | 38.6 | 38.4 | 38.2 | 38.3 | 38.4 | 38.2 | 38. 5 |
| Newspaper pubilishing and printing. | 36.5 | 36.1 | 36.1 | 35. 9 | 35. 7 | 370 | 36.7 | 36. 3 | 36. 4 | 36. 3 | 36. 5 | 36.5 | 36. 6 | 36. 4 | 36. 7 |
| Priodical publishing and printing- | 39.6 | 39.5 | 40.3 | 39.5 | 38.6 | 39.8 | 39.1 38.9 | 39.9 39 | 40.6 | 40.5 | 39.7 39.3 | 40.5 40 | 39.2 40.7 | 39.6 40.6 | 39.7 40.6 |
| Books... | 41.4 | 40.5 38.8 | 40.3 39.3 | 39.6 38.8 | 39.7 38.7 | 39.7 39.4 | 38.9 39.0 | 39.4 38.9 | 40.7 39.4 | 40.8 39.2 | 39.3 39.1 | 40.0 39.1 | 40.7 39.1 | 48.6 38.8 | 39.2 |
| Commercial printing | 39.1 | 38.8 | 39.3 | 38.8 | 38.7 | 39.4 | 39.0 | 38.9 | 39.4 | 39.2 | 39.1 | 3.1 | \% |  | 39.2 |
| Bookbinding and reiated industries. | 38.9 | 38.4 | 38.6 | 38.3 | . 2 | 38.5 | 38.2 | 38.4 | 39.7 | 39.5 | 38.7 | 38.6 | 38.8 | 38.2 | 3.1 |
| Other publishing and printing industries | 38.0 | 37.9 | 38.7 | 38.7 | 38.8 | 38.7 | 38.6 | 38.3 | 38.4 | 38.1 | 38.1 | 38.5 | 38.3 | 38.5 | 38.4 |
|  |  |  |  |  |  |  | erage | urly | nings |  |  |  |  |  |  |
| pparel and related produc | \$1. 67 | \$1.67 | \$1.69 | \$1.68 | \$1.68 | \$1.67 | \$1.67 | \$1. 67 | \$1.68 | \$1.68 | \$1.66 | \$1.66 | \$1.66 | \$1. 63 | 1. 59 |
| Men's and boys' suits and coats..-- | 1. 99 | 1. 96 | 1.97 | 1.95 | 1. 95 | 1. 95 | 1. 95 | 1.95 | 1. 96 | 1. 96 | 1.93 | 1.96 1.42 | 1. 1.41 | 1.92 1.37 | 1.85 1.33 |
| M-n's and boys furnishings.....-- | 1.43 | 1.44 | 1.44 | 1. 44 | 1.44 | 1. 43 | 1.43 | 1.43 | 1. 43 | 1.42 | 1.41 | 1.42 | 1.41 | 1.37 | 1.33 |
| Women's, misses', and Juntors' onterwear | 1.86 | 1.87 | 1.91 | 1.90 | 1.90 | 1.88 | 1.88 | 1.90 | 1. 83 | 1.93 | 1.90 | 1.85 | 1.86 | 1.85 | 1. 77 |
| Women's and children's undergarments | 1.54 | 1. 53 | 1.54 | 1.53 | 1. 53 | 1. 52 | 1. 53 | 1. 53 | 1.53 | 1. 51 | 1. 51 | 1. 52 | 1. 53 | 1. 48 | 1.45 |
| Hats, caps, and milinery--- | 1. 77 | 1. 79 | 1.88 | 1. 88 | 1.83 | 1. 79 | 1. 80 | 1. 83 | 1.84 | 1.84 1.53 | 1.87 1.52 | 1.80 1.53 | 1. 76 1.51 | 1.77 1.49 | 1.72 1.46 |
| Girls' and children's outerwear -..-- | 1.53 | 1.52 | 1.53 | 1. 53 | 1.54 | 1. 49 | 1.51 | 1. 52 | 1. 52 | 1. 53 | 1. 52 | 1.53 | 1. 51 | 1.49 | 1.46 |
| Fur goods and miscellaneous apparel | 1. 72 | 1.66 | 1.71 | 1.68 | 1.71 | 1.78 | 1.78 | 1.76 | 1.75 | 1.71 | 1.74 | 1.75 | 1. 72 | 1. 70 | 1.65 |
| Miscellaneous fabricated textlle products. | 1.70 | 1.70 | 1.69 | 1.68 | 1. 69 | 1.69 | 1. 69 | 1.68 | 1. 67 | 1. 65 | 1. 65 | 1. 67 | 1. 69 | 1. 63 | 1. 60 |
| Paper and allled prod | 2. 46 | 2.45 | 2.46 | 2. 44 | 2. 45 | 2. 44 | 2. 43 | 243 | 2. 43 | 2. 42 | 2. 42 | 2. 40 | 2. 39 | 2. 34 | 2. 26 |
| Paper and pulp. | 2. 64 | 2.62 | 2.64 | 2. 62 | 2. 63 | 2. 63 | 2. 62 | 2. 62 | 2.61 | 2. 60 | 2. ${ }_{2} 61$ | 2.58 2.58 | 2. 2.55 | 2. 2.51 | 2. 43 |
| Paperboard | 2.67 | 2.65 | 2.65 | 2.62 | 2.63 | 2.67 | 2.65 | 2. 62 | 2.63 | 2.62 | 2.62 | 2.58 | 2. 55 |  | 2.9 |
| Converted paper products. | 2. 22 | 2.22 | 2.22 | 2. 22 | 2.23 | 2.21 | 2. 20 | 2. 20 | 2. 20 | 2.19 | 2.18 | 2.18 | 2. 18 | 2. 12 | 2.04 |
| Paperboard containers and boxes---- | 2. 29 | 2.28 | 2.28 | 2.28 | 2. 26 | 2. 26 | 2.25 | 2. 26 | 2. 28 | 2. 25 | 2. 25 | 2.24 | 2. 24 | 2.18 | 2. 10 |
| Printing, publishing, and allied indus- |  | 2.86 | 2.87 | 2.84 | 2.82 | 2.83 | 2.84 | 2.83 | 2.84 | 2.82 | 2.81 | 2.81 | 2.81 | 2. 75 | 2. 67 |
|  | 3. 10 | 3. 07 | 3.03 | 3.01 | 3. 00 | 3. 05 | 3. 08 | 3. 06 | 3. 06 | 3. 03 | 3. 01 | 3.02 | 3. 03 | 2.95 | 2. 87 |
| Periodical publishing and printing- | 2. 86 | 2.89 | 2.90 | 2.87 | 2. 77 | 2. 86 | 2. 86 | 2. 86 | 2. 92 | 2. 86 | 2. 82 | 2. 83 | 2. 2.77 | 2. 78 | 2.75 |
| Books. | 2. 57 | 2.55 | 2.57 | 2. 55 | 2. 54 | 2. 52 | 2. 515 | 2. 289 | 2. 218 | 2. 48 2.82 | 2. 2.81 | 2.50 2.81 | 2. 2.81 | 2. 2.73 | 2.36 |
| Commercial printing | 2. 86 | 2.85 | 2.88 2.28 | 2.85 | 2.83 2.27 | 2.83 2.26 | 2. 2.23 | 2. 23 | 2. 23 | 2. 2.21 | 2.819 | 2. 21 | 2. 22 | 2.15 | 2.07 |
| Book binding and related industries. Other publishing and printing in- | 2. 29 | 2. 28 | 2.28 | 2.26 | 2.27 | 2.26 | 2.23 | 2. 23 | 2.23 2.87 | 2.21 2.87 | 2.19 2.89 | 2.81 2.86 | 2. 2.8 | 2.18 2.81 | 2.77 |

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

| Industry | 1963 |  |  |  |  | 1962 |  |  |  |  |  |  |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | May ${ }^{2}$ | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | May | 1961 | 1960 |
| Manufacturing-Continued A verage weekly earnings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nondurable goods-Continued |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Chemicals and allied products | \$112.59 | $\begin{array}{r} \$ 113.40 \\ 131.24 \end{array}$ | \$111.37 | \$110. 83 | \$111.10 | \$112.17 | \$111.37 | \$110.95 | \$110. 81 | \$110. 12 | \$110.81 | \$111. 19 | \$109. 52 | \$106. 81 | $\begin{array}{r} \$ 103.25 \\ 117.31 \end{array}$ |
| Industrial chemicals --...-.-...-- |  |  |  | 126. 16 | 126.05 | 127.56 | 126.65 | 126. 05 | 125.52 | 124.09 | 124.80 | 125.16 | 123.73 | 120.93 |  |
| Plastics and synthetics, except | 112.32 | $\begin{array}{r} 114.66 \\ 98.58 \\ \hline \end{array}$ | 110.68 | 110.15100.45 | $\begin{aligned} & 110.00 \\ & 100.85 \end{aligned}$ | 111.61100.60 | 109.86100.12 | 109.59100.19 | $\begin{gathered} 110.24 \\ 98.16 \end{gathered}$ | $\begin{array}{r} 110.24 \\ 98.23 \end{array}$ | $\begin{gathered} 111.41 \\ 97.92 \end{gathered}$ | $\begin{array}{r} 112.52 \\ 98.88 \end{array}$ | $\begin{array}{r} 109.62 \\ 98.57 \end{array}$ | 107.7493.96 | $\begin{array}{r}104.17 \\ 90.68 \\ \hline\end{array}$ |
| Drugs | 99.14 |  | 100.70 |  |  |  |  |  |  |  |  |  |  |  |  |
| Soap, cleaners, and toilet goods | 103. 53 | 102.62 | 103.28 | 102.91 | 103.02 | 103.73 | 103.98 | 103.48 | 105.32 | 103.98 | 103.79 | 103. 73 | 101.50 | 98.98 94.77 |  |
| Paints, varnishes, and allied products | $\begin{array}{r} 108.66 \\ 97.58 \\ 109.30 \end{array}$ | $\begin{array}{r} 103.48 \\ 99.50 \\ 105.78 \end{array}$ | $\begin{array}{r} 103.38 \\ 91.08 \\ 104.86 \end{array}$ | $\begin{array}{r} 102.21 \\ 89.89 \\ 105.06 \end{array}$ | $\begin{array}{r} 101.77 \\ 89.89 \\ 106.24 \end{array}$ | $\begin{array}{r} 102.331 \\ 90.52 \\ 107.52 \end{array}$ | 101.6689.46105.66 | $\begin{array}{r} 100.75 \\ 89.68 \end{array}$ | $\begin{array}{r} 101.75 \\ 90.31 \end{array}$ | $\begin{array}{r} 102.34 \\ 86.72 \end{array}$ |  |  |  |  | 95.6582.37 |
| Agricultural chemicals. |  |  |  |  |  |  |  |  |  |  | $\begin{array}{r} 102.09 \\ 88.20 \end{array}$ | $\begin{array}{r} 104.25 \\ 87.77 \end{array}$ | $\begin{gathered} 105.00 \\ 92.57 \end{gathered}$ | $\begin{aligned} & 98.25 \\ & 84.15 \end{aligned}$ |  |
| Other ehemical products. |  |  |  |  |  |  |  | 105. 57 | 106.17 | 105.08 | 104.42 | 104.75 | 103.09 | 101.19 | 97.06 |
| Petroleum refining and related industries $\qquad$ | $\begin{aligned} & 131.57 \\ & 137.03 \\ & 111.32 \end{aligned}$ | 134.20140.95105.50 | $\begin{array}{r} 128.61 \\ 134.97 \\ 99.35 \end{array}$ | $\begin{aligned} & 126.36 \\ & 132.68 \end{aligned}$ | $\begin{aligned} & 130.62 \\ & 137.52 \end{aligned}$ | $\begin{aligned} & 126.99 \\ & 132.48 \\ & 105.59 \end{aligned}$ | $\begin{aligned} & 127.71 \\ & 132.57 \end{aligned}$ | $\begin{aligned} & 127.19 \\ & 130.88 \end{aligned}$ | $\begin{aligned} & 131.09 \\ & 135.24 \end{aligned}$ | $\begin{aligned} & 126.35 \\ & 129.34 \end{aligned}$ |  |  |  |  | 118.78123.22 |
| Petroleum refining------1.--1.--- |  |  |  |  |  |  |  |  |  |  | 129. 44 | 127.68 131.65 | $\begin{aligned} & 126.05 \\ & 130.60 \end{aligned}$ | $\begin{aligned} & 124.42 \\ & 129.24 \end{aligned}$ |  |
| Other petroleum and coal products- |  |  |  | 98.60 | 102.50 |  | 108.03 | 113.48 | 115.57 | 113. 40 | 113.70 | 111.95 | 106. 27 | 102.10 | 99.26 |
| Rubber and miscellaneous plastic products | 101. 09 | 99.05 | 101.34 | 100.69 | 101.34 | 103. 00 | 101.84132.75 | $\begin{aligned} & 101.02 \\ & 132.11 \end{aligned}$ | $\begin{aligned} & 101.76 \\ & 131.78 \end{aligned}$ | $\begin{aligned} & 101.02 \\ & 131.70 \end{aligned}$ | $\begin{aligned} & 101.84 \\ & 136.83 \end{aligned}$ | $\begin{aligned} & 104.58 \\ & 138.13 \end{aligned}$ | $\begin{aligned} & 101.19 \\ & 130.19 \end{aligned}$ |  | 92.97 |
| Tires and inner tubes--------------- | $\begin{array}{r} 128.00 \\ 96.22 \\ 0.21 \end{array}$ | $\begin{array}{r}\text { 126. } \\ 94 \\ \hline 84 \\ \hline 8.63\end{array}$ | 129.3695.82 | 128.3295.8285.89 | 129.5296.2986.51 | $\begin{gathered} 134.55 \\ 97.47 \\ \hline 08 \end{gathered}$ |  |  |  |  |  |  |  | 96.72 121.88 | 116.3387.82 |
| Other rubber products |  |  |  |  |  |  | 132.7596.5985.26 | 185.3085.48 | 96.4686.53 | 94.42 | $\begin{array}{r}130.83 \\ 93.90 \\ 85 \\ \hline\end{array}$ | - 98.05 | 96.05 | 91.53 |  |
| Miscellaneous plastic products | 86.51 | 84.63 | 86.72 |  |  | 36.10 |  |  |  | 85. 28 | 85.89 | 87.36 | 85. 90 | 82.82 | 79.40 |
| Leather and leather products. Leather tanning and finishing Footwear, except rubber. $\qquad$ Other leather products. $\qquad$ | $\begin{aligned} & 64.77 \\ & 91.53 \\ & 61.37 \\ & 63.24 \end{aligned}$ | $\begin{aligned} & 62.48 \\ & 89.38 \\ & 59.33 \\ & 60.69 \end{aligned}$ | $\begin{aligned} & 64.58 \\ & 88.58 \\ & 61.58 \\ & 63.04 \end{aligned}$ | $\begin{aligned} & 65.08 \\ & 88.36 \\ & 62.33 \\ & 6.24 \end{aligned}$ | $\begin{aligned} & 65.60 \\ & 88.84 \\ & 63.54 \\ & 62.70 \end{aligned}$ | $\begin{aligned} & 65.05 \\ & 88.84 \\ & 62.66 \\ & 62.79 \end{aligned}$ | $\begin{aligned} & 64.03 \\ & 87.78 \\ & 60.67 \\ & 64.05 \end{aligned}$ | $\begin{aligned} & 62.63 \\ & 88.44 \\ & 59.30 \\ & 61.79 \end{aligned}$ | $\begin{aligned} & 64.36 \\ & 88.26 \\ & 61.69 \\ & 6.75 \end{aligned}$ | $\begin{aligned} & 65.53 \\ & 87.82 \\ & 63.67 \\ & 62.37 \end{aligned}$ | $\begin{aligned} & 65.84 \\ & 85.89 \\ & 64.46 \\ & 6.21 \end{aligned}$ | $\begin{aligned} & 65.88 \\ & 88.70 \\ & 64.01 \\ & 63.08 \end{aligned}$ | 63.9888.2961.6661.55 | $\begin{aligned} & 62.83 \\ & 84.35 \\ & 60.15 \\ & 61.07 \end{aligned}$ | $\begin{aligned} & 60.52 \\ & 81.74 \\ & 58.04 \\ & 58.62 \end{aligned}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | Average | weekly | hours |  |  |  |  |  |  |
| Chemicals and allied products.-.------ | 41.741.6 | 42.0 | $\begin{aligned} & 41.4 \\ & 41.6 \end{aligned}$ | 41.241.5 | 41.341.6 | 41.742.1 | 41.441.8 | 41.441.6 | 41.541.7 | 41.441.5 | 41.5 <br> 41.6 | 41.842.0 | 41.8 | 41.4 | 41.341.6 |
| Industrial chemicals--..--.-.----- |  | 42.2 |  |  |  |  |  |  |  |  |  |  | 41.8 | 41.7 |  |
| Plastics and synthetics, except | 41.6 | 42.0 | $\begin{aligned} & 41.3 \\ & 41.1 \end{aligned}$ | $\begin{aligned} & 41.1 \\ & 41.0 \end{aligned}$ | $\begin{aligned} & 41.2 \\ & 41.5 \end{aligned}$ | $\begin{aligned} & 41.8 \\ & 41.4 \end{aligned}$ | $\begin{aligned} & 41.3 \\ & 41.2 \end{aligned}$ | $\begin{aligned} & 41.2 \\ & 41.4 \end{aligned}$ | $\begin{aligned} & 41.6 \\ & 40.9 \end{aligned}$ | $\begin{aligned} & 41.6 \\ & 41.1 \end{aligned}$ | $\begin{aligned} & 42.2 \\ & 40.8 \end{aligned}$ | $\begin{aligned} & 42.3 \\ & 41.2 \end{aligned}$ | 42.040.9 | 41.6 | 41.540.340.5 |
| Drugs | 40.3 | 40.4 |  |  |  |  |  |  |  |  |  |  |  | 40.5 |  |
| Soap, cleaners, and toilet goods---- | 40.6 | 40.4 | 40.5 | 40.2 | 40.4 | 41.0 | 41.1 | 40.9 | 41.3 | 41.1 | 40.7 | 41.0 | 40.6 | 40.9 |  |
| Paints, varnishes, and allied prod- | 42.1 | 40.9 | 40.7 | 40.4 | 40.2 | 40.6 | 40.5 | 40.3 | 40.7 | 411 | 41.0 | 41.7 | 42.0 | 40.6 | 40.7 |
| Agricultural chemical | 45.6 | 48.3 | 44.0 | 42.6 | 42.4 | 42.1 | 42.0 | 42.5 | 42.6 | 41.1 | 42.2 | 42.4 | 45.6 | 42.5 | 42.9 |
| Other chemical produc | 42.2 | 41.0 | 40.8 | 41.2 | 41.5 | 42.0 | 41.6 | 41.4 | 41.8 | 41.7 | 41.6 | 41.9 | 41.4 | 41.3 | 41.3 |
| Petroleum refining and related indus- |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |
| tries---1-.-----7-.- | 41.4 | 42.2 | 40.9 | 40.7 | 41.8 | 41.4 | 41.6 | 40.9 | 42.0 | 40.8 | 41.6 | 41.4 | 41.2 | 40.9 | 41.1 40.8 |
| Other petroleum and coal products. | 44.0 | 42.2 | 39.9 | 39.6 | 41.0 | 41.9 | 42.7 | 44.5 | 45.5 | 45.0 | 45.3 | 44.6 | 43.2 | 42.9 | 42.6 |
| Rubber and miscellaneous plastic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| products.--------7.-- | 40.6 | 40.1 | 40.7 | 40.6 | 40.7 | 41.2 | 40.9 | 40.9 | 41.2 | 40.9 | 40.9 | 42.0 | 41.3 | 40.3 | 39.9 |
| Tires and inner tubes. | 40.0 | 39.9 | 40.3 | 40.1 | 40.1 | 41.4 | 41.1 | 40.9 | 40.8 | 40.9 | 42.1 | 42.5 | 41.2 | 39.7 | 39.3 |
| Other rubber products | 40.6 | 40.0 | 40.6 | 40.6 | 40.8 | 41.3 | 41.1 | 40.9 | 41.4 | 40.7 | 40.3 | 41.9 | 41.4 | 40.5 | 40.1 |
| Miscellaneous plastic products | 41.0 | 40.3 | 41.1 | 40.9 | 41.0 | 41.0 | 40.6 | 40.9 | 41.4 | 41.0 | 40.9 | 41.8 | 41.3 | 40.6 | 40.1 |
| Leather and leather products | 36.8 | 35.5 | 36.9 | 37.4 | 37.7 | 37.6 | 36.8 | 36.2 | 37.2 | 38.1 | 38.5 | 38.3 | 37.2 | 37.4 | 36.9 |
| Leather tanning and finishi | 40.5 | 39.9 | 39.9 | 39.8 | 40.2 | 40.2 | 39.9 | 40.2 | 40.3 | 40.1 | 39.4 | 40.5 | 40.5 | 39.6 | 39.3 |
| Footwear, except rubber.- | 36.1 | 34.9 | 36.4 | 37.1 | 37.6 | 37.3 | 35.9 | 35.3 | 36.5 | 37.9 | 38.6 | 38.1 | 36.7 | 36.9 | 36.5 |
| Other leather products. | 37.2 | 35.7 | 37.3 | 37.2 | 37.1 | 37.6 | 37.9 | 37.0 | 37.8 | 37.8 | 37.7 | 38.0 | 37.3 | 37.7 | 37.1 |
|  |  |  |  |  |  |  | Average | ourly | arnings |  |  |  |  |  |  |
| Chemicals and allied products | \$2.70 | \$2. 70 | \$2.69 | \$2. 69 | \$2. 69 | \$2. 69 | \$2. 69 | \$2. 68 | \$2. 67 | \$2. 66 | \$2. 67 | \$2. 66 | \$2. 62 | \$2. 58 | \$2. 50 |
| Industrial chemicals. | 3.05 | 3.11 | 3.05 | 3.04 | 3.03 | 3.03 | 3.03 | 3.03 | 3.01 | 2. 99 | 3.00 | 2.98 | 2.96 | 2.90 | 2.82 |
| Plastics and synthetics, except glass | 2.70 | 2.73 | 2.68 | 2.68 | 2.67 | 2.67 | 2.66 | 2.66 | 2.65 | 2.65 | 2.64 | 2.66 | 2.61 | 2. 59 | 2.51 |
| Drugs. | 2.46 | 2.44 | 2.45 | 2.45 | 2. 43 | 2. 43 | 2. 43 | 2. 42 | 2.40 | 2.39 | 2.40 | 2.40 | 2.41 | 2.32 | 2.25 |
| Soap, cleaners, and toilet goods-.-- Paints, | 2.55 | 2.54 | 2.55 | 2.56 | 2.55 | 2. 53 | 2. 53 | 2.53 | 2.55 | 2.53 | 2.55 | 2.53 | 2. 50 | 2.42 | 2.34 |
| ucts | 2. 58 | 2. 53 | 2.54 | 2.53 | 2.53 | 2. 52 | 2.51 | 2. 50 | 2. 50 | 2.49 | 2.49 | 2. 50 | 2. 50 | 2.42 | 2.35 |
| Agricultural chemicals. | 2.14 | 2.06 | 2.07 | 2.11 | 2.12 | 2.15 | 2.13 | 2.11 | 2.12 | 2.11 | 2.09 | 2.07 | 2.03 | 1.98 | 1.92 |
| Other chemical products. | 2.59 | 2.58 | 2.57 | 2.55 | 2.56 | 2.56 | 2.54 | 2. 55 | 2. 54 | 2. 52 | 2.51 | 2.50 | 2. 49 | 2.45 | 2.35 |
| Petroleum refining and related indus- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| tries.. | 3.14 | 3.18 | 3.16 | 3.12 | 3.14 | 3.08 | 3.07 | 3.05 | 3.07 | 3.03 | 3.06 | 3.04 | 3.03 | 3.02 | 2.89 |
| Petroleum refining | 3.31 | 3.34 | 3.30 | 3.26 | 3.29 | 3.20 | 3.21 | 3.20 | 3.22 | 3.17 | 3.21 | 3.18 | 3.17 | 3.16 | 3.02 |
| Other petroleum and coal products- | 2.53 | 2.50 | 2.49 | 2.49 | 2.50 | 2. 52 | 2. 53 | 2. 55 | 2.54 | 2. 52 | 2.51 | 2. 51 | 2.46 | 2. 38 | 2.33 |
| Rubber and miscellaneous plastic products |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| prodires and inner tubes.-.-- | 2.49 3.20 | 2.47 3.18 | 2.49 | 2. 48 | 2. 49 | 2.50 | 2.49 3 | 2.47 3.23 | 2.47 3.23 | 2.47 | 2.49 3.25 | 2.49 | 2. 45 | 2. 40 | 2.33 |
| Other rubber products. | 2.37 | 2.36 | 2.36 | 2.36 | 2.36 | 2.36 | 2.35 | 2.33 | 2.33 | 2.32 | 2.33 | 2.34 | 2.32 | 2.26 | 2.18 |
| Miscellaneous plastic products | 2.11 | 2.10 | 2.11 | 2.10 | 2.11 | 2.10 | 2.10 | 2.09 | 2.09 | 2.08 | 2.10 | 2.09 | 2.08 | 2.04 | 1. 98 |
| Leather and leather products | 1.76 | 1. 76 | 1.75 | 1. 74 | 1. 74 | 1.73 | 1.74 | 1.73 | 1. 73 | 1. 72 | 1.71 | 1. 72 | 1.72 | 1.68 | 1.64 |
| Leather tanning and finishing. | 2.26 | 2.24 | 2.22 | 2.22 | 2.21 | 2.21 | 2.20 | 2. 20 | 2. 19 | 2.19 | 2.18 | 2.19 | 2.18 | 2.13 | 2. 08 |
| Footwear, except rubber | 1. 70 | 1.70 | 1.70 | 1.68 | 1.69 | 1.68 | 1.69 | 1.68 | 1.69 | 1.68 | 1.67 | 1.68 | 1.68 | 1.63 | 1.59 |
| Other leather products.- | 1.70 | 1.70 | 1.69 | 1.70 | 1.69 | 1.67 | 1.69 | 1.67 | 1.66 | 1.65 | 1. 65 | 1.66 | 1.65 | 1. 62 | 1. 58 |

See footnotes at end of table.

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

| Industry | 1963 |  |  |  |  | 1962 |  |  |  |  |  |  |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | May ${ }^{2}$ | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | May | 1961 | 1960 |
|  | A verage weekly earnings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Local and interurban passenger transit: Local and suburban transportation | \$103.09 | \$101. 22 | \$100. 32 | \$100. 91 | \$99. 42 |  |  | 100.38 | 100.20 | 101.01 | 100. 49 | 101.48 | 100.58 | 98. 24 | 94. 82 |
| Intercity and rural buslines_------ | 123.55 | 124.27 | 119.13 | 122.97 | 125. 12 | 116.33 | 117.73 | 119.14 | 125. 65 | 129.44 | 126. 62 | 121.80 | 117.85 | 112. 14 | 105. 22 |
| Motor freight transportation and storage | 116.62 | 114.95 | 114.67 | 113.98 | 111. 52 | 114. 54 | 113.30 | 113.30 | 115. 78 | 115. 35 | 114.81 | 114.39 | 112.61 | 108.16 | 104. 17 |
|  | 136.82 | 138.11 | 135. 94 | 138.63 | 138.58 | 139.52 | 131.78 | 130.07 | 135.05 | 130.09 | 137.37 | 133. 50 | 130.17 | 131.78 | 124. 53 |
| Communication: <br> Telephone communication | 100.84 |  | 100. 58 | 101.09 |  |  |  | 102.08 | 102.31 | 99.29 | 99.54 | 97.66 | 96.14 | 93.38 | 89.50 |
| Telegraph communication | 110.04 | 108. 16 | 107.38 | 108.05 | 108.05 | 106.97 | 105. 78 | 107. 74 | 109.98 | 110.08 | 111.11 | 111.28 | 108. 61 | 104.08 | 100.01 |
| Radio and television broadcasting- | 133.00 | 135. 04 | 131. 99 | 131.93 | 134.30 | 130.93 | 132.78 | 131. 14 | 130.81 | 126. 10 | 127. 53 | 124.68 | 126. 16 | 119.74 | 121.13 |
| Electric, gas, and sanitary services_-.- | 120.42 | 119.72 | 119.43 | 120.01 | 119.60 | 121.18 | 119.48 119 | 118.78 120 | 118.94 120.06 | 116.85 118.82 | 117.14 119 | 115.87 117.14 | 115.46 116.31 | 112.48 112.75 | 108.65 109.45 |
| Electric companies and systems... | 121.54 | 120.42 111.65 | 120.13 112.48 | 119.43 | 120.42 111.38 | 121.60 <br> 114 <br> 1 | 119.89 | 120.30 110.70 | 120.06 111.51 | 118.82 | 119.11 107 | 117.14 106.80 | 116.31 <br> 107 <br> 1 | 112.75 104.19 | 109.45 100.69 |
| Gas companies and systems | 129.78 | 111.65 129.05 | 1128.43 | 129.68 | 128.64 | 114.40 130.94 | 129.27 | 1128.23 | 127.82 | 125.97 | 125.87 | 125.26 | 125.66 | 121.77 | 117.26 |
| Water, steam, and sanitary systems. | 96.35 | 97.10 | 97.34 | 98.47 | 97.64 | 96.70 | 97.34 | 95.47 | 97.29 | 95.06 | 96.59 | 94.37 | 93.96 | 83.02 | 89.84 |
|  | Average weekly hours |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Transportation and public utilities: Railroad transportation: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 41.9 | 42.7 | 43.2 | 41.1 | 43.3 | 42.5 | 42.4 | 43.1 | 42.1 | 41.7 |
| Local and interurban passenger transit: Local and suburban transportation_ | 42.6 | 42.0 | 41.8 | 41.7 | 41.6 | 42.2 | 42.1 | 42.0 | 42.1 | 42.8 | 42.4 | 43.0 | 42.8 | 42.9 | 43.1 |
| Intercity and rural buslinss..-.-.-- | 42.9 | 43.0 | 41.8 | 43.3 | 43.9 | 41.4 | 41.6 | 42.4 | 44.4 | 45.9 | 44.9 | 43.5 | 42.7 | 42.8 | 42.6 |
| Motor freight transportation and storage |  | 41.2 | 41.1 | 41.0 | 40.7 | 41.5 | 41.2 | 41.5 | 42.1 | 42.1 | 41.9 | 41.9 | 41.4 | 41.6 | 41.5 |
| Pipeline transportation | 40.6 | 40.5 | 40.1 | 40.3 | 41.0 | 41.4 | 40.3 | 39.8 | 40.8 | 40.4 | 41.5 | 40.7 | 40.3 | 40.3 | 40.8 |
| Communication: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Telephone communication-- | 39.7 42.0 | 39.5 41.6 | 39.6 41.3 | 39.8 41.4 | 39.5 41.4 | 39.9 41.3 | 40.9 41.0 | 40.5 41.6 | 40.6 42.3 | 40.2 42.5 | 40.3 42.9 | 39.7 42.8 | 39.4 43.1 | 39.4 41.8 | 39.6 42.2 |
| Radio and television broadcasting. | 39.7 | 39.6 | 39.4 | 39.5 | 39.5 | 39.2 | 39.4 | 39.5 | 39.4 | 38.8 | 39.0 | 38.6 | 38.7 | 38.5 | 38.7 |
| Electric, gas, and sanitary services...-- | 41.1 | 41.0 | 40.9 | 41.1 | 41.1 | 41.5 | 41.2 | 41.1 | 41.3 <br> 41.4 | 41.0 41.4 | 41.1 41.5 | 40.8 41.1 | 40.8 41.1 | 40.9 41.0 | 41.0 41.3 |
| Electric companies and systems. | 41.2 40.8 | 41.1 40.6 | 41.0 40.9 | 40.9 41.1 | 41.1 | 41.5 41.6 | 41.2 41.0 | 41.2 41.0 | 41.4 41.3 | 41.4 40.5 | 41.5 40.5 | 41.1 40.3 | 41.1 40.4 | 41.0 40.7 | 41.3 40.6 |
| Gas companies and systems | 40.8 41.2 | 40.6 41.1 | 40.9 40.9 | 41.1 41.3 | 41.1 41.1 | 41.6 <br> 41.7 | 41.0 41.3 | 41.0 41.1 | 41.3 41.1 | 40.5 40.9 | 40.5 41.0 | 40.3 40.8 | 40.4 40.8 | 40.7 41.0 | 40.6 41.0 |
| Water, steam, and sanitary systems. | 41.2 41.0 | 41.1 40.8 | 40.9 40.9 | 41.3 41.2 | 41.1 41.2 | 41.7 40.8 | 41.3 40.9 | 41.1 40.8 | 41.1 41.4 | 40.9 40.8 | 41.0 41.1 | 40.8 40.5 | 40.8 40.5 | 41.0 40.8 | 41.0 41.4 |
|  | A verage hourly earnings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Local and interurban passenger transit: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Local and suburban transportation- | \$2. 42 | \$2. 41 | \$2. 40 | \$2. 42 | \$2. 39 | 2.39 | 2. 39 | 2. 39 | 2. 38 | 2. 36 | 2. 37 | 2. 36 | 2.35 | 2. 29 | 2. 20 |
| Intercity and rural buslines..--.--- | 2.88 | 2.89 | 2.85 | 2.84 | 2.85 | 2.81 | 2.83 | 2.81 | 2.83 | 2.82 | 2.82 | 2.80 | 2.76 | 2.62 | 2.47 |
| Motor freight transportation and |  |  | 2. 79 | 2.78 | 2.74 | 2.76 | 2.75 | 2. 73 | 2.75 | 2.74 | 2.74 | 2.73 | 2.72 | 2.60 | 2. 51 |
|  | 2.81 3.37 | ${ }_{3.41}$ | 3.39 | 3.44 | 3.38 | 3.37 | 3.27 | 3. 26 | 3.31 | 3.22 | 3.31 | 3.28 | 3.23 | 3.27 | 3.09 |
| Communication: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Telephone communication- | 2.54 | 2. 53 |  |  | 2. ${ }_{2} 61$ | 2. 54 | 2.52 <br> 2.58 <br> 1 | 2. 52 | 2. 2.60 | 2. 47 | 2.47 2.59 | 2. 2.60 | 2. 24 | 2.37 2.49 | 2. 28 |
| Telegraph communication ${ }^{6}$----..--- | 2.62 <br> 3.35 | 2. 60 | 2.60 3.35 | 2.61 3.34 | 2. 61 | 2.69 3.34 | + ${ }^{2.58} \begin{array}{r}\text { 3 } \\ \\ 2.37\end{array}$ | 2. 59 | 2. 3.30 | 2. 59 | 2.59 3.27 | 3. 23 | 3.26 | 2. 411 | 2.37 3.13 |
| Radio and television broadcasting- <br> Electric, gas, and sainitary services | 3.35 2.93 | 3.92 2.92 | 3.35 2.92 | 3.34 2.92 | 3. 91 | 2. 92 | 3.37 2.90 2. | 2. 28 | 2. 88 | 2. 85 | 3.27 2.85 | 3.84 | 2.83 | 2.75 | 2. 65 |
| Electric companies and systems.---- | 2.95 | 2. 93 | 2.93 | 2. 92 | 2. 93 | 2.93 | 2. 91 | 2. 92 | 2. 90 | 2.87 | 2.87 | 2.85 | 2.83 | 2.75 | 2. 65 |
| Gas companies and systems.......-- | 2.75 | 2. 75 | 2.75 | 2.76 | 2.71 | 2.75 | 2.71 | 2. 70 | 2. 70 | 2. 64 | 2. 66 | 2. 65 | 2.65 | 2. 56 | 2. 48 |
| Combined utility systems...----.-- | 3. 15 | 3. 14 | 3. 14 | 3. 14 | 3. 13 | 3. 14 | 3. 13 | 3. 12 | 3. 11 | 3.08 2.33 | 3.07 2.35 | 3.07 2.33 | 3.08 2.32 | 2.97 2.98 | 2.86 2.17 |
| Water, steam, and sanitary systems. | 2.35 | 2.38 | 2.38 | 2.39 | 2. 37 | 2.37 | 2.38 | 2. 34 | 2.35 | 2.33 | 2.35 | 2.33 | 2. 32 | 2. 28 | 2.17 |

[^58]Table C-1. Gross hours and earnings of production workers, ${ }^{1}$ by industry-Continued

| Industry | 1963 |  |  |  |  | 1962 |  |  |  |  |  |  |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | May ${ }^{2}$ | Arr. | Mar. | Feb. | Jan. | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | May | 1961 | 1960 |
| Wholesale and retall trade s $\qquad$ Wholesale trade $\qquad$ | A verage weekly earnings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 77.3999.47 | \$76. 62 | \$76.42 | \$76. 42 | \$76.2i | \$75. 47 | \$75. 65 | \$75 46 | \$76 05 | \$76. 44 | \$76. 44 | \$75 86 | $\begin{array}{r} \$ 7488 \\ 96.22 \end{array}$ | $\begin{array}{r} \$ 72.94 \\ 93 \\ \hline 56 \end{array}$ | $\begin{array}{r} \$ 70.98 \\ 91.13 \end{array}$ |
|  |  | 98.58 | 98. 58 | 9793 | 97.36 | 98.74 | 97.44 | 9703 | 98.09 | 96.87 | 97. 10 | 9687 |  |  |  |
| Motor vehicles and automotive equipment | 94.66 | 94.24 | 93.15 | 92. 74 | 92.96 |  | 93.41 | 9386 | 93.86 | 93. 26 | 93.04 | 9284 | 9346 | 89.46 | 86. 53 |
| Drugs, chemicals, and allied products. | 99.10 | 99. 90 | 100.15 | 99.75 | 98.40 | 99.45 | 9970 | 98.80 | 9994 | 9784 | 9809 | 9696 | 9647 | 9424 | 91. 20 |
| Dry goods and apparel | ${ }^{91.01}$ | 92. 38 | ${ }^{91.85}$ | 91.96 | 91. 10 | 92. 58 | 92.12 | 92 <br> 91 <br> 91 <br>  <br> 10 | $\begin{array}{ll}93 & 25 \\ 92 & 35\end{array}$ | 9274 | 9199 | 9137 <br> 90 <br> 1 | 9185 89 86 | 9286 <br> 87 <br> 14 | 90. 68 |
| Groceries and related prod Electrical goods.......... | 93.79 101.85 | 92.93 101.71 | 91.84 102.21 | $9 n .98$ 102.87 | 91.05 102.56 | 92.20 103.48 | 9196 102.97 | 91 1020 109 | 9235 102.91 | 9196 100.04 | 91.76 101.84 | 9049 100.12 | 89 100 126 | 8714 97.53 | 84.67 95.11 |
| Hardware, plumbing, and heating goods. | 95.88 | 95.00 | 93. 96 | 93.50 | 94.66 | 95. 30 | 94. 54 | 94.60 | 94.83 | 92. 92 | 93. 79 | 92. 57 | 92.80 | 89.91 | 86.36 |
| Machinery, equipment, and supplies. | 108.3668.06 | 107.16 | 107.16 | $\begin{array}{r} 106.08 \\ 66.93 \\ \hline \end{array}$ | $\begin{array}{r} 10.5 .93 \\ 67 \end{array}$ | $\begin{array}{r} 108.65 \\ 6685 \end{array}$ | $\begin{array}{rr} 106 & 19 \\ 66 & 38 \end{array}$ | 105. 37 | 107.38 | 103.98 | $\begin{array}{r} 103.66 \\ 6738 \\ \hline \end{array}$ | $\begin{array}{r} 10604 \\ 66 \quad 85 \end{array}$ | 10414 | 101.59 | c9. 80 |
|  |  | 67.48 |  |  |  |  |  | 6655 | 6688 | 6755 53 |  |  | 6598 | 8401 | 62. 37 |
| General merchandise sto | 53.85 | 53.13 | 53. 01 | 52. 51 | 5286 | 54.06 | 51. 68 | 52.67 | 5348 | 5335 | 63. 55 | 53.09 | 5248 | 50) 62 | 4858 |
| Department stores...-.....- Limited price variety stores | 58.65 | 57.80 | 57. 12 | 56. 45 | 5746 | 58.06 39 | ${ }^{55} .61$ | 57.80 <br> 38 <br> 8 | 5882 | 58.12 | ${ }_{39}^{58.12}$ | 5813 | 5728 <br> 38 <br> 18 | 55 <br> 37 <br> 37 <br> 8 | 53 <br> 508 <br> 58 |
| Limited price variety stores...- Food stores.............--- | 39. 36 | 39.81 | 39. 36 | 3916 64.54 | 38. 96 64.91 | 39. 56 | 3832 65.66 | 38.20 64.94 | 3915 65.50 | 40.00 66.25 | 39.96 66.43 | 39.12 65.16 | 3818 63.88 | $\begin{array}{ll}37 & 28 \\ 63 & 01\end{array}$ | 35 80 80 |
| Food stores...........--...-...- | 65. 58 | 65.26 | 64.8966.47 |  |  | 6636 | 6745 | 6653 | 68.95 | 67. 71 | 68.2854.87 | 6715 | 8566 | $6444 \quad 62.95$ |  |
| stores, ..................- | $\begin{aligned} & 67.36 \\ & 54.56 \end{aligned}$ | 66. 66 |  | 66. 12 | 6664 |  |  |  |  |  |  |  |  |  |  |  |
| Apparel and accessories stores_....-- Men's and hoys' apparel stores. |  | 55. 52 66.39 | 53.35 64.40 | 54. 19 64.78 | 5536 66.77 | 56 <br> 67 <br> 67 <br> 1 | 53 <br> 64 <br> 8 | 53 645 64 | 54.13 65.45 | 64. 82 | 64.87 67.44 | 54. 83 | 53 65 65 685 | 8240 <br> 84 <br> 67 | 63.38 |
| Women's ready-to-wear stores - | 49.01 | 49.68 | 48.19 | 48. 38 | 49.35 | 50. 05 | 48. 10 | 48.05 | 4833 | 4823 | 48.85 | 48. 18 | 4757 | 46. 24 | 4441 |
| Family clothing stores....-- | 53.70 | 54.11 | 52. 20 | 53.55 | 53.94 | 54.96 | 52. 55 | 52. 00 | 53. 04 | 53. 68 | 5364 | 5304 | 5160 | 51.98 | 51.01 |
|  | 54.95 | 58.68 | 55. 59 | 55.61 | 56.45 | 57.61 | 54. 28 | 53. 77 | 56. 95 | 56. 83 | 57.93 | 56. 28 | 55. 23 | 52. 81 | 52. 33 |
|  | A verage weekly hours |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{aligned} & 38.5 \\ & 40.6 \end{aligned}$ | $\begin{aligned} & 38.5 \\ & 40.4 \end{aligned}$ | 38.440.4 | $\begin{aligned} & 38.4 \\ & 40.3 \end{aligned}$ | 38.540.4 | 38.940.8 | 38.440.6 | 38.5406 | 38.840.7 | 39.240.7 | 39.240.8 | 38.940.7 | 38. 640.6 | 38.840.5 | 39.040.5 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Motor vehicles and automotive equipment | 41.7 | 41.7 | 41.4 | 41.4 | 41.5 | 41.7 | 41.7 | 41.8 | 41.9 | 42.2 | 42.1 | 42.2 | 42.1 | 42.0 | 41.8 |
| Drugs, chemicals, and allied products |  | 39.8 37.4 | $\begin{array}{r} 39.9 \\ 37.8 \end{array}$ | 39.9 | $\begin{aligned} & 40.0 \\ & 37.8 \\ & 41.2 \\ & 40.7 \end{aligned}$ | 40.1 | $\begin{aligned} & 40.2 \\ & 37.6 \\ & 418 \end{aligned}$ | 40.0 | 40.3 | $\begin{aligned} & 401 \\ & 377 \\ & 41.8 \end{aligned}$ | $\begin{aligned} & 40.2 \\ & 37.7 \\ & 41.9 \\ & 40.8 \end{aligned}$ | $\begin{aligned} & 39.9 \\ & 376 \\ & 41.7 \\ & 40.7 \end{aligned}$ | $\begin{aligned} & 39.7 \\ & 37.8 \\ & 41.7 \\ & 40.7 \end{aligned}$ | $\begin{aligned} & 40.1 \\ & 37.9 \\ & 41.3 \\ & 40.3 \end{aligned}$ | $\begin{aligned} & 40.0 \\ & 38.1 \\ & 41.3 \\ & 40.3 \end{aligned}$ |
| Dry goods and apparel | 39.8 37.3 415 |  |  | 38.0 |  | 38.1 |  | 37.7 | 37.3 |  |  |  |  |  |  |
| Groceries and related prod | 41.5 | 41.3 | 41.0 | 40.8 |  | 42.1 |  | 41. 5 | 41.6 |  |  |  |  |  |  |
| Electrical goods --.................- | 40.1 | 40.2 | 40.4 | 40.5 |  | 40.9 |  | 40.7 | 41.0 |  |  |  |  |  |  |
| Hardware, plumbing, and heating goods. | 40.8 | 40.6 | 40.5 | 40.3 | 40.8 | 40.9 | 40.4 | 40.8 | 40.7 | 40.4 | 40.6 | 40.6 | 40.7 | 40.5 | 40.4 |
| Machinery, equipment, and sup- | 41.2 | 40.9 | 40.9 |  |  | 41.0 | 41.0 | 41.0 |  |  |  |  |  |  |  |
| Retall trade ${ }^{\text {a }}$ | 37.6 | 37.7 | 37.6 | 376 | 37.6 | 38.2 | 37.5 | 37.6 | 38.0 | 38.6 | 38.5 | 382 | 37.7 | 381 | 38.5 |
| General merchandis | 34.3 | 34.5 | 34.2 | 341 | 34.1 | 35.8 | 34.0 | 34.2 | 345 | 35.1 | 35.0 | 34.7 | 34.3 | 346 | 34.7 |
| Department atores. | 34.1 | 34.2 | 33.8 | 33.6 | 33.6 | 35. 4 | 33. 5 | 340 | 344 | 34.8 | 34.8 | 34. 6 | 313 | 34. 4 | 347 |
| Limited price variety stores..-- | 32.0 | 32.9 | 32.034.7 | 32.1 | 322 | 34. 1 | 32.2 | 32. | 329 | 33. 9 | 33.3 | 32.6 | 31.8 | 32.7 | 326 |
| Food stores.....................-.-- | 34.7 | 34.9 |  | 34.7 | 34.9 | 35.3 | 35.3 | 35.1 | 35.6 | 36.4 | 36.5 | 35.8 | 35.1 | 35.8 | $3{ }^{4} 3$ |
| Grocery, meat, and vegetable stores. | 34.9 <br> 34. 1 <br> 36. 7 <br> 33.8 <br> 35.1 31.4 | $\begin{aligned} & 34.9 \\ & 34.7 \\ & 37.3 \\ & 34.5 \\ & 35.6 \\ & 32.6 \end{aligned}$ | $\begin{aligned} & 34.8 \\ & 34.2 \\ & 36.8 \\ & 33.7 \\ & 34.8 \\ & 32.7 \end{aligned}$ | $\begin{aligned} & 34.8 \\ & 34.3 \\ & 36.6 \\ & 33.6 \\ & 35.0 \\ & 33.5 \end{aligned}$ | $\begin{aligned} & 35.1 \\ & 34.6 \\ & 37.3 \\ & 33.8 \\ & 34.8 \\ & 33.4 \end{aligned}$ | $\begin{aligned} & 35.3 \\ & 35.7 \\ & 38.2 \\ & 35.0 \\ & 36.4 \\ & 33.3 \end{aligned}$ | 35.5 <br> 34. 1 <br> 36. 4 <br> 33.4 <br> 34.8 <br> 32.5 | $\begin{aligned} & 35.2 \\ & 34.2 \\ & 30.7 \\ & 33.6 \\ & 34.9 \\ & 32.2 \end{aligned}$ | $\begin{aligned} & 35.8 \\ & 317 \\ & 374 \\ & 33.8 \\ & 35.8 \\ & 33.5 \end{aligned}$ | $\begin{aligned} & 36.6 \\ & 35.6 \\ & 37.9 \\ & 31.7 \\ & 36.2 \\ & 35.3 \end{aligned}$ | $\begin{aligned} & 36.7 \\ & 35.4 \\ & 38.1 \\ & 34.4 \\ & 36.0 \\ & 34.9 \end{aligned}$ | $\begin{aligned} & 38.1 \\ & 34.7 \\ & 37.1 \\ & 34.1 \\ & 35.6 \\ & 33.3 \end{aligned}$ |  | 36.0 | 38. 6 |
| Apparel and acmessories stores |  |  |  |  |  |  |  |  |  |  |  |  | 342 | 34.7 | 349 |
| Men's and boys' apparel stores- |  |  |  |  |  |  |  |  |  |  |  |  | 373 | 3-: 6 | 3.9 |
| Women's ready-to wear stores.- |  |  |  |  |  |  |  |  |  |  |  |  | 335 | 340 | 339 |
| Family clothing stores.-...-.-- |  |  |  |  |  |  |  |  |  |  |  |  | 35. 1 | 36. 1 | 36. 7 |
| Shoe stores.. |  |  |  |  |  |  |  |  |  |  |  |  | 32.3 | 32.8 | 32 K |
|  |  |  |  |  |  |  | verap | hourl | earning |  |  |  |  |  |  |
| Wholesale and retail trade ${ }^{\text {d }}$ | \$2. 01 | \$1.99 | \$1.99 | \$1.99 | \$1. 98 | \$1. 94 | \$1.97 | \$1.96 | \$1. 96 | \$1. 95 | \$1.95 | \$1. 95 | \$1. 94 | \$1. 88 | \$1. 82 |
| W bolesale trade........ | 2.45 | 2.44 | 2.44 | 2. 43 | 2.41 | 2. 42 | 2. 40 | 2.39 | 2.41 | 2.38 | 2. 38 | 2.38 | 2. 37 | 2.31 | 2.25 |
| Motor vehicles and automotive minipment. | 2.27 | 2. 26 | 2.25 | 2.24 | 2.24 | 2.25 | 2. 24 | 2. 24 | 2. 24 | 2.21 | 2. 21 | 2. 20 | 2. 22 | 2. 13 | 2. 97 |
| Drugs, chemicals. and allied produets | 2.49 | 2.51 | 2.51 | 2. 50 | 2.46 | 2.48 | 2. 48 | 2. 47 | 2. 48 | 2.44 | 2. 44 | 2. 43 | 2. 43 | 2.35 | 2. 28 |
| Dry goods and apparel | 2.44 | 2.47 | 2.43 | 2.42 | 2.41 | 2. 43 | 2. 45 | 2. 46 | 2.50 | 2. 46 | 2.44 | 2. 43 | 2. 43 | 2.45 | 238 |
| Groceries and related products.-. | 2.26 | 2. 25 | 2. 24 | 2. 23 | 2.21 | 2.19 | 2. 20 | 2. 20 | 2. 22 | 2.20 | 2. 19 | 2.17 | 2. 15 | 2.11 | 2. 05 |
| Electrical goods .-............-...- | 2. 54 | 2. 53 | 2. 53 | 2.54 | 2.52 | 2.53 | 2. 53 | 2. 53 | 2.51 | 2.47 | 2. 49 | 2. 46 | 2. 46 | 2.42 | 2.38 |
| Hardware, plumbing, and heating goods. | 2.35 | 2.34 | 2.32 | 2. 32 | 2.32 | 2.33 | 2.34 | 2.33 | 2.33 | 2.30 | 2.31 | 2. 28 | 2. 28 | 2. 22 | 2.18 |
| Machinery, equipment. and supplies. | 2.63 | 2.62 | 2. 62 | 2. 60 | 2.59 | 2.65 | 2. 59 | 2. 57 | 2.60 | 2. 53 | 2. 51 | 2. 58 | 2. 54 | 2. 49 | 2. 44 |
|  | 1.81 | 1. 79 | 1.78 | 1. 78 | 1. 79 | 1. 75 | 1. 77 | 1. 77 | 1.76 | 1.75 | 1.75 | 1. 75 | 1.75 | 1. 68 | 1. 82 |
| General merchandise sto | 1. 57 | 1.54 | 1. 55 | 1. 54 | 1.55 | 1.51 | 1. 52 | 1. 54 | 1.55 | 1. 52 | 1. 53 | 1. 53 | 153 | 1. 46 | 1. 40 |
| Department stores. | 1.72 | 1. 69 | 1. 69 | 1. 68 | 1.71 | 1.64 | 1. 66 | 1. 70 | 1. 71 | 1.67 | 1. 67 | 1. 68 | 1. 67 | 1. 60 | 1. 53 |
| Limited price variety stores | 1.23 | 121 | 1.23 | 1. 22 | 1.21 | 1. 16 | 1. 19 | 1. 19 | 1. 19 | 1.18 | 1. 20 | 1. 20 | 1. 20 | 1. 14 | 1. 09 |
| Food stores-....-.-......... | 1.89 | 1.87 | 1.87 | 1.86 | 1.86 | 1. 84 | 1.86 | 1.85 | 1.84 | 1.82 | 1.82 | 1. 82 | 1.82 | 1.76 | 1.68 |
| Grocery, mest, and regetable stores | 1.93 | 1.91 | 1. 91 | 1. 90 | 1.90 | 1.88 | 1. 90 | 1.89 | 1.87 | 1.85 | 1.86 | 1. 86 | 1. 86 | 1. 79 | 1. 72 |
| Apparel and accessories atores.......-- | 1.60 | 1. 60 | 1.56 | 1. 58 | 1. 60 | 1.57 | 1. 57 | 1.56 | 1. 56 | 1. 54 | 1. 85 | 156 | 1. 56 | 1. 51 | 147 |
| Men's and boys' apparel stores- | 1.80 1.45 | 1.78 1.44 | 1. 75 1.43 | 1.77 1.44 | 1.79 1.46 | 1.76 | 1.76 1.44 | 1.76 1.43 | 1.75 1.43 | 1. 1.36 1.39 | 1. 77 1. 42 | 1.75 | 1.76 1.42 1.4 | 1. 72 | 1.67 |
| Family rlothing stores......--- | 1. 53 | 1.52 | 1.50 | 1.53 | 1.55 | 1.51 1.51 | 1. 51 | 1.48 1.49 | 1.49 | 1.48 | 1.49 1.49 | 1. 19 | 1. 47 | 1.44 | 1. 39 |
| Shoe stores.... | 1.75 | 1.80 | 1. 70 | 1.66 | 1.69 | 1.73 | 1.67 | 1. 67 | 1. 70 | 1.61 | 1. 66 | 1. 69 | 1. 71 | 1. 61 | 1.61 |

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


1 For comparahility of data with those published in issues prior to Decem-
ber 19月1, spe footnote 1, table A-2. For employees covered, see foutnote 1, table A-3.
${ }_{8}^{2}$ Prelfminary. state Commerce Commission, which relate to all employees who recolved pay during the month, except executives, officials, and staff assistants (ICO Group [).

Table C-2. Average weekly hours, seasonally adjusted, of production workers in selected industries ${ }^{1}$

${ }^{1}$ For employees covered, see footnote 1, table A-3.
2 Preliminary.
${ }^{8}$ Excludes eating and drinking places.

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

Table C-3. Average hourly earnings excluding overtime of production workers in manufacturing, by major industry group ${ }^{1}$

| Major industry group | 1963 |  |  |  |  | 1962 |  |  |  |  |  |  |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | May ${ }^{2}$ | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | May | 1961 | 1960 |
| Manufacturing. | \$2.37 | \$2. 38 | \$2.36 | \$2. 36 | \$2.36 | \$2.35 | \$2. 33 | \$2.32 | \$2. 31 | \$2. 29 | \$2. 31 | \$2. 31 | \$2.31 | \$2.25 | \$2.20 |
| Durable goods | 2. 54 | 2. 54 | 2. 53 | 2. 53 | 2.52 | 2. 52 | 2. 50 | 2.48 | 2.48 | 2.46 | 2. 47 | 2.47 | 2. 47 | 2.42 | 2.36 |
| Ordnance and accessories | 2.82 | 2.81 | 2.83 | 2. 82 | 2.81 | 2. 78 | 2.78 | 2.76 | 2.77 | 2.75 | 2. 75 | 2. 76 | 2. 76 | 2.71 | 2.36 2.60 |
| Lumber and wood products except furniture $\qquad$ | 1. 93 | 1.91 | 1. 90 | 1.89 | 1.89 | 1.92 | 1.93 | 1.91 | 1.93 | 1.91 | 1.91 | 1.91 | 1.89 |  |  |
|  | 1. 91 | 1.91 | 1. 91 | 1. 90 | 1.90 | 1. 90 | 1.89 | 1.89 | 1.93 1.88 | 1.88 | 1. 1.88 | 1.81 | 1.89 1.89 | 1.88 1.86 | 1.82 1.82 |
| Stone, clay, and glass prod | 2. 36 | 2.37 | 2.36 | 2.36 | 2. 36 | 2. 36 | 2.35 | 2.33 | 1.88 2.33 | 1.81 2.32 | 1.81 2.32 | 1.88 2.32 | 1. 2.30 | 1.88 2.25 | 1.82 2.20 |
| Primary metal industries. | 2. 95 | 2.98 | 2.93 | 2. 92 | 2.91 | 2.90 | 2.89 | 2.89 | 2.89 | 2.88 | 2.88 | 2.88 | 2.89 | 2.84 | 2.75 |
| Fabricated metal products | 2. 52 | 2. 51 | 2. 51 | 2. 50 | 2.49 | 2.49 | 2. 48 | 2.47 | 2. 48 | 2. 46 | 2. 47 | 2.46 | 2.47 | 2.84 2.42 | 2.36 |
| Machinery --...-....-- | 2. 67 | 2.66 | 2. 66 | 2. 66 | 2. 65 | 2.65 | 2. 64 | 2. 63 | 2. 62 | 2. 60 | 2. 60 | 2. 60 | 2. 20 | 2. 54 | 2.47 |
| Electrical equipment and supplies...-- | 2.40 2.86 | 2.40 2.86 | 2.39 | 2.39 | 2.38 | 2.38 | 2. 36 | 2. 35 | 2.35 | 2.33 | 2.34 | 2. 34 | 2.34 | 2.30 | 2. 23 |
| Instruments and related products | 2.86 2.42 | 2.86 2.41 | 2. 87 | 2. 86 | 2.86 2.40 | 2.86 2.40 | 2.84 2. 40 | 2.83 2.39 | 2.83 2.38 | 2.80 2.37 | 2. 80 | 2.78 | 2.78 | 2.72 | 2. 65 |
| Miscellaneous manufacturing indus- | 2.42 | 2.41 | 2. 42 | 2. 42 | 2.40 | 2.40 | 2.40 | 2.39 | 2.38 | 2.37 | 2.37 | 2. 37 | 2. 38 | 2.32 | 2.26 |
|  | 1.96 | 1.98 | 1.97 | 1.98 | 1.98 | 1. 96 | 1.92 | 1.91 | 1.90 | 1. 90 | 1.92 | 1.91 | 1.91 | 1.87 | 1.84 |
| Nondurable goods. | 2.14 | 2.15 | 2.14 | 2.13 | 2.14 | 2.12 | 2. 11 | 2. 10 | 2. 10 | 2.09 | 2. 10 | 2. 10 | 2. 09 | 2.05 | 1. 99 |
| Food and kindred prod | 2.24 | 2.24 | 2.23 | 2.23 | 2.22 | 2. 20 | 2.17 | 2.15 | 2. 13 | 2.13 | 2.13 | 2.16 | 2.16 | 2.09 | 1. 98 2.02 |
| Tobacco manufactures. | 2.01 | 1.98 | 1. 94 | 1.91 | 1.88 | 1.85 | 1. 83 | 1.68 | 1. 67 | 1.78 | 1. 95 | 1. 96 | 1. 95 | 1. 74 | 1. 1.67 |
| Textile mill products. | 1.63 | 1.64 | 1. 64 | 1.64 | 1.63 | 1.83 | 1. 63 | 1.63 | 1. 62 | 1.78 1.62 | 1. 1.62 | 1.96 1.62 | 1.95 1.62 | 1. 74 1.57 | 1. 1.56 |
| Apparel and related produ | 1.64 | 1. 64 | 1. 66 | 1. 65 | 1.66 | 1. 64 | 1. 64 | 1. 64 | 1. 65 | 1. 64 | 1.63 | 1. 62 | 1. 63 | 1.61 | 1. 56 |
| Paper and allied products | 2.34 | 2. 34 | 2.34 | 2.33 | 2.33 | 2.32 | 2.31 | 2.31 | 2.30 | 2.30 | 2. 29 | 2.28 | 2.27 | 2.23 | 2.15 |
| Printing, publishing, and allied industries | (3) | ${ }^{(8)}$ | ${ }^{(3)}$ | ${ }^{(8)}$ | ${ }^{(8)}$ | ${ }^{(8)}$ | $\left.{ }^{8}{ }^{8}\right)$ | (8) | (3) | (3) | (3) | ${ }^{(3)}$ | (3) | (3) | (3) |
| Chemicals and allied products | 2.62 | 2.61 | 2.61 | 2.62 | 2. 62 | 2.62 | 2. 61 | 2. 60 | 2. 59 | 2.59 | 2.58 | $2.57$ | $2.54$ | $2.51$ | $\text { 2. } 43$ |
| tries | 3.04 | 3.09 | 3.09 | 3.06 | 3.07 | 2.99 | 2. 98 | 2.96 | 2. 96 | 2. 95 | 2.97 | 2. 95 | 2. 95 | 2. 94 | 2.82 |
| Rubber and miscellaneous plastic products. | 2.41 | 2. 40 | 2.40 | 2.40 | 41 | 2.41 | 2. 39 | 2.38 | 2.38 | 2. 38 | 2. 40 |  | 2. 36 |  | 2.82 |
| Leather and leather products | 1.73 | 1.73 | 1. 72 | 1.70 | 1. 71 | 1.70 | 1. 71 | 1.70 | 1.70 | 1.69 | 1. 68 | 1. 69 | 1. 69 | 2. 1.65 | $\begin{aligned} & 2.26 \\ & 1.61 \end{aligned}$ |

${ }^{1}$ For comparability of data with those published in issues prior to December 1961, see footnote 1, table A-2. For employees covered, see footnote 1, table A-3. Average hourly earnings excluding overtime are derived by assuming that overtime hours are paid for at the rate of time and one-half.

Preliminary
Not available because average overtime rates are stonificantly above time and one-half. Inclusion of data for the group in the nondurable goods total has little effect.

Table C-4. Average overtime hours of production workers in manufacturing, by industry ${ }^{1}$

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow{2}{*}{Industry} \& \multicolumn{5}{|c|}{1963} \& \multicolumn{8}{|c|}{1962} \& \multicolumn{2}{|l|}{\[
\begin{aligned}
\& \text { Annual } \\
\& \text { average }
\end{aligned}
\]} \\
\hline \& May \({ }^{2}\) \& Apr. \& Mar. \& Feb. \& Jan. \& Dec. \& Nov. \& Oct. \& Sept. \& Aug. \& July \& June \& May \& 1961 \& 1960 \\
\hline Manufacturing \& 2.8 \& 2.4 \& 2.6 \& 2.5 \& 2.5 \& 2. 9 \& 2.9 \& 2.8 \& 3.0 \& 2.8 \& 2.8 \& 2.9 \& 2.8 \& 2.4 \& \({ }_{2}^{2.4}\) \\
\hline Durable goods-.-3
Nondurable goods \& 2.9 \& 2.5 \& 2.7 \& \({ }^{2} .6\) \& \({ }_{2} 2.6\) \& 3.1 \& 3.0 \& 2.9 \& 3.1 \& \({ }_{2} 2.8\) \& 2.8 \& 3. 0 \& 2.8 \& 2.3 \& 2.4
2.5 \\
\hline Nondurable goods \& \& \& 2.6 \& 2.5 \& 2.4 \& 2.7 \& 2.8 \& 2.7 \& 2.9 \& 2.7 \& 2.8 \& 2.9 \& 2.8 \& 2.5 \& 2.5 \\
\hline \multicolumn{16}{|l|}{Durable goods} \\
\hline Ordnance and accessorles.- \& 1.9 \& 1.5 \& 2.1 \& 2.4 \& \({ }_{2}^{2.7}\) \& 3.1 \& 2.6 \& 2.4 \& 2.2 \& 2.2 \& \({ }_{2}^{2.3}\) \& \({ }^{2} .1\) \& 2.1 \& 1.9 \& 2.0 \\
\hline Ammunition except for small arms \& 1.7 \& 1.6 \& \({ }_{2.1}^{1.9}\) \& \({ }_{2.2}^{2.4}\) \& 2.4 2.9 \& 2.7 4 \& 2.0
3.4 \& 2.1
2.8 \& 1.7
2.7 \& \begin{tabular}{l}
1.9 \\
2.8 \\
\hline 1
\end{tabular} \& 2.0
3.0 \& 1.8
2.4
2.4 \& 1.9 \& 1.6 \& \({ }_{2}^{1.7}\) \\
\hline Other ordnance and accessories \& 2.5 \& 1.6 \& 2.4 \& \({ }_{2.6}^{2.2}\) \& 2.9 \& \({ }_{2.9}\) \& \({ }_{2.7}\) \& 2.5 \& 2.5 \& 2.1 \& 2. 2.0 \& 2. 2.4 \& 2. 2.4 \& 2.2
2.1 \& 2.7
1.8 \\
\hline Lumber and wood products except furniture \& 3.2 \& 2.9 \& 3.0 \& 2.9 \& 2.8 \& 3.0 \& 2.9 \& 3.2 \& 3.8 \& 3.7 \& 3.5 \& 3.5 \& 3.3 \& 2.9 \& . 9 \\
\hline \multirow[t]{2}{*}{Sawmills and planing milis Millwork, plywood, and related prod-} \& 3.2 \& 3.0 \& 3.0 \& 2.9 \& 2.9 \& 2.9 \& 2.9 \& 3.2 \& 3.6 \& 3.6 \& 3.4 \& 3.4 \& 3.5 \& 2.9 \& 3.0 \\
\hline \& 3.5 \& 3.1 \& 3.2 \& 3.0 \& 2.8 \& 3.3 \& 32 \& 3.2 \& 3.8 \& 3.7 \& 3.5 \& 3.5 \& 3.4 \& 2.8 \& . \\
\hline \& 3.5 \& 2.8 \& 2.6 \& 2.2 \& 1.9 \& 2.4 \& 2.5 \& 2.8 \& 3.2 \& 3. 3 \& 4.0 \& 3.4 \& 3.3 \& 2.5 \& 6 \\
\hline Miscellaneous wood \& 3.1 \& 2.6 \& 2.9 \& 2.7 \& 2.5 \& 2.7 \& 2.7 \& 3.0 \& 3.1 \& 3.1 \& 2.8 \& 3.2 \& 3.0 \& 2.6 \& . 7 \\
\hline \multirow[t]{2}{*}{Furniture and fixtures} \& 2.6 \& 2.2 \& 2.6 \& 2.5 \& 2.5 \& 3.3 \& 3.0 \& 3.3 \& 3.4 \& 3.2 \& 2.7 \& 3.1 \& 2.5 \& 2.4 \& 2.5 \\
\hline \& 2.7 \& 2.4 \& 2.9 \& 2.7 \& \({ }^{2} .7\) \& 3.7 \& 3.2 \& \({ }^{3.4}\) \& 3.4 \& 3.2 \& 2.6 \& 3.1 \& 2.6 \& 2.4 \& 2.5 \\
\hline  \& 2.3 \& 1.3 \& 1.8 \& 1.8 \& 1.8 \& 2.2 \& 1.6 \& \({ }^{2} .0\) \& 2.4 \& 2.0 \& \({ }^{2} .4\) \& \({ }^{2} .4\) \& 1.7 \& 2.0 \& 2.3 \\
\hline \multirow[t]{2}{*}{Partitions; office and store fixtures
Other furniture and fixtures..--} \& 1.6 \& 1.2 \& 1.3 \& 1.7 \& 1.9 \& 1.6 \& 2.5 \& 3.7 \& 4.6 \& 4.0 \& 3.6 \& 3.6 \& 2.8 \& 2.4 \& 2.3 \\
\hline \& 2.3 \& 1.9 \& 2.2 \& 2.0 \& 2.1 \& 2.9 \& 2.9 \& 2.8 \& 3.2 \& 3.4 \& 2.6 \& 3.0 \& 2.4 \& 2.5 \& 2.7 \\
\hline \multirow[t]{2}{*}{Stone, clay, and glass
Flat glass} \& 3.9 \& 3.3 \& 3.0 \& 2.7 \& 2.7 \& 2.9 \& 3.4 \& 3.7 \& 3.9 \& 3.9 \& 3.8 \& 3.7 \& 3.6 \& 3.1 \& 3.1 \\
\hline \& 1.9 \& 1.6 \& 1.3 \& 1.5 \& 1.5 \& 1.8 \& 2.2 \& 1.5 \& 2.0 \& 1.6 \& 1.8 \& 1.6 \& 1.3 \& 2.1 \& 2.4 \\
\hline Flat glass Glass and gassware, pressed or or blown-- \& 3.6 \& 3.2
2.3
2.3 \& 3.3 \& 1.3
3.3
1.7 \& 1.3
1.6 \& \begin{tabular}{l}
1.8 \\
1.3 \\
\\
\hline
\end{tabular} \& 3.6
1.7
1.7 \& 3.5
1.8 \& \begin{tabular}{l}
3.4 \\
2.3 \\
\hline
\end{tabular} \& \begin{tabular}{l}
3.4 \\
2.1 \\
\hline
\end{tabular} \& \begin{tabular}{l}
3.8 \\
2.1 \\
\hline
\end{tabular} \& 3.7
1.8 \& 1.5
1.9
1.9 \& \begin{tabular}{l}
3.6 \\
1.5 \\
\hline
\end{tabular} \& 3.6
1.6 \\
\hline Coment hydraulic------------------1-1 \& \({ }_{3.2}{ }^{2}\) \& \({ }_{2.8}^{2.3}\) \& 2.6 \& \({ }_{2.5}^{1.7}\) \& 2.4 \& 1.3
2.5 \& 1.7 \& 3.0 \& 3.1 \& 3.2 \& 3.2 \& 1.8
2.9 \& 1.9 \& \(\stackrel{1.5}{2.7}\) \& \({ }_{2} 1.7\) \\
\hline Structural clay products.-- \& \({ }_{2.1}\) \& 1.6 \& 1.7 \& 1.6 \& 1.7 \& 1.9 \& 2.1 \& 2.3 \& 2.0 \& 2.1 \& 1.7 \& 1.6 \& 1.2 \& 1.5 \& 1.5 \\
\hline Conerete, gypsum, and plaster- products. \& 6.4 \& 5.6 \& 4.5 \& 3.6 \& 3. 3 \& 3.8 \& 5.0 \& 6.0 \& 6.4 \& 6.7 \& 6.3 \& 6.3 \& 6.2 \& 5.0 \& 4.8 \\
\hline Other stone and mineral products.--- \& 3.0 \& 2.5 \& 2.7 \& 2.5 \& 2.3 \& 2.4 \& 2.7 \& 2.7 \& 2.9 \& 2.8 \& 2.7 \& 2.9 \& 2.8 \& 2.3 \& 2.4 \\
\hline Primary metal industries \& 3.1 \& 2.8 \& 2.5 \& 2.4 \& 2.3 \& 2.3 \& 2.1 \& 2.0 \& 2.2 \& 1.9 \& 2.0 \& 2.3 \& 2.0 \& 1.9 \& 1.8 \\
\hline \multirow[t]{2}{*}{Blast furnace and basic steel products--------------} \& 2.8 \& 2.8 \& 1.8 \& 1.5 \& \({ }^{1.3}\) \& 1.1 \& 1.0 \& .9 \& 1.3 \& . 9 \& 1.1 \& 1.1 \& 1.0 \& 1.3 \& 1.3 \\
\hline \& 3.5 \& \({ }^{3} .1\) \& 3.5 \& 3.6 \& 3.1 \& \({ }^{3.5}\) \& 3.0 \& \({ }_{2}^{2.9}\) \& 2.7 \& \({ }^{2} .5\) \& \({ }^{2} .8\) \& 3. 4 \& 3.2 \& 2.1 \& 2.1
3.0 \\
\hline Nonferrous smelting and refining--.--- \& 2.7 \& \& 2.9 \& 2.8 \& \& 2.9 \& 2.8 \& \& \& \& \& \& 2.3 \& 2.5 \& 3.0 \\
\hline Nonferrous rolling, drawing, and ex--------------------
truding \& 3.7
2.9 \& 2.5
2.8 \& 3.4
3.1 \& 3.3
3.0 \& \begin{tabular}{l}
3.5 \\
3.2 \\
\hline
\end{tabular} \& 3.9
3.3 \& 3.8
2.9 \& 3.4
2.9 \& 3.7
3.0

l \& 3.2
2.6
2 \& 3.3
2.8
2.8 \& 4.1
3.2
3.1 \& 3.4
2.9 \& 3.1
2.3 \& ${ }_{2.3}^{2.4}$ <br>
\hline \multirow[t]{2}{*}{Fabricated metal products..------------} \& 3.1 \& 2.7 \& 2.9 \& 2.9 \& 3.3 \& 3.8 \& 3.2 \& 3.2 \& 3.5 \& 2.9 \& 2.7 \& 3.4 \& 2.8 \& 2.3 \& 2.3 <br>
\hline \& 3.0 \& 2.4 \& 2.7 \& 2.6 \& 2.7 \& 2.9 \& 3.0 \& 3.0 \& 3.3 \& 3.1 \& 2.9 \& 3.1 \& 2.9 \& 2.4 \& 2.6 <br>
\hline \multirow[t]{2}{*}{Metal cans $\begin{aligned} & \text { Cutlery, hand tools, and general hard- }\end{aligned}$} \& 3.2 \& 3.1 \& 2.3 \& 2.5 \& 2.7 \& 2.4 \& 2.5 \& 2.8 \& 4.9 \& 4.3 \& 4.7 \& 4.0 \& 3.5 \& 3.2 \& 2.8 <br>
\hline \& 2.6 \& 2.2 \& 2.8 \& 2.6 \& 2.9 \& 3.1 \& 3.1 \& 2.4 \& 2.5 \& 2.1 \& 2.3 \& 2.9 \& 2.8 \& 2.0 \& 2.1 <br>
\hline Heating equipment and plumbing fix- \& \& \& \& \& \& \& \& \& \& \& \& \& \& \& <br>

\hline tures \& ${ }_{2.7}^{1.6}$ \& ${ }_{2.0}^{1.3}$ \& | 1.7 |
| :--- |
| 2.2 | \& ${ }_{2.1}^{1.7}$ \& 1.8

2.0 \& ${ }_{2.3}^{2.0}$ \& ${ }_{2.5}^{1.9}$ \& ${ }_{2.6}^{2.5}$ \& 2.5
3.0 \& 2.2
3.0 \& 1.9
2.8 \& ${ }_{2.8}^{2.8}$ \& ${ }_{2.6}^{1.6}$ \& ${ }_{2.3}^{1.5}$ \& ${ }_{2.4}^{1.4}$ <br>
\hline Fabricated structural metal products---- \& 3.7 \& 3.1 \& 3.5 \& 3. 9 \& 4.0 \& 4.3 \& 3.7 \& 3.6 \& 4.2 \& 3. 6 \& 3.6 \& 4.0 \& 3.8 \& 2.6 \& 2.5 <br>
\hline Metal stampings $\qquad$ \& ${ }_{3.8}^{3.8}$ \& 3.0

2.6 \& | 3.3 |
| :--- |
| 3.1 |
|  |
|  | \& 3.2 \& 3.4 3 \& 3.6

3.5
3.5 \& ${ }_{3.3}^{3.8}$ \& 3.8
3.6
3.6 \& 4. ${ }_{3}$ \& 3.7 ${ }_{3}{ }^{\text {a }}$ \& 3.2 \& 3.4
3.7
3.4 \& 3.6 ${ }_{3}^{3.6}$ \& ${ }_{2.8}^{2.9}$ \& <br>
\hline Coating, engraving, and allied services--
Miscellaneous fabricated wire products- \& ${ }_{2.9}$ \& 2.1 \& 2.8 \& 2.8 \& 2. 9 \& 3.0 \& 2.9 \& 3.1 \& 3.2 \& ${ }_{3.0}$ \& 2.7 \& ${ }_{3.1}$ \& 3.3
2.9 \& 2.7 \& 2.6 <br>
\hline \multirow[t]{2}{*}{Miscellaneous fabricated metal prod-
ucts} \& \& 2.2 \& \& 2.3 \& 2.4 \& \& 2.6 \& 2.7 \& 2.7 \& 2.5 \& \& \& \& \& <br>
\hline \& 2.7 \& \& 2.5 \& 2.3 \& \& 2.6 \& \& \& \& 2.5 \& 2.2 \& 2.7 \& 2.6 \& 2.3 \& <br>
\hline Machinery \& 3.1 \& 2.7 \& 3.2 \& 3.0 \& ${ }_{2}^{2.8}$ \& 3.1 \& 2.8 \& ${ }^{2} .9$ \& 3.0 \& 3.0 \& 3.2 \& 3.4 \& 3.3 \& 2.5 \& 2.7 <br>
\hline \multirow[t]{2}{*}{Engines and tur bines.-.-.-.--.------} \& 2.4 \& 1.7 \& ${ }^{2} .7$ \& ${ }^{2.6}$ \& 2.0 \& 2.5 \& 1.9 \& 1.9 \& ${ }^{2} 2.3$ \& 2.3 \& 2.1 \& ${ }_{2}^{2.3}$ \& ${ }^{2.5}$ \& 1.7 \& 1.8 <br>
\hline \& 2.0 \& 2.2 \& 2. ${ }_{2}^{2.6}$ \& ${ }_{2.3}^{2.5}$ \& 2. 2.0 \& 1.9
2.3 \& ${ }_{2.2}^{1.6}$ \& 1.8
2.5 \& ${ }_{2.7}^{2.1}$ \& 1.9
2.8 \& 1.7
3.0 \& 2.1 \& ${ }_{2.8}^{2.2}$ \& 1.6 \& 8 <br>
\hline \multirow[t]{2}{*}{(entruction and related machinery---} \& \& \& \& \& \& \& \& \& \& \& \& \& \& 1.9 \& <br>
\hline \& \& 4.6 \& 5. \& 4.7 \& 4.4 \& 4.7 \& . \& 4.1 \& , \& 4.5 \& 4.9 \& 5.2 \& 5.3 \& 3.4 \& 3 <br>

\hline Special industry machinery------------- \& | 3.4 |
| :--- |
| 2.4 | \& 3.1

2.0 \& | 3.5 |
| :--- |
| 2.4 | \& ${ }_{2.3}^{3.5}$ \& 3.5

2.2 \& 3.7
2.6 \& 3.3
2.5 \& 2. 6 \& 3.6 ${ }^{3.6}$ \& 3.3
2.7 \& 3.4
3.0 \& ${ }_{3.2}^{3.8}$ \& 3.5
2.9 \& 2.8
2.0 \& ${ }_{2.1}^{3.3}$ <br>
\hline \multirow[t]{2}{*}{(enter} \& \& \& \& \& \& \& \& \& \& \& \& \& \& \& <br>
\hline \& 1.6 \& 1.3 \& 1.7 \& 1.5 \& 1.3 \& 1.5 \& 1.3 \& 1.4 \& 1.4 \& 1.3 \& 1.6 \& 1.5 \& 1.5 \& . \& 1.9 <br>
\hline Service industry machines.-----------1.- \& 2.5 \& 1.7 \& 2.3 \& 1.8 \& 1.6 \& 1.7 \& 1.6 \& 1.8 \& 2.0 \& 2.1 \& 2.5 \& 3.0 \& 2.2 \& 1.6 \& <br>
\hline \multirow[t]{2}{*}{Electrical equipment and supplies.} \& 4.2 \& 3.6 \& \& 3.9 \& 4.1 \& 4.3 \& 4.2 \& 4.3 \& 4.4 \& 4.1 \& 4.2 \& 4.0 \& 4.0 \& 3.5 \& 3.4 <br>
\hline \& 1.9 \& 1.5 \& 1.9 \& 1.9 \& 1.9 \& 2.4 \& 2.3 \& ${ }^{2.3}$ \& ${ }^{2} 2.5$ \& 2.1 \& 2.0 \& 2.3 \& 2.1 \& 1.9 \& 1.9 <br>
\hline \multirow[t]{2}{*}{Electric distribution equipment-----------} \& 1.9 \& \& 1.9 \& 1.8 \& 1.5 \& 2.5 \& 2.2 \& 2.3 \& ${ }_{2} 2.4$ \& 2.0 \& 2.2 \& ${ }_{2} 2.2$ \& 1.9 \& 1.8 \& 1.9 <br>
\hline \& 2.4 \& 1.9
1.5 \& 2.2 \& 2.4 \& 1. 2.1 \& ${ }_{2.3}^{2.2}$ \& 2.3 \& 2.3 \& ${ }_{2.1}^{2.3}$ \& ${ }_{2.2} 2$ \& 2.1 \& ${ }_{2.0}^{2.6}$ \& 2.4 \& 1.9 \& 1.8 <br>

\hline Household appliances.-...-.-.-.-.--- \& | 2.2 |
| :--- |
| 1.9 | \& 1.4 \& 1.7 \& 1.6 \& 1.7 \& 2.3

2.0 \& ${ }_{2.1}^{1.9}$ \& 1.8 \& 2. 2.1 \& 1.2 \& 1.6 \& 1.9 \& 1.7 \& 1.6 \& 1.7 <br>
\hline Radio and TV receiving sets ---.------ \& 1.8 \& \& 1.4 \& 1.4 \& 1.2 \& 2.1 \& 1.7 \& 2.2 \& 2.6 \& 2.4 \& 2.0 \& 2.5 \& 1.6 \& 1.6 \& 1.4 <br>
\hline \multirow[t]{2}{*}{Electronic components and accessories.Miscellaneous electrical equipment and} \& ${ }_{1}^{1.5}$ \& 1.6 \& 1.9
1.9 \& 1.9 \& 1.7 \& 2.5
2.1 \& ${ }_{2.1}^{2.4}$ \& 2.5 \& ${ }^{3.1}$ \& 2.3 \& 1.8 \& 2.2 \& 2.5 \& 2.1 \& ${ }_{1.6}^{2.5}$ <br>
\hline \& 1.6 \& \& \& \& \& \& \& \& \& \& \& \& \& \& <br>
\hline supplies--------------------- \& 2.2 \& 1.6 \& 1.8 \& 2.6 \& 3.4 \& 3.8 \& 3.7 \& 3.5 \& 2.9 \& 2.3 \& 3.1 \& 3.3 \& 3.2 \& 2.1 \& 1.8 <br>
\hline Transportation equipment. \& 3.4 \& 2.7 \& 3.1 \& 3.0 \& 3.3 \& 4.6 \& 4.5 \& 3.9 \& 3.6 \& 3.1 \& 3.3 \& 3.3 \& 3.4 \& 2.5 \& 2.7 <br>
\hline Motor vehicles and equip \& 4.3 \& 3.3 \& ${ }^{3.7}$ \& 3.3 \& ${ }^{3.8}$ \& 6.1 \& 5.9 \& 4.9 \& 4.5 \& 3. 6 \& 4. 5 \& 3.9 \& 4.0 \& 2. 2.4 \& 3.2 <br>
\hline  \& ${ }_{3.7}^{2.1}$ \& 1.9 \& 2. 2.3 \&  \& 3.1 \& 3.2 \& 3.2 \& 3.2 \& 2.5 \& 2.7 \& 2.5 \& ${ }_{2.7}^{2.6}$ \& ${ }_{2.9}^{2.7}$ \& ${ }_{2.5}^{2.4}$ \& 2.4 <br>
\hline \multirow[t]{2}{*}{Railroad equipment.-.-.-.-.-------
Other transportation equipment} \& 1.9 \& 1.9 \& 2.3 \& 1.6 \& 1.6 \& 1.5 \& 1.2 \& 1.7 \& 1.7 \& 2.1 \& 1.8 \& 2.5 \& 2.8 \& 9 \& 1.2 <br>
\hline \& 2.8 \& 2.7 \& 2.9 \& 2.6 \& 1.8 \& 2.1 \& 1.9 \& 2.7 \& 3.0 \& 3.3 \& 2.5 \& 3.6 \& 3.5 \& 1.8 \& 1.7 <br>
\hline Instruments and related products....---- \& 2.4 \& 1.9 \& 2.3 \& 2.2 \& 2.2 \& 2.5 \& 2.5 \& 2.5 \& 2.5 \& 2.4 \& 2.4 \& 2.5 \& 2.2 \& 2.1 \& 2.1 <br>

\hline \multirow[t]{2}{*}{| Engineering and scientific instruments. |
| :--- |
| Mechanical measuring and control de- |
| vices |} \& 2.3 \& 1.8 \& 2.5 \& 2.3 \& 2.8 \& 3.1 \& 2.7 \& 2.8 \& 2.9 \& 2.7 \& 2.7 \& 2.6 \& 2.2 \& 2.2 \& 2.8 <br>

\hline \& 2.3 \& 1.8 \& 2.1 \& 1.9 \& 1.9 \& 2.6 \& 2.5 \& 2.3 \& 2.3 \& 2.3 \& 2.5 \& 2.3 \& 1.9 \& 1.9 \& 1.9 <br>
\hline \multirow[t]{2}{*}{Optical and ophthalmic goods Surgical, medical, and dental equip-} \& 2.2 \& 2.1 \& 2.5 \& 2.3 \& 2.0 \& 2.1 \& 1.7 \& 2.5 \& 2.5 \& 2.0 \& 2.1 \& 2.5 \& 2.2 \& 2.0 \& <br>
\hline \& 2.1 \& 1.7 \& 2.2 \& 1.9 \& ${ }^{1.6}$ \& 2.2 \& 2.2 \& 2.4 \& 2.5 \& 2.5 \& 2.4 \& 2.3 \& 2.1 \& 2.1 \& 2 <br>
\hline Photographic equipment and supplies.-- \& 1.84 \& 2.3 \& 1.7 \& 1.2 \& 3.15 \& 3.0 \& 3.4
2 \& 2.7 \& 2.7 \& 2.5 \& 2. 6 \& 2.8 \& 2.9 \& 2.9 \& 2.5 <br>
\hline
\end{tabular}

See footnotes at ond of table.

Table C-4. Average overtime hours of production workers in manufacturing, by industry ${ }^{1}$-Continued

| Industry | 1963 |  |  |  |  | 1962 |  |  |  |  |  |  |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | May ${ }^{2}$ | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | May | 1961 | 1960 |
| Manufacturing-Continued |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Durable goods-Continued |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Miscellaneous manufacturing Industries | 2.0 | 1.8 | 2.2 | 2.1 | 2.0 | 2.4 | 2.3 | ${ }^{2} .5$ | 2.6 | 2.3 | 1.9 | 2.3 | 2.4 | 2.1 | 2.1 |
| Jewelry, sll serware, and nlated ware-- | 2.7 | 2.3 | 2.7 | 2.5 | 2.5 | 4.15 | 3. ${ }^{2} 1$ | - ${ }^{2.4}$ | - 2.2 | 2.7 1.8 | 1.2 | 2.9 2.0 | 2. ${ }^{3} 1$ | 3.0 | 2.8 |
| Toys, amusement, and sporting goods.-- | 1.6 <br> 1.7 | 1.5 <br> 1.4 <br> 18 | 1.7 <br> 1.8 | 1.7 <br> 2.0 | 1.7 1.9 | 1.5 <br> 2.1 | 1.18 | 2.3 3.1 | 2. 2.2 | 1.8 | 1.6 | 1.6 | 2.2 1.9 | 1.9 | 1.9 |
| Costume jewelry, buttons, and notions. | 2.2 | 2.0 | ${ }_{2} .3$ | 2.3 | 1.7 | 2.2 | 1.9 | 2.0 | 2.1 | 2.4 | 2.0 | 3.0 | ${ }_{2}^{2.5}$ | 1.9 | 1.7 |
| Other manufacturing industries.....-- | 2.2 | 2.0 | 2.5 | 2.3 | 2.3 | 2.5 | 2.5 | 2.6 | 2.9 | 2.5 | 2.1 | 2.4 | 2.3 | 2.2 | 2.3 |
| Nondurable joods |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fond and kindred products. | 3.4 | 2.9 | 3.1 | 3.0 | 3.1 | 3.4 | 3.6 | 3.4 | 3.9 | 3.4 | 3.9 | 3.6 | 3. 5 | 3.3 | 3.8 |
| Meat products. | 3.5 | 2.9 | 3.2 | 2.9 | 3.4 | 4.2 | 4.5 | 3.8 | 3.8 | 3.1 | 3.9 | 3.8 | 3.9 | 3.7 | 3.7 |
| Dairy products.. | 3.5 | 3.2 | 3.2 | 3.0 | 3. 0 | 3.2 | ${ }^{3} .2$ | 3. ${ }^{3 .} 2$ | 3.7 <br> 3.4 | ${ }_{2.8}^{3.4}$ | 4.0 3.5 | 3.8 <br> 2.8 | 3.6 2.5 | 3. 1 | 2.9 |
| Canned and preser ved | 6. 2.2 | 1.8 | 5.4 | 5.6 | 5.7 | 6.1 | 8.4 | 6.9 | 7.0 | 6.8 | 6. 9 | 6.5 | 6.2 | 6.2 | 2. ${ }^{2}$ |
| Bakery products. | 3.1 | 2.9 | 2.8 | 2.7 | 2.6 | 2.8 | 3.3 | 3.1 | 3.7 | 3.3 | 3.4 | 3.4 | 3.1 | 2.9 | 2.9 |
| Sugar.. | 5.0 | 4.3 | 3.4 | 3.2 | 3.4 | 3.2 | 4.5 | 2.9 | 4.9 | 4.4 | 4.6 | 4.7 | 3.8 | 4. 5 | 4.2 |
| Confectionery and related products.--- | 1.9 | 1.7 | 2.3 | 2.3 | 2.3 | 3.0 | 3. 1 | 2.5 | 3. ${ }_{3}{ }^{\text {a }}$ | 3.1 ${ }^{2.6}$ | 4.0 | ${ }_{3.3}^{2.0}$ | 1.8 | ${ }_{2.8}^{2.5}$ | 2.4 |
| Beverages. <br> Miscellaneous food and kindred produets. $\qquad$ | 3.2 | 2.9 | 2.8 | 2.4 | 2.3 | 2.5 | 2.6 | 2.6 | 3.2 |  |  |  |  | 2.8 | 2.8 |
|  | 3.8 | 3.5 | 3.7 | 4.0 | 3.9 | 4.3 | 4.3 | 4.1 | 4.1 | 4.0 | 4.0 | 3.9 | 3.9 | 3.9 | 3.9 |
| Tohacco manu | 1.1 | . 3 | . 8 | . 7 | . 6 | 1.1 | 1.2 | 1.2 | 1.6 | 1.0 | . 6 | . 9 | . 7 | 1.1 | 1.0 |
| Clearettes. | 1.3 | . 4 | 1.0 | .5 | 5 | 1.2 | 1.5 | 1.0 | 1.4 |  |  |  |  |  |  |
| Oigars. | 1.0 | . 1 | . 8 | 1.1 | . 7 | 1.0 | 1.6 | 1.4 | 1.3 | 1.2 | . 4 | . 9 | . 5 | 1.0 | 1.0 |
| Textile mill nroducts --...- | 3.2 | 2.8 | 3.1 | 3.0 | 2.8 | 3.0 | 3.3 | ${ }_{3}^{3.2}$ | 3. 0 | 3.1 | 3.1 | 3.5 | 3.3 | 2.7 | 2.6 |
| Sllk and synthettc hroad woven fairice- | 3.2 | 3.0 | 3.0 | 2.9 | 3.0 | 3.0 | ${ }^{3} 2$ |  | 2.8 | 3. 4 | 2.9 | ${ }_{4}^{3.1}$ | ${ }_{4.3}^{3.3}$ | 2.7 | 2.8 |
|  | 4. ${ }^{4}$ | 3.7 3.0 | 3.9 3.6 3 | 3.9 3.7 | 4. 4.4 | 4.3 <br> 3.1 | 4.5 3.2 | 4.4 | 4.2 3.7 | 4.4 | 4. 4 | 8. 2.6 | 4.9 | 3.2 3.3 |  |
| Narrow fabrics and smallwares.-------- | 3.4 | 2.9 | 3.0 | 3.0 | 3. 3 | 3.2 | 3.3 | 3.4 | 3.2 | 3.3 | 3.3 | 3.4 | 3.3 | 2.9 | 2.4 |
| Kniting ${ }_{\text {Fnithing textios, except wooland knit. }}$ | 2.0 | 1.6 | 1.8 | 1.7 | ${ }^{1.6}$ | ${ }_{4}^{1.7}$ | ${ }_{4}^{2.2}$ | 4.3 | 2. 3 | -3.3 | 2. 3.4 | 4.7 | 4.3 | 2.0 | 1.9 |
|  | 4.2 <br> 3.5 | 3.8 3.6 | 4.6 <br> 4.8 | 4.2 | 3.1 <br> 3.3 | 4.5 | 5.7 | 4.2 5.0 | 3.7 4.7 | 4.3 | 3.4 | 3.8 | 3.4 | 3. 3 | ${ }_{2.8}$ |
|  | 3.2 | 2.9 | 3.1 | 2.9 | 2.5 | 2.6 | 2.8 | 3.1 | 2.8 | 3.3 | 3.2 | 3.5 | 3.4 | 2.8 | 2.4 |
| Miscellaneous textile goods---------------- | 3.3 | 2.8 | 3.3 | 3.4 | 3.2 | 3.7 | 3.8 | 3.8 | 3.4 | 3.2 | 3.7 | 4.2 | 3.4 | 2.9 | 2.8 |
| Apparel and related products. <br> Men's and hoys' sults and coats............ Men's and hovs' furnishings. | 1.3 | 1.1 | 1.4 | 1.2 | 1.0 | 1.2 | 1.4 | 1.4 | 1.4 | 1.5 | 1.3 | 1.4 | 1.3 | 1.1 | 1.2 |
|  | 1.1 | . 9 | 1.15 | 1.3 1.0 1.5 | $\begin{array}{r}1.1 \\ .9 \\ \hline\end{array}$ | 1.0 | 1.1 | 1.3 | 1.4 | 1.2 | 1.3 | 1.4 | 1.2 | .8 | 1.4 1.0 |
| Men's and hoys' furnishings. <br> Women's, misses', and juniors' outerwear. |  | . | 1.1 |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1.4 | 1.4 | 1.8 | 1.5 | 1.1 | 1.2 | 1.3 | 1.2 | 1.4 | 1.6 | 1.5 | 1.6 | 1.5 | 1.1 | 1 |
| Women's and chidran's undergar- ments | 1.3 | 1.0 | 1.3 | 1.1 | . 9 | 1.2 | 1.7 | 1.7 | 1.6 | 1.5 | 1.2 |  | 1.0 | 4 |  |
| Ments, | 1.1 | 1.0 | 2.1 | 1.7 | 1.1 | 1.2 | 1.2 | 1.5 | 1.2 | 1.6 | 1.3 | 1.2 |  |  | 1.8 |
|  | 1.2 | 7 | 1.2 | 1.2 |  |  |  |  | 1.2 | 1.6 | 1.5 | 1.5 | ${ }_{1.2} .8$ | 1.3 | 1.3 |
| Fur goods and miscellaneous apparel---- | . 9 | 7 | 9 | 8 | .7 | 1.1 | 1.3 | 1.4 | 1.2 | 1.1 | 1.1 | 1.1 |  | 1.1 | 1.1 |
|  | 1.7 | 1.5 | 1.5 | 1.4 | 1.3 | 1.8 | 2.0 | 2.2 | 2.1 | 1.8 | 1.8 | 1.8 | 1.7 | 1.6 | 1.7 |
| Paper and allied productsPaper and pulp.-...-- | 4.2 | 3.8 | 4.3 | 4.2 | 4. 2 | 4.5 | 4.5 | 4.5 | 4.8 | 4. 6 | 4.7 | 4.5 | 4.4 | 4.3 | 4.1 |
|  | 5.2 5.4 5. | 4.8 5.0 | 5.4 5.9 | 5.2 5.6 | 5.3 5.4 5. | 5.2 6.3 | 5.2 6.0 | ${ }_{8}^{8.1}$ | 5.3 6.4 | b. 2 5.8 b |  |  | 8.4 | 5.0 5.8 | 5.1 5.1 |
| PaperboardConverted paper and paperboard prod-ucts. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 2.7 | 2.5 | 2.9 | 2.8 | 2.9 | 3.2 | 2.8 | 3.0 | 3.3 | 3.4 | 3.0 | 3.3 | 2.8 | 3.0 | 2.8 |
| Paperboard containers and boxes..------ | 3.5 | 3.0 | 3.3 | 3.2 | 3.1 | 3.8 | 4.0 | 4.3 | 4.6 | 4.1 | 4.2 |  |  | . 6 | 3.3 |
| Printing, publishing, and allier industriesNewspaper puhlisiling and printing--- | 2.7 | 2.4 |  | 2.5 | 2.4 | 3.0 | 2.8 | 2.8 | 3.1 | 2.9 | 2.7 | 2.6 | 2.8 | 2.7 | 2.9 |
|  | 2.7 | 2.0 | 2.0 | 1.8 | 1.8 | 3.1 | ${ }_{3.6}^{2.9}$ | 2.7 | 2.8 | 2. ${ }_{3}{ }^{5}$ | 2. 2.4 | 2.6 | ${ }_{2.3}^{2.8}$ | 2.4 | 2.7 |
|  | 2.8 | 3. 0 | 4.0 | 3.3 <br> 2.8 | 2.3 2.6 | 3.3 2.8 | 3. 2.6 | 3.8 3.0 | 4.4 | 3.4 <br> 3.6 | 3.4 | 2.6 3.3 | ${ }_{3.9}$ | 3.1 | ${ }_{3.7}^{3.6}$ |
|  | 3.9 2.9 | 3.7 2.7 | 3.6 3.2 | 2.8 | 2.7 | 3.2 | 2.9 | 3.0 | 3.2 | 3.0 | 2.8 | 2.7 | 2.9 | 2.9 | 3.1 |
| Rook hinding and related Industries.-.-- | 2.1 | 2.1 | 2.2 | 1.8 | 2.2 | 2.1 | 2.3 | 2.4 | 3.2 | 2.7 | 2.4 | 2.1 | 2.5 | 2.1 | 2.1 |
| Other publishing and printing Industries. | 2.1 | 1.9 | 2.5 | 2.7 | 2.4 | 2.6 | 2.4 | 2.7 | 2.7 | 2.8 | 2.6 | 2.4 | 2.2 | 2.5 | 2.6 |
|  | 2.6 | 3.0 | 2.5 | 2.4 | 2.2 | 2.4 | 2.3 | 2.8 | 2.7 | 2.4 | 2.6 | 2.6 | 2.7 | 2.3 | 3 |
|  | 2.2 | 2.8 | 2.3 | 2.4 |  | 2.5 | ${ }^{2.4}$ | 2.4 | 2.6 | 2.4 | 28 | 2.4 | 2.3 | 2. 3 | 2.8 |
| Plastles and synthetics, except slass.--- | 2.2 | 2.6 | 2.1 | 2.0 | 1.9 | 2.1 | 1.9 | 2.0 | 2.3 | 2.3 | 2.6 | 2.6 | 2.3 | 2.0 | 2.0 |
|  | 1.8 | 2.0 | 2.6 | 2.5 | 2.4 | 2.4 | 2.5 | 2.7 | 2. ${ }^{2}$ | ${ }_{2} 2.3$ | 2. 3 | 2.4 | 2.1 | 1.9 | 1.8 |
| Soan, cleaners and toilet | 2.2 | 2.2 2.0 | 2.4 | 2.5 1.7 | 2. 1.6 | 2.4 | 2.5 1.5 | 2.8 1.8 | 3.2 | 2.7 2.3 | 2.8 <br> 2.4 | 2.8 2.8 | 2.3 | 1.6 | 2.3 1.8 |
|  | 6. 9 | 9.6 | 5.6 | 3.7 | 3.3 | 3.5 | 3.1 | 3. 6 | 3.9 | 2.8 | 3.2 | 3.3 | 7.2 | 3.8 | 4.8 |
|  | 2.7 | 2.2 | 2.4 | 2.4 | 2.5 | 2.7 | 2.6 | 2. 6 | 2.8 | 2.8 | 2.6 | 3.0 | 2.8 | 2.5 | 2.8 |
| Petroleum refining and related Industries Petroleum refining. Other petroleum and col.-.............. | 2.8 | 2.5 | 1.7 | 1.6 | ${ }^{2} .0$ | 2.0 | 2.5 | 2.5 | 3.0 | 2. 2 | 2. 6 | 2.5 | 2.2 | 2.0 | 2. |
|  | 1.9 6.0 | ${ }_{4.1}{ }_{4} .1$ | 1.5 2.6 | 1.4 2.6 | 1.7 3.2 | 1.5 4.0 | 1.9 | 1.6 8.8 | 2.0 6 | 5.8 | 1.7 6.2 | ${ }_{6.1}^{1.6}$ | 1.6 4.7 | 1.5 4.5 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 2.7 | 2.3 | 2.9 | 2.9 | 2.7 | 3.2 | 3.1 | 3.0 | 3.3 | 3.1 | 3.0 | 3.7 | 3. 2 | 2.6 | 2.4 |
| Tires and inner tuhes. Other rubber products - | ${ }_{2.3}^{2.6}$ | 2.3 2.2 | 2.8 2.5 | 2.9 2.6 | 2.8 2.6 | 3. ${ }_{3}{ }^{\text {a }}$ | 3.3 3.0 3. |  | 3.6 | 3.5 2.8 2.8 | 3.6 | 4.4 <br> 3.5 | 3.3 | 2.7 2.4 2 | 2.3 2.2 |
|  | ${ }_{3.2}^{2.3}$ | 2.5 | 3.4 | 3.2 | 3.0 | 3.0 | 3.2 | 2.1 3.1 | 3. 3 | 3.0 | 3.0 | 3.5 | ${ }_{3.3}$ | 2.9 | 2. 2.5 |
| Leather and leather produ |  |  | 1.3 | 1.5 | 1.2 | 1.3 | 1.4 | 1.3 | 1.4 | 1.8 | 1.4 | 1.5 | 1.2 | 1.4 | 1.2 |
| Leather tanning and finishing. <br> Footwear, except rubber. <br> Other leather products. | $\begin{array}{r}2.9 \\ \hline 1\end{array}$ | 2.3 | 2.3 | 1.5 1.3 | 2.4 | 2. ${ }_{1} 1$ | 2.5 | $\begin{array}{r}2.7 \\ \hline 8\end{array}$ | 1.8 1.0 | 1.28 | 1.3 <br> 1.3 | 3.0 | 2.8 | 2.3 1.1 | 1.1 |
|  | 1.19 | . 9 | 1.4 | 1.7 | 1.2 | 1.6 | 2.1 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.3 | 1.7 | 1.4 |

[^59]Table C-5. Indexes of aggregate weekly man-hours and payrolls in industrial and construction activities ${ }^{1}$ [1957-59 $=100$ ]

| Activity | 1963 |  |  |  |  |  | 1962 |  |  |  |  |  |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | June ${ }^{2}$ | May ${ }^{2}$ | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | 1961 | 1960 |
|  | Man-hours |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 101.9 | 99.5 | 96.1 | 94.0 | 92.4 | 93.4 | 96.3 | 99.2 | 101. 7 | 103.4 | 102.0 | 100.6 | 100.8 | 95.1 | 99.0 |
| Mining | 85.9 | 83.5 | 80.3 | 76.6 | 77.3 | 77.9 | 79.8 | 81.3 | 83. 3 | 84. 3 | 85.4 | 82.4 | 85.4 | 84. 9 | 91.1 |
| Contract construction | 104.2 | 98.0 | 88.7 | 75. 6 | 69.5 | 75.1 | 80.7 | 94.9 | 105.3 | 107.7 | 110.6 | 107.7 | 99.5 101.8 | 94.3 95.8 | 98.3 99.6 |
| Manufacturing - | 102.3 | 100.6 | 98.2 | 98.2 | 97.3 | 97.5 | 100.0 | 100.9 | 102.0 | 103.6 | 101.3 |  | 101.8 | 95.8 |  |
|  | 104.1 | 102.7 | 100.0 | 99.1 | 98.4 | 98.7 | 100.7 | 101.2 | 101.8 | 102.4 | 99.0 | 99.8 | 102.2 | 93.9 | 99.4 |
|  | 121.0 | 121.3 | 119.3 | 124.1 | 125.8 | 127.9 | 129.9 | 129.5 | 127.4 | 128.0 | 127.4 | 123.1 | 122.4 | 118.1 | 111.7 |
| Lumber and wood products, except furniture. $\qquad$ | 96.8 | 98.2 | 93.2 | 90.7 | 90.0 | 90.6 | 92.5 | 96.2 | 99.6 | 103.1 | 105.0 | 102.3 | 102.7 | 94. 0 | 99.2 |
| Furniture and fixtures. Stone, clay, and glass products. | 104.0 | 101.2 | 100.4 | 101.2 | 101. 1 | 101. 7 | 105.7 | 106.0 | 107.9 | 108. 0 | 107.3 | 101. 6 | 104. 5 | 97.7 | 102.6 |
|  | 104. 0 | 101.2 | 96.7 | 90.6 | 87.3 | 88.2 | 91.7 | 98.0 | 100.8 | 102.1 | 103. 0 | 101.6 | 101. 3 | 94.8 | 100.4 |
| Primary metal industries.....-...-- | 105.4 | 102.6 | 100.5 | 95.9 | 94.1 | 92.2 | 92.2 | 90.0 | 89.8 | 92.5 | 90.5 | 90.3 | 95. 2 | 91.6 | 98.0 |
| Fabricated metal products.-.-.-...- | 104.1 | 102.2 | 98.7 | 97.9 | 97. 5 | 98.4 | 100.2 | 100.7 | 101. 9 | 102.7 | 99.6 99.6 | 98.8 100.4 | 102.6 102.8 | 94.1 93.2 | 99.9 99.7 |
| Machinery-..-....-....-.-....-...- | 102.5 | 1101.6 | 100.8 109.1 | 1101.3 | 111.8 | 113.1 | 100.2 115.8 | 115.8 8 | 99.6 116.4 | 100.2 116.9 | 113.4 | 111.8 | 114.5 | 104.1 | 105.8 |
|  | 99.7 | 99.9 | 96.5 | 96.5 | 96.4 | 98.2 | 100.7 | 99.5 | 97. 9 | 95.7 | 82.9 | 93.9 | 95. 2 | 83.8 | 92.1 |
| Transvortation equipment.-.-.---- | 105.6 | 103.7 | 102.2 | 102.7 | 102.4 | 102.0 | 103.8 | 104.1 | 103.3 | 103.0 | 103.1 | 101.0 | 103.1 | 98.8 | 102.8 |
| Miscellaneous manufacturing industries. | 103.3 | . 100.8 | 96.9 | 96.9 | 94.5 | 91.8 | 98.9 | 1076 | 111.2 | 110.7 | 107.2 | 101.5 | 105.1 | 98.8 | 101.4 |
| Nondurable goods | 100.0 | 97.9 | 95.9 | 97.1 | 96.0 | 96.0 |  | 100.6 | 102.2 | 105.2 | 104.3 | 100.8 | 101.2 |  |  |
|  | 93.8 | 89.0 | 86.2 | 86.9 | 85.6 | 88.1 | 93.3 | 96.8 99 | 102.5 | 110.0 133.2 | 106. 4 104.1 | 101.8 74.0 | 95.9 75.6 | 96.5 94.4 | 98.0 97 |
|  | 75. 7 | 74.8 | 69.6 | 77.1 | 80.9 | 89.7 | 100.0 | 996 | 120.5 94.8 | 133.2 94.6 | 104.1 95.7 | 74.0 94.2 | 75.6 97.7 | 94.4 93.5 | 97.1 96.5 |
| Textile mill products.-.-.-.-......-- | 93.7 106.6 | 92.4 106.3 | 90.7 103.2 | 91.6 108.2 | 90.6 105.6 | 90.2 100.7 | 103.5 105.5 | 94. 105 10.8 | 94. 8 | 94.6 107.8 | 109.5 | 102.7 | 105.5 | 99.1 | 101. 8 |
| Apparel and related products.-.-.-- | 106.4 | 103.6 | 101.8 | 102.9 | 101.7 | 102.6 | 105.0 | 104.4 | 105.1 | 106.6 | 106.1 | 104.1 | 105.8 | 102.0 | 102.1 |
| Printing, publishing, and allied industries. | 105.0 | 104.4 | 103.0 | 102.3 | 100.8 | 100.9 | 104.2 | 106.0 | 106. 0 | 106.8 | 105.1 | 104. 0 | 105.1 | 104.6 | 104.4 |
| Chemicals and allied products.-.--- | 106.0 | 106.5 | 107.7 | 104.1 | 102.6 | 102.5 | 103.5 | 103.5 | 103.7 | 104.5 | 104.3 | 104.2 | 104.8 | 100.8 | 101.6 |
| Petroleum refining and related Industries. | 85.4 | 84.2 | 83.2 | 79.2 | 78.8 | 80.6 | 81.4 | 82.7 | 83.5 | 86.5 | 88.4 | 90.7 | 90.2 | 89.0 | 93.5 |
| Rubber and miscellaneous plastic products <br> Leather and leather products |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 110.1 97.0 | 109.0 91.0 | 107.1 87.5 | 108.2 93.7 | 107.8 95.6 | 109.3 95.7 | 111.1 97.8 | 111.3 95.9 | 112.0 93.7 | 112.0 97.0 | 109.2 101.7 | 106.8 99.5 | 112.3 100.6 | 99.5 97.4 | 101.5 97.5 |
| Leather and leather products.------ | Payrolls |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mining <br> Contract construction. |  | 91.6 | 88.4 | 84.4 | 85.5 | 85.7 | 87.6 | 87.9 | 90.2 | 92.0 | 92.2 | 88.8 | 92.0 | 89.9 | 95.2 |
|  |  | 115.8 | 104.3 | 90.1 | 83.3 | 90.3 | 96.9 | 111.9 | 123.9 | 127.0 | 128.5 | 124.8 | 114.0 | 106. 4 | 106. 9 |
|  | 119.1 | 116.8 | 113.7 | 113.4 | 112.0 | 112.1 | 115.0 | 115.3 | 115.7 | 117.4 | 113.6 | 113.2 | 115.1 | 105.2 | 106.6 |

${ }^{1}$ For comparability of data with those published in issues prior to Decem-
ber 1961, see footnote 1, table A-2.
For mining and manufacturing, data refer to production and related workers
and for contract construction, to construction workers, as defined in footnote 1 , table A-3.
: Preliminary.

Table C-6. Gross and spendable average weekly earnings of production workers in manufacturing ${ }^{1}$ [In current and 1957-59 dollars]

| Item | 1963 |  |  |  |  | 1962 |  |  |  |  |  |  |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | May ${ }^{2}$ | Apr. | Mar. | Feb. | Jan. | Dee. | Nov. | Oct. | Sept. | Aug. | July | June | May | 1961 | 1960 |
| Manufacturing | $\$ 99.47$93.66 | $\begin{array}{r} \$ 97.76 \\ 92.05 \end{array}$ | $\begin{array}{r} \$ 98.09 \\ 92.36 \end{array}$ | $\begin{array}{r} \$ 97.20 \\ 91.61 \end{array}$ | $\begin{array}{\|r} \$ 97.44 \\ 91.92 \end{array}$ | $\begin{array}{r} \$ 98.42 \\ 93.02 \end{array}$ | $\begin{array}{r} \$ 97.36 \\ 91.85 \end{array}$ | $\begin{array}{r} \$ 96.72 \\ 91.25 \end{array}$ | $\begin{array}{\|r} \$ 97.68 \\ 92.06 \end{array}$ | $\begin{array}{r} \$ 95.75 \\ 90.76 \end{array}$ | $\begin{array}{r} \$ 96.80 \\ 91.75 \end{array}$ | $\begin{array}{r} \$ 97.27 \\ 92.37 \end{array}$ | $\begin{array}{r} \$ 96.80 \\ 92.02 \end{array}$ | $\$ 92.34$88.62 | $\begin{array}{r} \$ 89.72 \\ 87.02 \end{array}$ |
| Gross average weekly earnings: Current dollars. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Worker with no dependents: <br> Current dollars. | 79.69 | 78. 36 | 78.63 | 77. 91 | 78.11 | 79. 35 | 78. 50 | 77. 99 | 78. 76 | 77.21 | 78. 05 | 78. 43 | 78. 05 | 74. 60 71.59 | 72.57 70.39 |
| 1957-59 dollars.---.-.-.-. | 75.04 | 73. 79 | 74.04 | 73.43 | 73.69 | 75.00 | 74. 06 | 73.58 | 74.23 | 73.18 | 73. 98 | 74. 48 | 74. 19 | 71. 59 | 70.39 |
| Worker with 3 dependents: Current dollars. | 87.45 | 86.04 | 86.31 | 85. 58 | 85.78 | 87.05 | 86.19 | 85. 66 | 86. 45 | 84.87 | 85. 73 | 86. 11 | 85. 73 | 82. 18 | 80.11 |
| 1957-59 dollars.- | 82.34 | 81.02 | 81.27 | 80.66 | 80.92 | 82.28 | 81.31 | 80.81 | 81. 48 | 80.45 | 81.26 | 81. 78 | 81.49 | 78.87 | 77.70 |

[^60] well as on the level of his gross income, spendable earnings have been com-
puted for 2 types of income recelvers: (1) A worker with no dependents, and (2) a worker with 3 dependents.
The earnings expressed in 1957-59 dollars have been adjusted for changes In purchasing power as measured by the Bureau's Consumer Price Index. 2 Preliminary.
NOTE: These series are described in "The Calculation and Uses of the Spendable Earnings Series," Monthly Labor Review. January 1959, DD. 50-54.

## D.-Consumer and Wholesale Prices

Table D-1. Consumer Price Index. ${ }^{1}$-All-city average: *All items, groups, subgroups, and special groups of items
$[1957-59=100]$

| Group | 1963 |  |  |  |  |  | 1962 |  |  |  |  |  |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | June | May | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | 1962 | 1961 |
| All items. | 106.6 | 106.2 | 106.2 | 106. 2 | 106.1 | 106.0 | 105.8 | 106.0 | 106.0 | 106.1 | 105.5 | 105. 5 | 105. 3 | 105. 4 | 104.2 |
| Food ${ }^{2}$ | 105.0 | 104.2 | 104.3 | 104. 6 | 105.0 | 104. 7 | 103.5 | 104.1 | 104.3 | 104.8 | 103.8 | 103.8 | 103. 5 | 103.6 | 102.6 |
| Food at home | 103.4 | 102.5 | 102.6 | 103. 0 | 103.5 | 103. 2 | 101.9 | 102.6 | 102.9 | 103.5 | 102.3 | 102.4 | 102.1 | 102.2 | 101.5 |
| Cereals and bakery pr | 109.2 | 109.3 | 109.2 | 109.1 | 109.2 | 108. 7 | 108.2 | 108. 4 | 108.0 | 107.9 | 107.8 | 107.9 | 107.4 | 107.6 | 105. $\frac{4}{4}$ |
| Meats, poultry, and fish | 98.4 | 98.0 | 98.3 | 100.7 | 102.1 | 102.5 | 102.5 | 103. 5 | 104.1 | 106.3 | 102.6 | 100. 8 | 99.7 | 101. 7 | 99.3 |
| Dairy products. | 102.8 | 102.8 | 102.9 | 103.5 | 103.6 | 103.8 | 103.9 | 104. 2 | 104.3 | 104. 2 | 103.9 | 103.5 | 102.7 | 104. 1 | 104.8 |
| Fruits and vegetables | 115.6 | 113.9 94.5 | 112.0 | 109.6 | 109.4 | 106.4 | 100.2 97.2 | 102.1 | 102.0 | 102.2 | 105.2 | 109.9 | 111.9 | 105. 0 | 104. 2 |
| Other foods at home ${ }^{3}$ | 96.9 | 94.5 | 96.2 | 96.7 | 97.1 | 97.6 | 97.2 | 97.2 | 98.1 | 97.8 | 85.2 | 94.1 | 93.4 | 96.1 | 97.8 |
| Housing ${ }^{4}$ | 105.9 | 105.7 | 105.8 | 105.7 | 105.4 | 105.4 | 105. 2 | 105.1 | 105.0 | 104.9 | 104.8 | 104. 8 | 104.8 | 104.8 | 103.9 |
| Rent | 106.7 | 106.6 | 106.5 | 106. 4 | 106.4 | 106.3 | 106. 2 | 106.2 | 106.1 | 105.9 | 105.8 | 105. 7 | 105.6 | 105. 7 | 104.4 |
| Gas and electricity | 108.1 | 107.4 | 107.5 | 108. 0 | 108.0 | 108.2 | 108.1 | 108.1 | 108.0 | 108.0 | 108.0 | 108. 0 | 107. 7 | 107.9 | 107.9 |
| Solid and petroleur | 102.1 | 102.4 | 104.2 | 104.8 | 104.8 | 104.9 | 104.8 | 103.6 | 102.4 | 101.3 | 100.1 | 99.7 | 99.4 | 102.1 | 101.6 |
| Housefurnishings | 98.5 | 98.4 | 98.5 | 98. 6 | 98.3 108.3 | $\begin{array}{r}97.9 \\ \hline\end{array}$ | 98. 6 | 98.7 107 | 98.8 | 98.7 107.6 | 98.5 | 99.0 107.5 | 99.1 107 | 98.9 107 | 99.5 |
| Household operation | 110.2 | 110.0 | 109.9 | 109. 7 | 109.3 | 109.3 | 108.1 | 107.8 | 107.6 | 107.6 | 107.4 | 107.5 | 107.4 | 107.4 | 105.9 |
| Apparel | 103.9 | 103.7 | 103.8 | 103.6 | 103.3 | 103.0 | 103.9 | 104.3 | 104.9 | 104.6 | 102.5 | 102.9 | 102. 8 | 103. 2 | 102.8 |
| Men's and boys' | 104.4 | 104.2 | 104.1 | 103.9 | 103.7 | 103.5 | 104.3 | 104.3 | 104.2 | 104.0 | 102.9 | 103.2 | 103.1 | 103. 3 | 102.8 |
| Women's and gi | 101.2 | 101.1 | 101.4 | 101.1 | 100.7 | 100.2 | 101.5 | 102.5 | 104.0 | 103. 6 | 99.9 | 100.4 | 100.5 | 100.9 | 101.0 |
| Footwear .... | 110.6 | 110.3 | 110.2 | 110.0 | 109.9 | 109.8 | 109.9 | 109.7 | 109.6 | 109.5 | 109.3 | 109.2 | 109.1 | 109.3 | 107.8 |
| Other apparel ${ }^{5}$ | 101.0 | 100.9 | 100.9 | 101.1 | 100.9 | 100.3 | 101.3 | 101.1 | 101.6 | 101.2 | 100.3 | 100.8 | 100.4 | 100.6 | 100.8 |
| Transportat | 107.4 | 107.4 | 107.0 | 107.0 | 106.8 | 106. 6 | 108.0 | 1083 | 108.1 | 107.8 | 107.4 | 106. 8 | 107.3 | 107.2 | 105.0 |
| Private | 106.1 | 106.0 | 105.5 | 105.6 | 105.3 | 105.3 | 106.8 | 107.2 | 106.9 | 106. 7 | 106. 2 | 105.4 | 106.0 | 105. 9 | 104.0 |
| Public. | 116.6 | 116.5 | 116.5 | 116.4 | 116.3 | 115.7 | 115.7 | 115.4 | 116.0 | 115.7 | 115. 7 | 115.6 | 115.6 | 115.4 | 111.7 |
| Medical car | 116.8 | 116.4 | 116.1 | 115.8 | 115.6 | 115.5 | 115.3 | 115.0 | 114.9 | 114.7 | 114.6 | 114.6 | 114.4 | 114.2 | 111.3 |
| Personal car | 107.8 | 107.8 | 107.6 | 107.3 | 107.3 | 107.4 | 107.6 | 107.1 | 106.9 | 106.8 | 106.8 | 106.8 | 106.1 | 106.5 | 104.6 |
| Reading and reereation | 110.9 | 110.7 | 111.0 | 110.1 | 110.0 | 110.2 | 110.0 | 110.1 | 109.5 | 110.0 | 110.3 | 110.0 | 109.2 | 109.6 | 107.2 |
|  | 107.6 | 106.0 | 105.8 | 105. 7 | 105. 7 | 105. 7 | 105.6 | 105.6 | 105. 6 | 105.6 | 105.5 | 105.6 | 105. 2 | 105. 3 | 104.6 |
| Special groups: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| All items less food. | 107.3 | 107.0 | 107.0 | 106.8 | 106.6 | 106. 5 | 106. 7 | 106.7 | 106.7 | 106. 6 | 106. 2 | 108. 1 | 106.1 | 106. 1 | 104.8 |
| All items less shelter | 106.6 | 106.1 | 106.1 | 106.1 | 106.1 | 105.9 | 105.8 | 106.0 | 106.1 | 106. 1 | 105. 5 | 105. 4 | 105. 3 | 105. 4 | 104. 2 |
| All commodities less food | 103.3 | 103.0 | 103.0 | 102.9 | 102.7 | 102.6 | 103.4 | 103.5 | 103.6 | 103.4 | 102.6 | 102.5 | 102.6 | 102.8 | 102.1 |
| All commodities | 104.1 | 103.6 | 103.6 | 103.7 | 103.8 | 103.6 | 103.6 | 103.8 | 104.0 | 104.1 | 103.2 | 103.1 | 103.1 | 103.2 | 102.4 |
| Nondurables | 104.8 | 104. 2 | 104.2 | 104.4 | 104. 5 | 104.3 | 104.0 | 104.2 | 104.4 | 104.7 | 103.5 | 103.5 | 103.4 | 103.6 | 102.8 |
| Nondurables less food. | 104.5 | 104.2 | 104.3 | 104.2 | 104. 1 | 104.0 | 104. 6 | 104. 4 | 104.6 | 104.6 | 103.2 | 103.3 | 103. 4 | 103.8 | 103.2 |
| Nondurables less food and apparel.- | 105. 0 | 104.7 | 104.7 | 104.7 | 104.6 | 104. 7 | 105.1 | 104.5 | 104.5 | 104.6 | 103. 7 | 103.5 | 103.8 | 104. 2 | 103.3 |
|  | 101.3 | 101.0 | 100.9 | 100.8 | 100.6 | 100.4 | 101.7 | 102.2 | 102.0 | 101.6 | 101.7 | 101.5 | 101.6 | 101.5 | 100.5 |
| Durables less ca | 98.4 | 98.3 | 98.4 | 98.5 | 98.4 | 98.5 | 98.6 | 98.6 | 98.6 | 98.6 | 98.7 | 98.7 | 98.8 | 98.8 | 98.8 |
| All services ${ }^{8}$ | 111.3 | 111.1 | 111.1 | 110.8 | 110.5 | 110.5 | 110.1 | 110.0 | 109.8 | 109.8 | 109.9 | 109.8 | 109.5 | 109.5 | 107.6 |
|  | 112.2 | 111.9 | 111.9 | 111.6 | 111.2 | 111.2 | 110.8 | 110.6 | 110.5 | 110.5 | 110.6 | 110.5 | 110.2 | 110.2 | 108.3 |
| Household operation services, gas, and electricity | 110.6 | 110.2 | 110.2 | 110.2 | 109.9 | 109.9 | 109.1 | 108. 8 | 108.7 | 108.6 | 108.5 | 108.6 | 108.5 | 108. 5 | 107.2 |
| Transportation services...--------- | 112.3 | 112.2 | 112.0 | 111.8 | 111.4 | 111.1 | 110.9 | 110.7 | 110.8 | 110.5 | 111.7 | 111. 7 | 111.5 | 111.2 | 109.5 |
| Medical care services. | 120.1 | 119.5 | 119.2 | 118.9 | 118.7 | 118.5 | 118.2 | 118.0 | 117.8 | 117.5 | 117.3 | 117.2 | 116.9 | 116.8 | 113.1 |
| Other services. | 110.5 | 110.3 | 110.5 | 110.0 | 109.6 | 109.7 | 109.3 | 109.3 | 109.1 | 109.3 | 109.3 | 109.1 | 108.7 | 108.7 | 106.8 |

[^61](except shoe repairs), gasoline, motor oil, prescriptions and drugs, toilet goods, nondurable toys, newspapers, cigarettes, cigars, beer, and whiskey. ${ }^{7}$ Includes water heaters, central heating furnaces, kitchen sinks, $\operatorname{sink}$ 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, railroad fares, professional medical services, hospital services, hospitalization and surgical insurance, barber and beauty shop services, television repairs and motion picture admissions.

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

| City | 1963 |  |  |  |  |  | 1962 |  |  |  |  |  |  | Annual average |  | $\begin{gathered} 1963 \\ (1947- \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | June | May | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | 1962 | 1961 | June |
| All-city average ${ }^{\text {8 }}$----- | All Items |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 106.6 | 106.2 | 106.2 | 106.2 | 106.1 | 106.0 | 105.8 | 106.0 | 106.0 | 106.1 | 105.5 | 105.5 | 105.3 | 105.4 | 104.2 | 130.8 |
| Atlanta, Ga | 104.9 | (3) | (3) | 104.9 | (8) | (8) | 104.5 | (3) | (8) | 104.7 | (3) | (a) | 104.0 | 104.1 | 103.2 | 129.9 |
| Baltimore, M | 106.8 | (3) | (3) | 106.2 | (8) | (3) | 105.7 | (2) | (3) | 106.0 | (8) | (8) | 104.8 | 105.2 | 104. 4 | 132.5 |
| Boston, Mass | ${ }^{(3)}$ | (3) | 109.2 | $\left.{ }^{8}\right)$ | (8) | 108.6 | ${ }^{(3)}$ | (2) | 108.2 | ${ }^{(8)}$ | (3) | 107.2 | (3) | 107.4 | 105.1 |  |
| Chicago, Ill. | 105.2 | 105.0 | 105.0 | 105.2 | 104.7 | 104.7 | 104.7 | 105.0 | 105.0 | 105.2 | 104.4 | 104.5 | 104.5 | 104. 6 | 103.6 | 132.7 |
| Cincinnati, Ohio | 104.6 | ${ }^{(3)}$ | ${ }^{(3)}$ | 104.5 | (1) | ${ }^{(3)}$ | 104.0 | ${ }^{(3)}$ | ${ }^{(3)}$ | 104.3 | ${ }^{(3)}$ | ${ }^{(3)}$ | 103.3 | 103.6 | 102.6 | 127.3 |
| Cleveland, Ohio | ${ }^{(3)}$ | 104.3 | (3) | ${ }^{8}$ | 104.3 | (3) | ${ }^{(3)}$ | 103.7 | ${ }^{(2)}$ | ${ }^{(3)}$ | 103.8 | ${ }^{(3)}$ | ${ }^{(3)}$ | 103.5 | 103.2 |  |
| Detroit, Mich..- | 103.5 | 102.4 | 102.1 | 102. 6 | 102.6 | 102.5 | 102.5 | 102.6 | 102.8 | 102.8 | 102.3 | 101.8 | 101.8 | 102.2 | 101.9 | 127.6 |
| Houston, Tex | ${ }^{(3)}$ | 104.4 | ${ }^{(3)}$ | ${ }^{(8)}$ | 105.0 | ${ }^{(2)}$ | ${ }^{(3)}$ | 104.5 | ${ }^{(3)}$ | (8) | 104.6 | ${ }^{(8)}$ | (3) | 104.6 | 102.6 |  |
| Kansas City, Mo-..-- | (3) 107.4 | (3) 107.6 | 106.4 | ${ }^{\left({ }^{(2)}\right.} 107.7$ | ${ }_{107.8}^{\text {(8) }}$ | 105.9 107.3 | ${ }^{(3)} 107.2$ | ${ }_{107.1}^{(8)}$ | 107.1 | ${ }^{(8)} 107.2$ | ${ }_{106.6}$ | 106.0 106.8 | ${ }^{(3)} 107.0$ | 106.1 106.6 | 104.5 105.4 | ${ }_{13} 13.9$ |
| Los Angeles, Calif...- | 107.4 | 107.6 | 108.0 | 107.7 |  | 107.3 |  |  |  | 107.2 |  |  |  |  |  |  |
| Minneapolis, Minn.- | ${ }^{(3)}$ | ${ }^{3}$ ) | 106.5 | ${ }^{(3)}$ | ${ }^{(8)}$ | 106.0 | ${ }^{(2)}$ | ${ }^{(3)}$ | 105.9 | ${ }^{(3)}$ | ${ }^{(2)}$ | 105.7 | ${ }^{(3)}$ | 105. 6 | 104.2 | ${ }^{(3)}$ |
| New York, N.Y..--- | 108.7 | 107.8 | 107.9 | 107.6 | 107.6 | 107.5 | 106.9 | 107.1 | 107.2 | 107.3 | 106.6 | 106. 4 | 105.8 | 106.4 | 104.8 | 131.0 |
| Philadelphia, Pa | 107.2 | 106.2 | 106.4 | 106.4 | 106.2 | 105.9 | 105.7 | 105.8 | 105.8 | 106.0 | 105.2 | 105.3 | 104.9 | 105. 2 | 104. 4 | 131.6 |
| Pittsburgh, Pa- | ${ }^{(3)}$ | (3) | 106.3 | (8) | ${ }^{(8)}$ | 106.5 | ${ }^{(3)}$ | (3) | 106.3 | ${ }^{(8)}$ | (3) | 106.0 | ${ }^{(8)}$ | 105.9 | 105.0 |  |
| Portland, Oreg. | (3) | (3) | 106.2 | (3) | (3) | 105.7 | (3) | (3) | 105.3 | ${ }^{(3)}$ | (3) | 104.8 | (8) | 104.6 | 104.1 | ${ }^{(3)}$ |
| St. Louis, Mo. | 105.6 | (3) | ${ }^{(3)}$ | 105.8 | (8) | (3) | 106.0 | (8) | ${ }^{(3)}$ | 105. 6 | (8) | (3) | 104.4 | 105.1 | 103.9 | 131.0 |
| San Francisco, Calif. | 108. 9 | (3) | (3) | 108.4 | (8) | (3) | 107.8 | (8) | (3) | 107.5 | (3) | (8) | 107.5 | 107.4 | 105.8 | 138.2 |
| Scranton, Pa | ${ }^{(3)}$ | 106.7 | (8) | (3) | 106.9 | (3) | ${ }^{(3)}$ | 106.5 | (3) | (3) | 106.0 | (8) | (3) | 105. 9 | 104.1 | $\left.{ }^{3}\right)$ |
| Seattle, Wash | (3) | 107.4 | (8) | (3) | 107.2 | (2) | (3) | 107.0 | (3) | (8) | 106.7 | (8) | (3) | 106.5 | 104.9 | (3) |
| Washington, D.C | (3) | 106.1 | (3) | (8) | 105.6 | (3) | (3) | 105.3 | (3) | (3) | 104.8 | (3) | (3) | 104. 6 | 103.7 | (3) |
| All-city average ${ }^{2}$-.--- | Food |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 105.0 | 104.2 | 104.3 | 104.6 | 105.0 | 104.7 | 103.5 | 104.1 | 104.3 | 104.8 | 103.8 | 103.8 | 103.5 | 103.6 | 102.6 |  |
| Atlanta, Ga | 103.7 | 102.3 | 102.7 | 103.8 | 104.2 | 104.0 | 102.7 | 103.1 | 103.9 | 104.3 | 103.4 | 102.9 | 103.0 | 103.0 | 101. 8 | -------- |
| Baltimore, M | 104.8 | 103. 5 | 103.5 | 103.7 | 103.9 | 104.6 | 103.4 | 103.6 | 104. 2 | 104.5 | 104.2 | 103.4 | 103.0 | 103.3 | 102.4 |  |
| Boston, Mass | 106.6 | 106. 2 | 106.6 | 106.5 | 106.3 | 106. 4 | 105. 7 | 106.4 | 105.7 | 105.7 | 105.0 | 104. 3 | 104. 2 |  | 102.4 |  |
| Chicago, Ill | 105.9 | 104. 7 | 105.0 | 105.7 102.6 | 105.4 | 105. 6 | 104.3 | 105.7 102.8 | 105.7 103.0 | 106.7 103.7 | 105.8 102.2 | 105.7 102.4 | 105.2 101.5 | 105.3 101.9 | 103.2 101.8 |  |
| Cincinnati, Ohio | 102.9 | 102.3 | 102.2 | 102.6 | 103.7 | 103.1 | 101.7 | 102.8 | 103.0 | 103.7 | 102.2 | 102.4 | 101.5 | 101.9 | 101.8 |  |
| Cleveland, Ohio. | 101.6 | 100.7 | 100.8 | 101.7 | 102.2 | 101.7 | 100.8 | 101.3 | 101.7 | 102.4 | 101.5 | 101.4 | 101.2 | 101.0 | 100.9 |  |
| Detroit, Mich. | 102.0 | 100.7 | 100.8 | 101.1 | 101.7 | 101.3 | 100.6 | 101.6 | 101.5 | 101.6 | 100.8 | 101.2 | 100.9 | 101.1 | 101. 4 |  |
| Houston, Tex. | 103.1 | 102.0 | 101.8 | 102.3 | 103.0 | 103.2 | 102.4 | 102.8 | 103. 6 | 104. 0 | 102.9 | 103.1 | 102.2 | 102.9 | 101. 3 | -------- |
| Kansas City, Mo | 103.9 | 102.1 | 103.3 | 103.6 | 104.3 | 103.2 | 103.2 | 104.4 | 104.5 | 105. 1 | 104.2 | 103.7 | 103.0 | 103.3 | 101. 9 |  |
| Los Angeles, Calif.---- | 106.3 | 105.9 | 106.6 | 106.8 | 107.8 | 106.8 | 105.6 | 105.3 | 105.6 | 105.9 | 104.7 | 105.0 | 106.1 | 105.5 | 104.5 |  |
| Minneapolis, Minn_- | 102.1 | 101.7 | 102.0 | 101.8 | 101.7 | 101.5 | 100.8 | 100.9 | 101.5 | 102.5 | 101.8 | 102.5 | 102.3 | 101.8 | 101.2 |  |
| New York, N. Y...--- | 106.9 | 106.3 | 106.3 | 106. 6 | 106.8 | 106. 6 | 104.9 | 105.8 | 106. 3 | 107.0 | 105.7 | 104.8 | 103.7 | 104.9 | 102.9 |  |
| Philadelphia, Pa...--- | 104.5 | 103.2 | 103.1 | 104.1 | 104. 4 | 104.5 | 103.0 | 103.5 | 104. 8 | 104.8 | 103. 6 | 103.8 | 102.6 | 103.1 | 101. 9 |  |
| Pittsburgh, Pa_...-. | 103.7 | 103.2 | 103.1 | 104.1 | 104.3 | 103.2 | 101.7 | 102.5 | 102.8 | 103.4 | 102.5 | 102.4 | 102.5 | 102.4 | 102.3 |  |
| Portland, Oreg-------- | 104.8 | 104.1 | 104.5 | 104.6 | 105.2 | 105.3 | 103.9 | 104.1 | 104.5 | 104.8 | 103.4 | 103.6 | 104.2 | 103.6 | 103.0 | ---.----- |
| St. Loui | 104.9 | 103.1 | 104.0 | 104.5 | 105.0 | 104.9 | 104.6 | 104.5 | 103.8 | 104.2 | 102.7 | 102.8 | 102.3 | 103.0 | 102.0 |  |
| San Francisco, Calif | 107.0 | 105.9 | 106.5 | 106. 9 | 107.0 | 106.7 | 105. 6 | 105.8 | 105. 6 | 105. 0 | 104. 3 | 105. 5 | 105. 9 | 105. 4 | 104. 0 | ------ |
| Scranton, Pa | 104.6 | 103.1 | 103.1 | 103.3 | 104.4 | 104.1 | 102.9 | 103.6 | 104. 1 | 103.8 | 10.3 | 103.1 | 103.5 | 103.1 | 101. 3 |  |
| Seattle, Wash | 107.1 | 106. 7 | 107.3 | 107.3 | 106.9 | 106. 3 | 105. 9 | 105.9 | 105.9 | 106. 6 | 106. 0 | 106. 1 | 106. 5 | 105.7 | 104.5 |  |
| Washington, D.C.--- | 104.6 | 103.3 | 102.9 | 103.6 | 103.2 | 103.9 | 101.8 | 102.1 | 103.4 | 103.0 | 102.6 | 102.2 | 101.1 | 102.0 | 101.6 | -------- |

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

Table D-3. Indexes of wholesale prices, ${ }^{1}$ by group and subgroup of commodities

| Commodity group | 1963 |  |  |  |  |  | 1962 |  |  |  |  |  |  | Annual A verage |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | June ${ }^{3}$ | May | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | $1962{ }^{2}$ | 1961 |
| All commoditie | 100.3 | 1100.0 | 99.7 | 99.9 | 100.2 | 100.5 | 100.4 | 100.7 | 100.6 | 101.2 | 100. 5 | 100.4 | 100.0 | 100.6 | 100.3 |
| Farm products and proces | 98.9 | 98.4 | 97.6 | 97.4 | 98.7 | 99.8 | 99.3 | 100.4 | 100.3 | 102.1 | 99.8 | 98.9 | 97.7 | 89.6 | 98.6 |
| Farm prod | 94.9 | 94.4 | 95.4 | 95.4 | 96.5 | 98.5 | 97. 3 | 99.3 | 98.7 | 100.6 | 97.6 | 965 | 95.3 | 97.7 | 96.0 |
| Fresh and drled fruits and vege | 96.8 | 99.8 | 99.6 | 99.0 | 965 | 104.0 | 88.5 | 96.4 | 97.5 | 94.9 | 90.9 | 92.2 | 987 | 97.7 | 93.7 |
| Grains. | 101.4 | 102.9 | 105.1 | 103.7 | 1030 | 102.0 | 101.1 | 99.5 | 98.5 | 98.6 | 98.1 | 991 | 999 | 988 | 956 |
| Livestock and IIve | 89.3 | 86.8 | 88.2 | 85. 6 | 89.5 | 941 | 96.2 | 98.3 | 98.6 | 104.4 | 98.5 | 958 | 91.6 | 96.2 | 925 |
| Plant and anlma | 101.4 | 101.7 | 102. 0 | 1018 | 100.8 | 99.3 | 98.1 | 97.6 | 97.5 | 97.4 | 984 | 993 | 99.6 | 98.4 | 948 |
| Fluid milk | 97.9 | 497.3 | 98.3 | 99.6 | 101.1 | 101.3 | 101. 9 | 1021 | 1025 | 101.6 | 1008 | 998 | 97.0 | 101.2 | 1039 |
| Eggs. | 79.2 | 77. 1 | 81.3 | 99.8 | 99.1 | 100. 1 | 99.3 | 1124 | 103.1 | 1107 | 98. 0 | 862 | 800 | 95.2 | 990 |
| Hay, hayseeds, an | 113.8 | 112.5 | 110.7 | 1138 | 1135 | 111.9 | 108.2 | 106. 9 | 103.1 | 998 | 105.2 | 1053 | 108. 3 | 105. 4 | 1072 |
| Other farm pro | 89.3 | 89.5 | 89.4 | 89.0 | 89.1 | 87.4 | 89.0 | 90.1 | 89.7 | 908 | 89.9 | 925 | 925 | 91.8 | 932 |
| Processed foods | 102.1 | 4101.7 | 99.3 | 99.0 | 100.5 | 100.8 | 100.9 | 101.3 | 101.5 | 103.3 | 101. 5 | 1008 | 99.8 | 101.2 | 100.7 |
| Cereal and bakery prod | 107.0 | 107.6 | 108. 1 | 1080 | 108.6 | 107.4 | 1076 | 1077 | 107.6 | 107.6 | 1078 | 1079 | 107. 6 | 107.6 | 1051 |
| Meats, poultry, and fish | 93.9 | 491.9 | 90.3 | 91.8 | 95.6 | 97.9 | 99.1 | 1001 | 100.0 | 106.8 | 101.0 | 990 | 957 | 99.1 | 954 |
| Dairy products and ice cream..-.-.-.-. | 106.6 | ${ }^{4} 106.8$ | 106.9 | 107.1 | 108.0 | 107.8 | 108. 1 | 108.0 | 107.7 | 106.0 | 106.1 | 105. 7 | 105.0 | 106.9 | 107.5 |
| Canned and frozen frults and vegetables. | 104.5 | 103.4 | 102.9 | 101.3 | 99.8 | 100.0 | 957 | 96. 3 | 96. 4 | 966 | 97.1 | 88. 7 | 991 | 98.0 | 101.7 |
| Sugar and confectionery | 132.1 | 133.6 | 113.9 | 126.1 | 105. 1 | 105.0 | 1028 | 1025 | 103.0 | 1021 | 1027 | 1022 | 102.4 | 102. 2 | 101.3 |
| Packaged beverage mi | 81.1 | 80.9 | 80.9 | 791 | 79.1 | 79.1 | 79.1 | 79.1 | 79. 1 | 82.4 | 82.6 | 82.6 | 82.6 | 81.9 | 837 |
| Anlmal fats and olls | 79.0 | 77. 2 | 79.1 | 80.0 | 86. 0 | 82.8 | 85.2 | 92.2 | 95.2 | 91.4 | 89.5 | 85.8 | 85.7 | 83.4 | 944 |
| Crude vegetable olls | 83.3 | 484.2 | 83.3 | 83.8 | 82. 5 | 81.0 | 78.9 | 79.8 | 80.9 | 76. 7 | 77. 9 | 78. 2 | 808 | 84.5 | 1026 |
| Refined vegetable ofls | 84.4 87.0 | 85.8 87 | 84.1 | 90.0 90.5 | 89.2 | 88.4 | 90.0 | 88.7 91.8 | 86.2 | 84. 6 | 85.2 | 85.2 | 88.8 | 93.1 | 1083 |
| Vegetable oll end products Miscellaneous processed food | 87.0 101.5 | 87.0 | 87.2 | 90.5 | 91.9 | 91. 9 | 91.8 | 918 | 90.9 | 92.6 | 92. 9 | 94.5 | 1001 | 97.3 | 1027 |
| Mil commollaneous processed foo | 101.5 100.9 | 4101.8 | 101.4 100.2 | 101.5 | 1015 1006 | 100. 2 | 100.4 | 1012 1008 | 104.6 100.8 | 102.8 | 101.1 | 1010 | 1018 | 101.8 | $105.8$ |
| All commoditles except farm an | 100.6 | 100.5 | 100.4 | 100.6 | 1006 | 100.7 | 100.7 | 100.7 | 100.7 | 100.8 | 1006 | 1008 | 1007 | 1008 | 1008 |
| Textile products and apparel...- | 100.3 | 4100.2 | 100.1 | 100.2 | 1003 | 100.4 | 100. 6 | 100.5 | 100. 5 | 100.6 | 1008 | 1008 | 1008 | 100.6 | 997 |
| Cotton products | 99.7 | 99.7 | 100.1 | 100.2 | 100.5 | 100.6 | 100.8 | 1007 | 101.0 | 101.3 | 1017 | 1018 | 1020 | 101.7 | 100.4 |
| Wool products. | 100.6 | 4100.6 | 100.8 | 100.8 | 100.7 | 100.7 | 100.2 | 100.1 | 99.6 | 99.4 | 99.3 | 993 | 991 | 99.1 | 971 |
| Manmade fibe | 93.8 | 93.8 | 93.8 | 93.8 | 93.7 | 93.7 | 93.7 | 93.6 | 93.6 | -94. 0 | 943 | 94.7 | 946 | 93.9 | 934 |
| Silk products. | 147.5 | 144.4 | 150.9 | 150.9 | 1511 | 149.8 | 143.3 | 130.3 | 1295 | 125. 2 | 132.4 | 130.2 | 130.7 | 125.9 | 1132 |
| A pparel | 101.9 | 4101. 6 | 101.3 | 1014 | 101.4 | 101. 3 | 101.7 | 101.7 | 101.7 | 101. 6 | 101.8 | 101.8 | 1015 | 1015 | 1010 |
| Miscellaneous textile products | 117.4 | 118.2 | 116.3 | 114.9 | 118.2 | 123.3 | 127.9 | 127.8 | 121.6 | 122.1 | 119.4 | 121.6 | 123.9 | 122.4 | 123.3 |
| Hides, skins, leather, and leather products | 104. 4 | 104.8 | 104.5 | 105.1 | 105. 1 | 106.0 | 106.9 | 107.3 | 107. 4 | 107.5 | 107.0 | 107.5 | 108.0 | 107.4 | 1062 |
| Hides and skins.. | 85.8 | 87. 4 | 85.0 | 88.4 | 85. 9 | 106.0 95.2 | 101.6 | 107. 1 | 108.8 | 110.8 | 105. 1 | 1042 | 1085 | 108.2 | 107.9 |
| Leather | 102.5 | 103.2 | 102.8 | 103.7 | 104. 7 | 105. 2 | 106. 1 | 106. 8 | 106. 5 | 106. 6 | 106.9 | 108.4 | 110.0 | 108. 5 | 106.0 |
| Footwear | 108. 2 | 108.2 | 109.2 | 108.3 | 108. 3 | 108. 3 | 108. 5 | 108. 4 | 108. 4 | 108.8 | 108.8 | 108.8 | 108.7 | 108.7 | 1074 |
| Other leather proc | 104.2 | 4104.4 | 104.5 | 104.7 | 104.8 | 104.9 | 105. 5 | 105.0 | 104.8 | 104.0 | 103.9 | 1050 | 104. 9 | 104.3 | 103.2 |
| Fuel and related prod | 100.9 | 100.4 | 1003 | 100.8 | 100.3 | 100.4 | 100.8 | 100.8 | 100.8 | 100.8 | 99.5 | 100.0 | 996 | 100.2 | 100.7 |
| Coal..----...- | 94.8 | 494.2 | 95. 0 | 981 | 984 | 98.3 | 98.3 | 97.7 | 97.2 | 96. 6 | 95.6 | 953 | 946 | 96.8 | 97.7 |
| Coke | 103.6 | 103.6 | 103. 6 | 103.6 | 103. 6 | 103.6 | 103.6 | 103.8 | 1036 | 1036 | 1036 | 1036 | 1036 | 103.6 | 1036 |
| Gas fuels | 120.0 | 4120.1 | 124. 1 | 127.8 | 127.8 | 120.8 | 123.1 | 122.3 | 122. 7 | 120.1 | 1178 | 1197 | 113.8 | 1192 | 118.7 |
| Electric power ${ }^{9}$ | 102.2 | 4102.2 | 102.4 | 102.4 | 102.5 | 102. 5 | 102. 7 | 102.7 | 102.7 | 102.8 | 102.8 | 102.8 | 102.8 | 102.8 | 102.4 |
| Crude petroleum and natural gasoline-- | (8) | (5) | (8) | ${ }^{(8)}$ | (3) | (8) | 98.1 | 98.1 | 98.1 | 98.2 | 98.2 | 98.2 | 98.2 | 98.1 | 98.0 |
| Petroleum products, refined.-....------- | 99.9 | 99.1 | 98.2 | 98.2 | 97.1 | 98.2 | 98.6 | 98.9 | 98.9 | 99.2 | 97.2 | 98. 0 | 981 | 98.2 | 99.3 |
| Chemicals and allled product | 96.3 | 496.4 495 | 486.3 | 96.8 | 96.7 | 96.9 | 96.8 | 97.0 | 97.1 | 96.8 | 97.0 | 97.2 | 97.6 | 97.5 | 99.1 |
| Industrial chernicals. | 95.1 | 195.0 | 495.0 | 95.4 | 95. 2 | 96.0 | 95.9 | 95.9 | 96.1 | 95.9 | 95.9 | 961 | 962 | 96.3 | 98.4 |
| Prepared paint | 103.0 | 103.0 | 103.7 | 103.7 | 103.8 | 103.8 | 103.8 | 103.8 | 103.8 | 103.8 | 1038 | 1038 | 1038 | 103.8 | 103.6 |
| Paint materials. | 91.1 | 91.7 | 91.5 | 93.0 | 93.0 | 93. 0 | 92.9 | 93.9 | 93.8 | 94.5 | 95.3 | 96.0 | 98.2 | 95.6 | 99.6 |
| Drugs and pharmace | 95.2 | 95.2 4 | 95.1 | 95.2 | 95.1 | 95.2 | 94.3 | 95.1 | 95.1 | 95.0 | 95.0 | 95.1 | 97.0 | 96.0 | 98.3 |
| Fats and oils, Inedibl | 80.4 | 478.6 | 77.7 | 74.5 | 727 1036 | 71.7 | 72.8 | 75.9 | 76.7 | 72.3 | 730 | 73.5 | 73.4 | 76.3 | 87.5 |
| Mixed fertilizer-. | 103.6 | 103. 6 | 103.7 | 103.6 | 103.6 | 103.0 | 102.8 | 103.1 | 103.4 | 103. 9 | 103.9 | 103.9 | 1039 | 103.8 | 102.6 |
| Fertilizer materials | 100.8 | 102. 3 | 102.3 | 102.3 | 102.3 | 100.8 | 99.6 | 99.2 | 99.0 | 98. 6 | 98.4 | 101.0 | 1036 | 101.9 | 104.3 |
| Other chemicals and allied | 98.6 | 98.6 | 98.6 | 99.5 | 99.5 | 99.6 | 99.5 | 99.5 | 99.5 | 99.5 | 99.4 | 99.4 | 99.4 | 99.4 | 99.2 |
| Rubber and rubber pro | 93.1 92.5 | 93.2 92.6 | 94.1 92.8 | 94.1 92.7 | 94. 2 | 94.3 94.1 | 94.4 94.7 | 93.7 92.8 | 93. 1 | 92.8 92.0 | 92.7 92.3 | 92.7 92.4 | 93. 0 | 93.3 93.6 | 96.1 96.3 |
| Tires and tubes | 89.1 | 89.1 | 89.0 | 89.0 | 89.0 | 89.0 | 89.0 | 88.0 | 86.4 | 88.4 | 86.4 | 86.4 | 86.4 | 87.1 | 96.3 92.4 |
| Miscellaneous rubber products | 97.5 | 97.5 | 99.8 | 99.8 | 99.7 | 99.7 | 99.7 | 99.7 | 100.0 | 99.4 | 99.1 | 99.1 | 99.4 | 99.4 | 100.0 |
| Lumber and wood products. | 98.2 | 97.5 | 97.0 | 96.5 | 96.1 | 95.9 | 95.8 | 96.3 | 96. 6 | 97. 0 | 97.4 | 97. 5 | 97.3 | 96.5 | 959 |
| Lumber | 99.0 | 98.4 | 97.6 | 96. 6 | 96. 2 | 95.9 | 95.8 | 96.3 | 96. 7 | 97. 2 | 97.7 | 98.0 | 97.6 | 96.5 | 947 |
| Millwork | 102.8 | 102.4 | 102.4 | 102.5 | 1023 | 102.3 | 102.1 | 102.3 | 102.3 | 102.3 | 102.7 | 1023 | 101.9 | 101.8 | 101. 9 |
| Plywood.-.-...-. | 92.6 | 90.9 | 91.0 | 91.2 | 90.5 | 90.5 | 90.4 | 91.5 | 91. 9 | 92.2 | 92.1 | 924 | 92.9 | 92.4 | 95.7 |
| Pulp, paper, and allied produ | 99.3 | 99.1 | 99.0 | 99.0 89.4 | 99.1 | 99.0 | 99.0 | 99.1 | 99.3 | 99.5 | 99.7 | 100.0 | 100. 5 | 100.0 | 988 |
| Woodpulp. | 91.3 | 91.3 | 91.3 | 89.4 | 89.4 | 89.4 | 89.4 | 89.4 | 91.3 | 93.6 | 93. 6 | 93.6 | 93.6 | 932 | 95.0 |
| Wastepaper | 90.8 | 89.8 | 92.5 | 96.6 | 96. 1 | 94.7 | 94.6 | 96. 0 | 96. 1 | 96.4 | 95.1 | 96.8 | 96.4 | 97.5 | 80.5 |
| Paper ....- | 102.2 | 102.2 | 102. 2 | 102.2 | 102. 2 | 102. 2 | 102. 2 | 102. 2 | 1023 | 102.4 | 102.6 | 102.6 | 103.1 | 102.6 | 102.2 |
| Paperboard | 94.1 | 94.1 | 94.1 | 04.1 | 94.1 | 94.1 | 94.1 | 94.1 | 94.0 | 94.0 | 94.0 | 94.0 | 93.8 | 93.1 | 92.5 |
| uets | 100.1 | 99.9 | 99.7 | 99.7 | 99.9 | 99.6 | 99.6 | 99.7 | 100.0 | 100.0 | 100.4 | 101.0 | 101.6 | 101.0 | 99.5 |
| Bullding paper and board. | 97.4 | ${ }^{4} 96.2$ | 95.5 | 94.1 | 95.5 | 95.6 | 96.2 | 96.6 | 96.3 | 97.1 | 97.1 | 96.3 | 95.5 | 97.2 | 100.8 |

[^62]Table D-3. Indexes of wholesale prices, ${ }^{1}$ by group and subgroup of commodities-Continued
$\left[1957-59=100\right.$, unless otherwise specified] ${ }^{2}$

| Commodity group | 1963 |  |  |  |  |  | 1962 |  |  |  |  |  |  | Annual A verage |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | June ${ }^{3}$ | May | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | $1962{ }^{\text {s }}$ | 1961 |
| All commoditles except farm and foodsContinued |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Metals and metal product | 100.0 | 99.9 | 99.4 | 99.4 | 99.4 | 99.5 | 99.3 | 99.3 | 99.4 | 99.7 | 99.8 | 99.7 | 99. 8 | 100. 0 | 100.7 |
| Iron and steel... | 99.0 | 99.3 | 98.5 | 98.4 | 98.6 | 98.8 | 98.7 | 98.4 | 98.7 | 99.0 | 1 | 98.9 99.0 | 98.8 99.3 | 99.3 99.2 | 100.7 1004 |
| Nonferrous metal | 98.7 | 98.7 | 98.2 | 98.1 | 48.0 | 98.0 | 97.7 | 98.3 103.7 | 98.8 103.7 | 103.7 | 103.7 | 103. 7 | 103.7 | 103.7 | 102.0 |
| Metal containers | 104.9 | 104.6 | 104. 5 | 104.5 103.9 | 104.5 104.0 | 103.8 | 1038 | 103.8 | 103. 7 | 103.7 | 103.7 | 103.7 | 1042 | 1040 | 1038 |
| Hardware Plumbing | 104.6 | 100.8 | 100.8 | 101.3 | 1011 | 97.5 | 97.5 | 97.5 | 97.2 | 96.8 | 96.8 | 97.1 | 98.5 | 1001 | 103.1 |
| Heating equipment | 93.5 | 493.0 | 92.9 | 92.6 | 92.4 | 92.5 | 93.3 | 92.8 | 92.7 | 92.6 | 92.9 | 92.9 | 92.9 | 93.2 | 94.6 |
| Fabrlcated structural metal products -- | 88.3 | 498.2 | 97.6 | 97.8 | 98.0 | 98.1 | 98.1 | 98.1 | 98.2 | 98.2 | 98.3 | 98.3 | 98.3 | 98.2 | 99.0 |
| Fabricated nonstructural metal prod- | 104.9 | 104.0 | 103.8 | 103.7 | 103.7 | 103. 7 | 103.8 | 103. 9 | 103. 8 | 103. 8 | 103. 9 | 103.9 | 103.8 | 103. 9 | 103. 1 |
|  | 101.9 | 4102.0 | 101.9 | 102.0 | 102.2 | 102.3 | 102.3 | 102.2 | 102. 2 | 102. 3 | 102. 3 | 1023 | 102. 4 | 102.3 | 102. 3 |
| Agricultural machinery and equipment. | 111.0 | 110.9 | 110.9 | 111.0 | 110.8 | 110.8 | 110.5 | 110.2 | 109.6 | 109.4 | 109. 4 | 109.5 | 108.5 | 109.5 | 107.4 |
| Construction machinery and equipment | 109.5 | 109.2 | 108.8 | 108.8 | 108.5 | 108.3 | 108.3 | 108.2 | 108.0 | 107.7 | 107.7 | 107.6 | 107.7 | 107.8 | 107. 5 |
| Metalworking machinery and equipment | 109.6 | 109.4 | 109.4 | 109.1 | 109.1 | 109.2 | 109.3 | 109.3 | 109.3 | 109.3 | 109.5 | 109.6 | 109.7 | 109.3 | 107.0 |
| General purpose machinery and equipment | 103.5 | 4103.4 | 103.4 | 103.4 | 103.6 | 103.9 | 103.8 | 103.7 | 103. 7 | 103. 6 | 103.3 | 102.9 | 103.1 | 103.3 | 102.8 |
| Miscellaneous machinery. <br> Special industry machinery and equip- <br> ment 10 | 103.3 | 103.3 | 103.4 | 103.7 | 103.4 | 103.4 | 103.4 | 103.3 | 103.3 | 103. 2 | 103.5 | 103.4 | 103.2 | 103.4 | 102.8 |
|  | 103.9 | 103.9 | 103. 9 | 103.1 | 103.1 | 102.9 | 102.8 | 102.5 | 102. 2 | 102.0 98.4 | 102.0 | 102.0 98.1 | 101.8 98.4 | 101.9 | 100.4 100.0 |
| Electrical machinery and equipment... | 97.7 | 97.7 4 | 97.0 99.8 | 97.1 100.3 | 97.8 100.4 | 98.0 100.4 | 98.1 100.4 | 98.1 100.4 | 98.4 100.4 | 100.9 | 98.9 100.9 | 100.9 | 100.9 | 100.5 | 100.0 100.7 |
| Motor vehicles Transportation equipment, rallroad rolling stock ${ }^{10}$ $\qquad$ | 98.9 | +99.4 | 99.8 | 100.3 | 100.4 | 100.4 | 100.4 | 100.4 | 100.4 | 100.8 |  |  |  |  |  |
|  | 100.5 | 100.5 | 100.5 | 100.5 | 100.5 | 100.5 | 100.5 | 100.5 | 100.5 | 100.5 | 100.5 | 100.5 | 100.5 08.9 | 100.5 | 100. 2 |
| Furniture and other bousehold durables_ | 98.1 | 98.0 | 98.1 | 98.2 | 9 9\%. 2 | 98.3 | 98.4 | 98.6 | 985 104.0 | 98. 6 103.9 | 98.7 104.0 | 98.8 104.1 | 989 1039 | 98.8 103.8 | 995 1028 |
|  | 104.4 | 104.4 | 104. 4 | 104. 6 | 104. 5 | 104.5 102.3 | 104.2 | 104.1 | 104.0 102.5 | 103.9 102.5 | 104.0 102.5 | 102.4 | 102. 2 | 102.3 | 1018 |
| Commercial furniture | 102.4 | 102.3 | $\begin{array}{r}102.3 \\ 9.5 \\ \hline\end{array}$ | 102.3 98.0 | 102.3 95.9 | 102.3 96.2 | 102.3 96.4 | 102.5 96.8 | 106.8 98.8 | 96.7 | 96.7 | 96.7 | 86.9 | 97.0 | 993 |
|  | 91.9 | 92.0 | 92.1 | 92.3 | 92.3 | 92.3 | 93.0 | 93.1 | 93.0 | 93.2 | 93.6 | 93.9 | 94.3 | 94.0 | 95.2 |
| House hold appliances Television, radio receivers, and phono- | 88.5 | 88.9 | 89.4 | 89.4 | 90.1 | 90.1 | 90.4 | 90.4 | 90.7 | 90.7 | 90.8 | 90.8 | 909 | 91.1 | 95.3 |
|  | 103.4 | 103.1 | 103. 0 | 102.8 | 102.8 | 102.8 | 102.8 | 102.9 | 102.9 | 103.1 | 102.9 | 103.0 | 1032 | 1031 | 102.5 |
| Nonmetalle mineral products | 101.1 | 101.3 | 101.5 | 101.5 | 101.5 | 101.4 | 101.5 | 1016 | 101.6 | 1015 | 101.6 | 101.6 | 1019 | 101.8 | 101.8 |
| Flat glass................... | 96.6 | 96.6 | 96.6 | 96.6 | 96. 6 | 96. 6 | 96. 6 | 96.6 | 96.6 103.3 | 96.6 103.3 | 96.6 103.3 | 98.0 103.3 | 980 103.2 | 97.0 103.2 | 96.8 1028 |
| Concrete ingredients | 102.9 | 103.0 | 103. 0 | 103.0 | 103.0 | 102.7 102.5 | 103. 2 102. 5 | 103.3 | 103.3 102.7 | 103.3 102.6 | 103.3 102.6 | 103.3 102.7 | 103.2 102.5 | 103.2 | 1028 102.5 |
| Concrete products...... | 101.9 104.0 | 101.9 4104.0 | 102.2 103.8 | 102.2 103.6 | 102.2 103.6 | 102.5 103.7 | 102.5 103.5 | 102.8 | 103.4 | 1036 | 103. 6 | 103. 6 | 1036 | 103.5 | 103. 2 |
| Structural clay products Gypsum products....- | 104.0 | 104.0 105.0 | 103.8 105.0 | 105.0 | 105.0 | 105.0 | 105. 0 | 105.0 | 105.0 | 105.0 | 105. 0 | 105.0 | 105.0 | 105.0 | 1038 |
| Gypsum products....-. | 88.8 | 492.7 | 94.1 | 94.1 | 94.1 | 89.4 | 89.4 | 89.4 | 89.4 | 89.4 | 89.4 | 89.4 | 9.5. 3 | 94.8 | 98. 6 |
| Other nonmetallic minerals | 101.3 | 101.4 | 101.4 | 101.5 | 101.5 | 102.2 | 102.4 | 102.4 | 102.2 | 1015 | 101. 7 | 1040 | 104. 1 | 104. 1 | 1022 |
| Tobacco products and bottled beverages. | 105.6 105.7 | 105.2 | 104.4 102.3 | 104.3 102.2 | 104.3 102.2 | 104.3 102.2 | 104.3 102.2 | 104.5 | 104.5 102.2 | 104.2 | 102.0 | 1020 | 102.0 | 102. 1 | 1020 |
| Tobacco products. | 105.7 101.0 | 104.5 4101.0 | 102.3 | 102. 1 | 101.1 | 101.1 | 101. 1 | 101.5 | 101.5 | 101. 1 | 101. 1 | 100.7 | 1011 | 101.0 | 1006 |
| Alcoholic beverages Nonalcoholle beverages | 117.4 | +117.4 | 117.4 | 117.4 | 117.4 | 117.4 | 117.4 | 117.4 | 117.4 | 117.1 | 117.1 | 116. 7 | 116.7 | 118.8 | 1128 |
| Miscellaneous products | 108.1 | 107.6 | 108.0 | 110.8 | 111.5 | 111.6 | 110.2 | 109.8 | 108.7 | 109.1 | 107.2 | 107.6 | 105.4 | 107.3 | 103.9 |
| Toys, sporting goods, small arms, ammunition | 100.7 | 100.7 | 100.7 | 100.5 | 101.1 | 101. 3 | 101.3 | 101. 2 | 101.2 | 101.1 | 101.0 | 101.0 | 100.7 | 100.8 | 100.9 |
| Manufactured animal feeds | 112.1 | 111.2 | 111.9 | 117.1 | 118. 2 | 118.3 | 115.7 | 114.9 08.7 | 112.8 88.7 | 113.7 98.7 | 110.2 98.7 | 111.0 98.7 | 107.2 98.7 | 110.6 98.7 | 1046 98.9 |
| Notions and accessorles....-.-.-.-.-.-. -- | 98.7 | 98.7 | 98.7 | ,98.7 | 98.7 | 98.7 | 98.7 | 98.7 | 88.7 | 98.7 | 98.7 | 98.7 | 98.7 | 98.7 | 98.9 |
| Jewelry, watches, and photographic equipment $\qquad$ | 103.8 | 103.9 | 103.8 | 103.9 | 104. 0 | 104.0 | 104.4 | 104.4 | 104.4 101.6 | 104. 4 101.2 | 1044 1010 | 104.3 101.0 | 104.2 100.9 | 104.2 101.3 | $\begin{aligned} & 103.5 \\ & 101.2 \end{aligned}$ |
|  | 101.3 | 101.4 | 101.4 | 101.7 | 101.7 | 101.8 | 101.5 | 101.7 | 101. 6 | 101. 2 | 101.0 | 101.0 | 100.9 |  |  |

1 As of January 1961, new weights reflecting 1958 values were introduced into the index. See "Weight Revisions in the Wholesale Price Index 1890Into the index. See "Weight Revisions in the 10 holesale
1960 " Monthly Lahor Review, February 1962, pp. 175-182.
3 As of January 1962, the indexes were converted from the forme of $1947-49=100$ to the new base of $1957-59=100$. Technical details and earlier data on the 1957-59 base furnished upon request to the Bureau.
${ }^{1}$ Preliminary.

Revised.
Formerly titled "other processed foods."

- Formerly titled "other textile products."

7 January $1958=100$.

- Discontinued.
"Formerly titled "other rubber products."
${ }^{10}$ January $1961=100$.

Table D-4. Indexes of wholesale prices for special commodity groupings ${ }^{1}$
$\left[1957-59=100\right.$, unless otherwise specifled] ${ }^{2}$

| Commodity group | 1963 |  |  |  |  |  | 1962 |  |  |  |  |  |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | June ${ }^{3}$ | May | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | $1962{ }^{3}$ | 1961 |
| All foods | 100.9 | ${ }^{4} 100.7$ | 98. 7 | 92.0 | 100.1 | 101.1 | 99.9 | 101.3 | 101.2 | 102.9 | 100.5 | 99.6 | 98.9 | 100.6 |  |
| All fish.. | 114.4 | 115.9 | 113.6 | 117.3 | 118.4 | 121.9 | 120.9 | 118.3 | 119.0 | 119.8 | 121.6 | 119.0 | 118.3 | 119.2 | $107.9$ |
| Textile products, excluding hard flber p | 100.9 | 100.7 98.0 | 100.2 98.2 | 100.4 98.3 | 100.6 98.4 | 100.7 98.4 | 100.8 98.5 | 100.8 98.3 | 100.8 98.4 | 101.2 98.7 | 100.8 99.0 | 100.8 99.2 | 100.6 | 100.9 | 10.8 |
| Bituminous coal-domestic sizes | 94.1 | 492.9 | 95.5 | 100.6 | 101.5 | 101.5 | 101.5 | 100.4 | ${ }_{99.1}^{98.4}$ | 98.1 | 85.9 | ${ }_{95.0}$ | 99.2 | 98.8 98.3 | 97.7 99.8 |
| Reflined petroleum products | 99.9 | 99.1 | 98.2 | 98.2 | 97.1 | 98.2 | 98.6 | 98.6 | 98.9 | 99.2 | 97.2 | 98.0 | 98.1 | 98.2 | 99.3 |
| East Coast markets | 96.2 | 96.2 | 98.9 | 98.9 | 98.9 | 98.9 | 100.1 | 98.9 | 97.8 | 97.8 | 97.8 | 97.8 | 97.8 | 98.2 99.4 | 100.8 |
| Midcontinent marke | 105.4 | 102.6 | 99.7 | 98.6 | 88.6 | 94.4 | 97.5 | 101.4 | 101.4 | 101.4 | 101.4 | 101.4 | 101.4 | 98.2 | 99.6 |
| Gulf Coast markets | 99.7 | 99.7 | 97.7 | 97.7 | 97.9 | 97.9 | 97.4 | 95.6 | 97.8 | 99.2 | 99.2 | 99.2 | 97.2 | ${ }_{98.6}$ | 101.2 |
| Pacific Coast markets Midwest markets | 89.7 | 90.7 | 90.7 | 90.7 | 90.7 | 91.7 | 91.7 | 91.7 | 91.4 | 91.4 | 91.4 | 91.4 | 92.8 | 90.9 | 89.9 |
|  | ${ }^{95} 1085$ | 103.5 | 94.5 103.5 | 95.5 103.5 | 103. 5 | 97.6 103.5 | 97.7 103.5 | 98.3 103.5 | 103.5 | 97.2 103.5 | 87.0 102.2 | 90.8 102.2 | 102.2 ${ }^{93.4}$ | 94.2 | 93.5 |
| Synthetic detergents. | 199.6 | 103.5 99.6 | ${ }_{99.6}$ | res 99 | 99.6 | 109.6 | 103.5 99.6 | ${ }^{103.6}$ | 103.5 99.8 | 103.5 99.8 | 102.2 99.8 | 102.2 99.8 | 102.2 99.8 | 102.6 | 101.4 |
| Pharmaceutical preparations | 96.8 | 96.9 | 96.8 | 96.8 | 96.6 | 96.6 | 96.1 | 96.4 | 96.3 | 96.3 | 96.3 | 96.4 | 98.5 | ${ }_{9}^{99.7}$ | 100.8 |
| Ethical preparations ${ }^{8}$ | 95.6 | 95.7 | 95.7 | 95.7 | 95. 7 | 95.7 | 95.0 | 95.4 | 95.4 | 95.4 | 95.4 | 95.5 | 88.4 | 96.9 | 99.3 |
| Anti-infectives ${ }^{\text {s }}$ | 88.3 | 88.5 | 88.5 | 88.5 | 88.5 | 88.5 | 86.6 | 87.6 | 87.6 | 87.7 | 87.7 | 87.9 | 98.7 | 93.1 | 99.3 99.3 |
| Anti-arthritics | 100.6 | 100.6 | 100.6 | 100.6 | 100.6 | 100.6 | 100.6 | 100.6 | 100.6 | 100.6 | 100.6 | 100.6 | 100.6 | 100.6 | 100.3 |
| Sedatives and h | 113.2 | 113.2 | 112.5 | 112.5 | 112.5 | 112.5 | 112.5 | 112.5 | 112.5 | 112.5 | 112. 5 | 112.5 | 112.5 | 112.5 | 102.6 |
| A taractics ${ }^{5}$ | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Anti-spasmodies and anti-cholinergics | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Oardiovasculars and anti-hyperten | 101.3 | 101.3 | 100.7 | 100.7 | 100.7 | 100.7 | ${ }^{98.7}$ | 101.6 | 100.9 | 100. 9 | 100.9 | 100.9 | 100.9 | 100.5 | 100.5 |
| Hormones | 100.0 | 100.8 | 103.8 99.6 | 103.8 | 103.8 | 103.8 99.6 | 103.8 <br> 99.6 | 103.8 99.6 | 103.8 <br> 99.6 | ${ }_{99.6}^{103.8}$ | ${ }_{99.6}^{103.8}$ | 104.2 99.6 | 104.2 99.6 | 104.0 | 101.9 |
| Diuretics ${ }^{\text {- }}$ | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 99.6 100.0 | 100.0 100.0 |
| Dermatological | 100.8 | 100.8 | 100.8 | 100.8 | 100.8 | 100.8 | 100.8 | 100.8 | 100.8 | 100.8 | 100.8 | 100.8 | 100.8 |  | 100.2 |
| Hermatinics ${ }^{8}$ | 108.8 | 108.8 | 108.8 | 108.8 | 108.8 | 108.8 | 108.5 | 108.5 | 108. 5 | 108.5 | 108.5 | 108.5 | 108. 5 | 108.5 | 100.1 |
| Analgesics ${ }^{3}$ | 101.8 | 101.8 | 101.8 | 101.8 | 101.8 | 101.8 | 101.8 | 101.8 | 101.8 | 101.8 | 101.8 | 101.8 | 101.8 | 101. 8 | 100.9 |
| Antl-obesity preparations ${ }^{\text {s }}$ | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Vough and cold preparation | 100.4 | 100.7 | 100.7 | 100.7 | 100.7 | 100.7 | 100.6 | 100.6 | 100.6 | 100.6 | 100.6 | 100.6 | 100. 6 | 100.0 | 99.4 |
| Proprietary preparatio | 88.1 101.5 | 88.1 | 88.1 101.6 | 88.1 101.6 | 88.1 101.0 | 88.1 100.9 | 88.1 100.7 | 88.1 100.7 | 88.1 100.5 | 88.1 100.5 | 88.1 100.5 | 88.1 100.5 | 88.1 100.7 | 88.1 | 95.0 |
| Vitamins ${ }^{\text {3 }}$ | 100.3 | 100.3 | 100.3 | 100.3 | 100.3 | 100.3 | 100.3 | 100.3 | 99.6 | 100.3 | 100.3 | 100.3 | 100.3 | 100.5 | 100.1 |
| Cough and cold preparatio | 100.1 | 100.1 | 100.1 | 100. 1 | 100.1 | 99.5 | 100.1 | 100.1 | 100.1 | 100.1 | 100.1 | 100.0 | 100.0 | 100.0 | 100.0 100.0 |
| Laxatives and elimination | 103. 8 | 103.8 | 103.8 | 103.8 | 101.7 | 101.7 | 101.6 | 101.6 | 101.6 | 101.6 | 101.5 | 101.5 | 102.0 | 101.1 | 100.0 99.8 |
| Internal analgesics ${ }^{3}$ - | 101. 9 | 101.9 | 101.9 | 101. 8 | 101.3 | 101.3 | 101.3 | 101.3 | 101.3 | 101.1 | 101.1 | 101.1 | 101.1 | 101.2 | 100.4 |
| Tonics and alteratives | 100. 0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| External analgesi | 102.3 | 102.3 | 102.3 | 102.3 | 102.3 | 102.3 | 101.3 | 101.3 | 100.8 | 100.7 | 100.7 | 100.7 | 101.2 | 100.8 | 100.0 |
| Antacids ${ }^{\text {a }}$ | 102.9 98 | 102.1 | 102.9 | 102.9 | 102.9 | 101.7 100.1 | 100.9 98.9 | 100.9 98.9 | 100.1 98.9 | 100.1 98.9 | 100.1 98.9 | 100.0 | 100.0 | 100.2 | 100.0 |
| Lumber and wood products | 97.6 | 96.7 | 96.1 | 95.4 | 94.9 | 104.6 94 | 94.6 | 98.2 | 98.6 | 96.1 | 98.4 | 98.9 96.8 | 100.6 96.6 | 99.6 | 100.0 |
|  | 98.2 | 97.5 | 96.5 | 95.6 | 95.3 | 95.0 | 95.0 | 95.6 | 96.1 | 96.8 | 97.3 | 97.6 | 97.1 | 95.9 95 | 94.7 93.5 |
| Pulp, paper, and allied products (excluding building paper and board) | 99.4 | 99.2 | 99.2 | 99.2 | 99.3 | 99.1 | 99.1 | 99.2 | 99.4 | 99.6 | 99.9 | 100.2 | 100.7 | 95.9 100.1 | 93.6 98.7 |
| Special metals and metal products | 100.2 | 4100.2 | 100.0 | 100.1 | 100.2 | 100.2 | 100.1 | 100.1 | 100.1 | 100.4 | 100.5 | 100.5 | 100.5 | 100.5 | 101.0 |
| Steel mill products | 102.1 | 102.0 | 101.2 | 101.1 | 101.3 | 101.3 | 101.3 | 101.3 | 101.4 | 101.3 | 101.3 | 101.4 | 101.5 | 101.4 | 101.7 |
| Machinery and equipment -----.- | 103.1 | 1123.0 | 102.7 | 102. 6 | 102.9 | 103.0 | 103.0 | 102.8 | 4103.0 | 102.8 | 102.8 | 102.9 | 103.0 | 102.9 | 102.9 |
| Metalworking machinery......... | 109.1 | 4108.9 | 108.8 | 108.4 | 108.5 | 108.6 | 108.7 | 108.7 | 1108.8 | 110.5 | 1109.4 | 110.5 | 110.5 | 110.5 | 108.3 |
| All tractors | 111.3 | 111.1 | 110.7 | 110.6 | 100.5 | 110.4 | 110.2 | 110.0 | 109.5 | 109.2 | 109.1 | 109.3 | 109.4 | 109.8 | 106.6 |
| Industrial valves | 107.4 | 107.4 | 107.4 | 107.4 | 107.4 | 107.8 | 108.0 | 108.0 | 108.0 | 107.7 | 107.3 | 104.6 | 106.6 | 107.4 | 108.0 |
| Industrial fittings. | 91.7 | 91.1 | 90.9 | 90.9 | 94.6 | 94.6 | 94.6 | 94.6 | 94.6 | 193.9 | 197.3 | 104.6 93.9 | 106.6 | 107.4 | 108.7 |
| Antifriction bearings and comp | 90.8 | 90.8 | 90.8 | 90.8 | 90.8 | 90.8 | 90.8 | 90.8 | 90.8 | 90.8 | 90.8 | 90.8 | 90.8 | 90.8 | ${ }^{82.5}$ |
| Abrasive grinding wheel | 96.3 | 96.4 | 96.4 | 97.7 | 97.7 | 97.7 | 97.7 | 97.7 | 97.7 | 97.7 | 97.7 | 97.7 | 97.7 | 98.5 | 98.2 |
| Construction materials. | 98.3 | 98.1 | 97.8 | 97.7 | 97.6 | 97.7 | 97.7 | 97.9 | 98.0 | 98.1 | 98.3 | 98.4 | 98.5 | 98.3 | 98.6 |

${ }^{1}$ See footnote 1, table D-3.
${ }^{2}$ See footnote 2 , table D-3.
${ }^{8}$ Preliminary.
${ }^{-}$Revised.

New series. January $1961=100$

- Metals and metal products, agricultural machinery and equipment, and motor vehicles.

Table D-5. Indexes of wholesale prices, ${ }^{1}$ by stage of processing and durability of product

| Commodity group | 1963 |  |  |  |  |  | 1962 |  |  |  |  |  |  | Annual average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | June | May | Apr. | Mar. | Feb. | Jan. | Dec. | Nov. | Oct. | Sept. | Aug. | July | June | $1962{ }^{3}$ | 1961 |
|  | 100.3 | 100.0 | 99.7 | 99.9 | 100.2 | 100.5 | 100.4 | 100.7 | 100.6 | 101.2 | 100.5 | 100.4 | 100.0 | 100.6 | 100.3 |
| Stage of processing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Crude materials for further processing | $\begin{aligned} & 94.8 \\ & 93.7 \\ & 96.4 \end{aligned}$ | 94.2 92.8 | 95.0 | 94.5 | 95.6 | 96.8 | 96.8 | 97.6 | 97.4 | 99.2 | 97.2 | 96.5 | 95.2 | 97.1 | $\begin{aligned} & 96.1 \\ & 94.9 \end{aligned}$ |
|  |  |  | 96.5 | 96.7 | 94. 96 | 97.195.8 | 95.8 | 98.295.9 | 96.0 | 10.696.3 | 97.486.6 | 97.0 | 97.3 | 96.8 |  |
| Crude nonfood materials except fuel...---.-.-.-.-- | $96.4$ | 96.6 |  |  |  |  |  |  |  |  |  |  |  | 97.4 | 97.9 |
| manufacturing--.-....-.-..............-.-- | 95.8 | 96.0 | 95.9 | 96.2 | 95.8 | 95.2 | 95.1 | 95.3 | 95.3 | 95.7 | 96.0 | 96.5 | 96.8 | 96.8 | 97.4 |
| Crude nonfood materials, except fuel, for construction | 103.0 | 103.0 | 103.0 | 103.1 | 103.0 | 102.7 | 103.2 | 103.3 | 103.3 | 103.3 | 103.3 | 103.3 | 103.2 | 103.2 | 102.8 |
| Crude fuel....-............... | 100.8 | ${ }^{4} 100.5$ | 102.3 | 105.4 | 105. 6 | 103.3 | 104.0 | 103.4 | 103.2 | 102.0 | 100.6 | 101.0 | 98.7 | 101.8 | 102.3 |
| Crude fuel for manufacturing | 100.8 | 100. 5 | 102.3 | 105.3 | 105. 5 | 103.2 | 103.9 | 103.4 | 103.2 | 102.0 | 100.6 | 101.0 | 98.8 | 101.8 | 102.2 |
| Crude fuel for nonmanufactu | 101.0 | ${ }^{4} 100.7$ | 102.5 | 105.8 | 106.0 | 103. 5 | 104.3 | 103. 7 | 103.5 | 102.2 | 100.8 | 101.2 | 98.8 | 102.0 | 102.4 |
| Intermediate materials, supplies, and components.... Intermediate materials and components for manufacturing | 100.6 | 100.5 | 99.9 | 100.0 | 100.1 | 100.2 | 100.1 | 100.1 | 100.1 | 100.2 | 100.1 | 100.3 | 100.2 | 100.2 | 100.3 |
|  | 99.7 | 99.74110.2 | 98.8103.5 | $\begin{array}{r} 98.6 \\ 101.2 \end{array}$ | $\begin{array}{r} 98.7 \\ 101.2 \end{array}$ | 98. 8 | 98.7 | 98.8 | 98.9 | 99.0 | 99.1 | 99.2 | 99.3 | $\begin{array}{r} 99.2 \\ 100.5 \end{array}$ | $\begin{array}{r} 99.8 \\ 102.6 \end{array}$ |
| Intermediate materials for food manufacturing. | 109.5 |  |  |  |  | 101.0 |  | 100.2 | 100.8 | 100.4 | 99.8 | 99.4 | 99.5 |  |  |
| Intermediate materials for nondurable manufacturing | 97.0 | 97.1 | 97.1 | 97.1 | 97.2 | 97.3 | 97.3 | 97.4 | 97.6 | 97.7 | 97.8 | 98.1 | 98.3 | 98.0 | 98.6 |
| Intermediate materials for durable manufacturing | 100.4 | 100.1 | 99.6 | 99.7 | 99.8 | 100.0 | 99.9 | 100.1 | 100.1 | 100.4 | 100.5 | 100.6 | 100.6 | 100.4 | 100.5 |
| Components for manufacturing | 98.7 | 98.6 | 98.2 | 98. 2 | 98.5 | 98. 6 | 98.8 | 98.6 | 98.6 | 98.7 | 98.7 | 98.7 | 98. 9 | 98.8 | 99.6 |
| Materials and components for constru | 99.4 | 99.2 | 99.0 | 98.9 | 98.9 | 98.8 | 98.9 | 99.0 | 99.1 | 102.1 | 100.8 | 101.4 | 99.5 | 99.3 | 99.7 |
| Processed fuels and lubricants...-.-.-............- | 101.8 | 101.4 | 100.8 | 100.8 | 100.3 | 100.6 | 1.01.4 | 101.7 | 102.0 |  |  |  | 101.2 | 101.2 | 101.6 |
| Processed fuels and turing | 102.6 | ${ }^{4} 102.4$ | 102.0 | 102.2 | 101.9 | 101.9 | 102.6 | 102.7 | 102.9 | 102.9 | 100.9 | 102.4 | 102.1 | 102.3 | 102.5 |
| Processed fuels and lubricants for nonmanufacturing |  |  |  |  |  |  |  | 100.0 | 100.4 | 100.6 | 99.0 | 99.6 | 99. 7 | 99.4 | $\begin{aligned} & 100.1 \\ & 100.9 \end{aligned}$ |
|  | $\begin{aligned} & 100.3 \\ & 101.3 \end{aligned}$ | $\begin{array}{r} 99.7 \\ 4101.2 \end{array}$ | $\begin{array}{r} 98.6 \\ 100.9 \end{array}$ | $\begin{array}{r} 98.4 \\ 101.1 \end{array}$ | $\begin{array}{r} 97.6 \\ 101.4 \end{array}$ | $\begin{array}{r} 98.4 \\ 101.6 \end{array}$ | $\begin{aligned} & 99.4 \\ & 101.5 \end{aligned}$ | 10.6 | $\begin{aligned} & 101.4 \\ & 105.0 \end{aligned}$ | 101.4 | 101.6104.3 | 102.1 | 102.6 | 102.2104.5 |  |
| Supplies. | $\begin{aligned} & 104.9 \\ & 105.1 \end{aligned}$ | $\begin{array}{r} 104.7 \\ 1+105.2 \end{array}$ | $\begin{aligned} & 105.1 \\ & 105.9 \end{aligned}$ | $\begin{aligned} & 106.4 \\ & 105.7 \end{aligned}$ | 106. 7 | 106.6 | 105.9 |  |  |  |  | 104.7 | 103.8 |  | $\begin{aligned} & 100.9 \\ & 102.3 \\ & 105.2 \end{aligned}$ |
| Supplies for manufacturing |  |  |  |  | 105.8 | 105.7 | 105.9 | 105. 9 | 106.1 | 106. 0 | 105.8 | 105. 9 | 105.9 | 105.7 |  |
| Supplies for nonmanufacturin |  | 4104.0 | 104. 2 | 106.1 | 111.5 | 106.4 | 105.3 | 104.9 | 104. 0 | 104.3 | 103.2 | 103. 7 | 102.4 | 103.5 | 100.6 |
| Manufactured animal feed | $\begin{aligned} & 105.6 \\ & 101.6 \end{aligned}$ | $\begin{aligned} & 104.8 \\ & 101.6 \end{aligned}$ | $\begin{aligned} & 105.4 \\ & 101.6 \end{aligned}$ | $\begin{aligned} & 110.5 \\ & 101.5 \end{aligned}$ | $\begin{aligned} & 111.4 \\ & 101.5 \end{aligned}$ | 111.5 | 109.1 | 108.3 | 106. 2 | 107.0 | 103.7 | 104. 5 | 100.8 | 104.1 | 97.5 |
| Other supplies |  |  |  |  |  | 101.3 | 101.1 | 101. 0 | 100.9 | 100.8 | 101.1 | 101.3 | 101.6 | 101.3 | 100.5 |
| Finished goods (goods to users, including raw foods and fuels).. <br> Consumer finished goods | $101.3 \cdot 4101.1$ |  |  | ${ }^{4} 101.1$ |  |  |  | 102.0 | 101.9 | 102.6 | 101.7 | 101.5 | 101.1 | 101.7 | 101.4 |
|  |  |  | 101.5 |  | 101.8 | 101.0 |  |  |  |  |  |  |  |  |  |
| Consumer foods. | 199.9 | ${ }_{4} 99.4$ |  | $\begin{aligned} & 99.9 \\ & 98.2 \end{aligned}$ | 99.0 | 100.4 | 101.4 | 100.7 | 102.1 | 101.9 | 103.9 | 101.3 | 100.3 | 99.3 | 101.3 | 100.9 |
| Consumer crude food | 92.4 | 93.2 | 94.2 | 99.5 | 98.9 | 103.4 | 95.9 | 102.8 | 100.9 | 101.5 | 96.3 | 93.4 | 93.7 | 98.6 | 97.6 |
| Consumer processed foods | 101.1 | 4100.3 | 98.9 | 98.9 | 100.7 | 101.1 | 101.4 | 101. 9 | 102.0 | 104.3 | 102.1 | 101. 4 | 100.2 | 101.7 | 100.8 |
| Consumer other nondurable go | 102.1 | ${ }^{4} 101.8$ | 101.6 | 101.8 | 101.7 | 101.7 | 101.8 | 101. 7 | 101.8 | 101.7 | 101.4 | 101.5 | 101.4 | 101.6 | 101.5 |
| Oonsumer durable good | 99.1 | 499.4 | 99.5 | 99.7 | 99.8 | 99.8 | 99.9 | 100.0 | 99.9 | 100.1 | 100.1 | 100.2 | 100.0 | 100.0 | 100.5 |
| Producer finished goods --.-.........--- | 102. 9 | ${ }_{4} 102.9$ | 102.9 |  | 103.0 | 103.0 | 103.0 | 102.9 | 102.8 | 102.9 | 103.0 | 103. 0 | 102.8 | 102.9 | 102.5 |
| Producer finished goods for manufacturing ....- | 104. 7 | 4104.7 | 104.7 | 104.5 | 104. 6 | 104.7 | 104.7 | 104. 6 | 104.5 | 104.5 | 104.5 | 104. 6 | 104.4 | 104.4 | 103.8 |
| Producer finished goods for nonmanufacturing- | 101.1 | 4101.1 | 101.2 | 101.4 | 101.4 | 101.5 | 101.4 | 101.3 | 101.3 | 101.3 | 101.5 | 101.5 | 101.3 | 101.4 | 101.2 |
| Durability of product |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total durable goods | 100.8 | 4100.8 | 100.6 | 100.6 | 100.7 | 100.7 | 100.7 | 100.7 | 100.7 | 100.9 | 101.0 | 101. 0 | 101.0 | 101.0 | 101.8 |
| Total nondurable good | 99.7 | 499.4 | 99.0 | 99.2 | 99.7 | 100.2 | 100.0 | 100.5 | 100.4 | 101.2 | 100.0 | 99.8 | 99.3 | 100.1 | 99.6 |
| Total manufactures--.- | 100.7 | 100.4 | 100.0 | 100.2 | 100.4 | 100.6 | 100.6 | 100.7 | 100.7 | 101.1 | 100.7 | 100.8 | 100.6 | 100.8 | 100.7 |
| Durable manufactures | 101.2 | 4101.1 | 100.9 | 100.9 | 101.0 | 101.1 | 101.1 | 101. 1 | 101.1 | 101.3 | 101.3 | 101.4 | 101.4 | 101.3 | 101.4 |
| Nondurable manufactures | 100.1 | 99.5 | 99.0 | 99.3 | 99.7 | 100.0 | 100.0 | 100.2 | 100.2 | 100.9 | 100.0 | 100.1 | 99.8 | 100.1 | 100.0 |
| Total raw or slightly processed goods. | 98.1 | 98.4 | 98.4 | 98. 3 | 99.1 | 100.2 | 99.4 | 100.5 | 100.2 | 101.1 | 99.2 | 98.4 | ${ }_{87} 97$ | 99.5 | 98.3 |
| Durable raw or slightly processed goods.--d Nondurable raw or slightly processed good | 89.1 98.6 | 89.9 98.9 | 89.4 98.9 | 88.7 98.9 | 88.6 99.7 | 87.9 100.9 | $\begin{array}{r}86.4 \\ 100.1 \\ \hline\end{array}$ | 85.4 101.4 | 86.3 <br> 101.0 | 87.8 101.9 | 88.3 99.9 | 86.8 99.0 | 86.7 97.9 | 89.2 100.1 | 95.2 98.5 |

${ }^{1}$ See footnote 1, table D-3.
${ }^{2}$ See footnote 2, table D-3.
${ }^{3}$ Preliminary.
4 Revised.

Note: For description of the series by stage of processing, see "New BLS Economic Sector Inderes of Wholesale Prices," Monthly Labor Review, December 1955, pp. 1448-1453; and by durability of product and data be ginning with 1947, see Wholesale Prices and Price Indexes, 1957, BLS Bulletin 1235 (1958)

## E.-Work Stoppages

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

| Month and year | Number of stoppages |  | Workers involved in stoppages |  | Man-days idle during month or year |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Beginning in month or year | In effect during month | Beginning in month or year | In effect during month | Number | Percent of estimated working time |
| 1935-39 (average). | 2,862 |  | 1, 130, 000 |  | $\begin{aligned} & 16,900,000 \\ & 39,700.000 \end{aligned}$ | $0.27$ |
| 1947-49 (average). | 3, 573 4.750 4.750 |  | 2, 3 480 480 |  | 38, 000.000 | .471.43 |
|  | 4. 985 |  | 4. 600.000 |  | $\begin{array}{r} 116.000,000 \\ 34.600 .000 \end{array}$ |  |
| 1947. | 3. 693 | ------------- | 2, 170,000$1,960,000$ |  |  | 1.43 .41 |
| 1948 |  |  |  |  | 34, 100,000 | .37 .59 |
| 1949 | 3. 6066 | ------------- | 2, 410.0002.220.000 |  | 50, 500, 000 | . 44 |
| 1951. | 4, 843 4.737 |  |  | 3,540,000 |  | 22, 900. 000 | . 23 |
| 1952 | 5. 1117 |  |  |  |  | $\begin{aligned} & 59,100.000 \\ & 28,300,000 \end{aligned}$ |  |
| 1954 | 5. ${ }^{\text {3. }} 469$ |  | 1. 530.0002. 650,000 |  | 22, 600.000 | . 21 |  |
| 1955. | 4. 320 |  |  |  | $\begin{aligned} & 28.200,000 \\ & 33,100,000 \end{aligned}$ | . 26 |  |
| 1956 | 3, 825 |  | 2. 650,000$1.900,000$ |  |  | .29 .14 |  |
| 1957. | 3, 673 3,694 3, |  | 2. 0600.000$1,880.000$ |  | $16.500,100$ 23.900 .000 | . 14 |  |
| 1959 | 3.694 |  |  |  | 69.000 000 | . 61 |  |
| 1960 | 3. 333 |  | $1,320.000$ |  | $\begin{aligned} & 19,100,000 \\ & 16,300,000 \end{aligned}$ | $\begin{array}{r}.17 \\ .14 \\ \hline 16\end{array}$ |  |
| 1962 | 3,614 |  | 1, $1,230,000$ |  | 18,600,000 |  |  |
| 1962: June | 436355 | 695 | 151, 000 | 311.000 | 3, 020, 060 | . 31 |  |
| July |  | 621 | 98,100129.000 | 195.000198,000 | 2, $1.920,000$ | . 21 |  |
| August | 352 | ${ }_{6}^{617}$ |  |  |  |  |  |
| Oeptomber.. | 297 | 506 | 91,700 | 181, 000 | 1, 5900.000 | . 18 |  |
| November | 133 | 442 | 81, 4 , 200 | 146. 1700 | $\begin{array}{r} 981.000 \\ 1,330,000 \end{array}$ | . 14 |  |
| December |  | 331 |  |  |  |  |  |
|  | $\begin{aligned} & 230 \\ & 200 \\ & 225 \\ & 350 \\ & 425 \\ & 450 \end{aligned}$ | $\begin{aligned} & 36 n \\ & 320 \\ & 350 \\ & 475 \\ & 600 \\ & 675 \end{aligned}$ | 75. 000 <br> 60, 000 <br> 4.5, 0 MO <br> 10n. nno <br> $12.5,000$ 135.000 | $\begin{aligned} & 185,0 n 0 \\ & 120,000 \\ & 90,000 \\ & 130,000 \\ & 165,000 \\ & 190,000 \end{aligned}$ | $\begin{aligned} & 2,340,000 \\ & 1,100,000 \\ & 1,110,000 \\ & 1.050,000 \\ & 1,750,0 n 0 \\ & 1,740,000 \end{aligned}$ | .23.12.12.10.17.18 |  |
| Februnry |  |  |  |  |  |  |  |
| March ${ }^{\text {a }}$ - |  |  |  |  |  |  |  |
| April ${ }^{2}$ |  |  |  |  |  |  |  |
| June ${ }^{2}$ |  |  |  |  |  |  |  |

[^63]or secondary pffect on other establishments or industries whose employees are made dle as a result of material or service shortages.
${ }^{2}$ Preliminary.

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[^0]:    *Director of Research, Industrial Union Department, AFL-CIO, and also Director, continuing Seminar on Comparative Labor Movements, National Institute of Labor Education.
    ${ }^{26}$ It is difficult to separate manuals from nonmanuals in classified civil service employment-the so-called Beamte.
    ${ }^{26}$ In pre-Hitler Germany, there was a very strong, independent whitecollar federation and, to some extent, the DAG carries on this tradition.
    The DA G's application for membership in the International Confederation of Free Trade Unions, with which the DGB is affiliated, has been held up. It is, however, a member of the International Federation of Clerical and Technical Employees, the trade secretariat for free white-collar unions in the private sector.

[^1]:    ${ }^{27}$ Until recently there was jurisdictional friction between this union and the TCO commercial workers union, but this now seems to have been worked out. TCO's relations with the Swedish Confederation of Professional Associations (SACO) have been more strained than those with LO. (Both TCO and LO are affiliated to the International Confederation of Free Trade Unions.) TCO tends to believe there is no real necessity for a third federation of professional employees. Some of these professional employees are to be found in the TCO ranks, but the large majority are in SACO.

[^2]:    ${ }^{28}$ W. A. Widden, "The Place of Nonmanual Workers in the Trade Union Structure," International Nonmanual Workers' Conference, op. cit., p. 39.
    ${ }_{29}$ There has been some recent discussion in Britain about the desirability of consolidating unionized clerical-office and related employees into one national union. See Trade Union Membership (London, Political and Economic Planning, 1962) and The Observer, July 1, 1962, for usion officers' reaction to this proposal.
    ${ }_{30} \mathrm{~A}$ recent move led by officers of NALGO to affiliate with the TUC was defeated by a close vote in the referendum.

[^3]:    ${ }^{31}$ The sufficiency of even these efforts have been questioned by TUC whitecollar union leaders. Dame Anne Godwin, Chief Officer of the Clerical and Administrative Workers' Union, has argued that the TUC must do more to make itself attractive to nonmanuals. See "Workers in White Overalls," Socialist Commentary, 1959.
    ${ }^{32}$ According to Richard Rose, the British Labor Party polled approximately a two-thirds vote among manual workers in the 1959 election, but only about one-fifth among the nonmanual occupations. See Mark Abrams and Richard Rose, Must Labour Lose (London, Penguin Books, Ltd., 1960), p. 76.

[^4]:    ${ }^{33}$ In contrast to the pre-1930's, when each major political party and/or religious group had its "own" union federation. the Austrians created a unified trade union center after World War II-a center which has no sort of direct ties with any political party.
    ${ }^{34}$ M. Van de Vall, "Trade Unions in the Welfare State as Seen by Their Members," Trade Union Information (Paris, Organization for Economic Cooperation and Development), No. 38 (not dated, probably 1962).
    ${ }^{85}$ New York Times, September 5, 1962.
    ${ }^{36}$ Space permits treatment of only a few key factors in white-collar collective bargaining.

[^5]:    ${ }^{37}$ Some Facts About SIF, The Swedish Union of Clerical and Technical Employees in Industry (Stockholm, undated, around 1951), p. 10.
    ${ }^{38}$ Beyond the wage surveys, the SIF has helped to develop the job classification system for clerical and technical employees which has now become standard throughout most of Swedish industry; see The Classification System of the TCO, Summary Description (Stockholm, TCO, 1961).
    ${ }^{39}$ Draughtsmen and Allied Technicians Association, Its Structure and Work (London, 1962), pp. 16-17.

[^6]:    ${ }^{40}$ See, for example, Survey of Salaries, March 1963, prepared and published by the Lockheed Section of the Engineers and Scientists Guild, Burbank, Calif.
    ${ }^{41}$ The acceptance of more individualized wage treatment even among manual workers in some European countries goes beyond U.S. practice. Skilled metalworkers in Denmark, for example, have minimums set by national negotiations but once these are completed, individual workers proceed to negotiations on their own behalf.
    ${ }^{42}$ Even among manual workers, strikes have become less common in Western Europe than in the United States.
    ${ }^{43}$ TCO, Central Organization of Salaried Employees in Sweden (Stockholm 953 ed.), p. 31.

[^7]:    *Of the Bureau of Labor Statistics and the Office of Manpower, Automation, and Training. respectively.
    ${ }^{1}$ "Job Mobility of Workers in 1955," Current Population Reports, Serles P-50, No. 70 (U.S. Bureau of the Census).

[^8]:    ${ }^{2}$ An exception to this definition was that persons who worked for several different private families in jobs such as domestic service, babysitting, odd jobs and the like, were considered as having one job.

[^9]:    ${ }^{3}$ See Robert L. Stein, "Unemployment and Job Mobility," Monthly Labor Review, April 1960, pp. 350-358.

[^10]:    - See Hugh Folk, "Effects of Private Pension Plans on Labor Mobility," Monthly Labor Review, March 1963, pp. 285-288.

[^11]:    ${ }^{1}$ Includes illness, household or school responsibilities, fired, retired, and reason not reported.

[^12]:    *Of the Division of Employment and Labor Force Analysis, Bureau of Labor Statistics.
    ${ }^{1}$ Data presented in this report relate to the civilian noninstitutional population in the calendar week ending Oct. 13, 1962. All members of the Armed Forces and inmates of institutions are excluded. The survey of students' employment in October 1961 was analyzed in the Monthly Labor Review, June 1962, pp. 635-642 and reprinted as Special Labor Force Report No. 22. An article based on the 1960 survey appeared in the July 1961 issue of the Review (Special Labor Force Report No. 16) and another, based on the 1959 survey, was published in the July 1960 issue (Special Labor Force Report No. 6).
    ${ }^{2}$ A detailed analysis of unemployment among school dropouts may be found in "Employment of High School Graduates and Droupouts, October 1962," Monthly Labor Review, July 1963, pp. 727-779, and Special Labor Force Report No. 32; see also "Educational Attainment of Workers, March 1962," Monthly Labor Review, May 1963, pp. 504-515.

[^13]:    ${ }^{1}$ Data for 1962 are not strictly comparable with those for earlier years

[^14]:    ${ }^{1}$ Percent of civilian labor force who were unemployed.

[^15]:    ${ }^{1}$ Includes forestry and fisheries, mining, transportation and public utilities, and public administration
    ${ }_{2}$ Includes forestry and fisheries, mining, construction, transportation and public utilities, and public administration.

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

[^16]:    ${ }^{1}$ Percent not shown where base is less than 100,000 .

[^17]:    -Statement to the President from the Advisory Committee on Labor-Management Policy, April 29, 1963.

[^18]:    ${ }^{1}$ Members of the delegation were: Government: Delegates-George L-P Weaver, Assistant Secretary of Labor for International Affairs and chairman of the delegation, and George P. Delaney, Special Assistant to the Secretary of State; Adviser and Substitute Delegate-John F. Skillman, Special Assistant to the Secretary of Commerce; Advisers-Representatives Adam Clayton Powell, James Roosevelt, and Wilham Hanes Ayres; Ambassador Roger W. Tubby, Representative to the European Office of the United Nations; Richard Conn, Harry M. Douty, Dale Good, John E. Lawyer, Irvin S. Lippe, John P. O'Neill, Donald L. Ream, Harold D. Snell, William M. Steen, Morris B. Wallach, and John L. Hagan. Employers: DelegateRichard Wagner, Chairman of the Board, Chamber of Commerce of the United States, and Chairman of the Executive Committee, Champlin Oil and Refining Co.; Advisers-John E. Branch, Malcolm L. Denise, Richard P. Doherty, Edwin R. Niehaus, George J. Pantos, and William G. Van Meter. Workers: Delegate-Rudolph Faupl, International Representative, International Association of Machinists; Advisers-Cornelius J. Haggerty, Joseph D. Keenan, George Meany, William J. Pachler, Jacob S. Potofsky, Bert Seidman, and David Sullivan.

[^19]:    ${ }^{2}$ The African states are pressing other UN bodies for the exclusion of South Africa and Portugal. Early in July, the African delegates to the International Conference on Education, sponsored jointly by the United Nations Educational, Scientific, and Cultural Organization and the International Bureau of Education, pushed through a resolution expelling Portugal (because of its colonial policy) and then walked out of the Conference when the Portuguese delegates refused to leave. The resolution was supported by the Soviet bloc, the Arab countries, India, and Israel; it was opposed by major Western countries, including the United States, on the ground that the Conference had no right to bar an invited country.
    The African countries also asked the Economic and Social Council to bar both South Africa and Portugal from its subsidiary Economic Commission for Africa. On July 10, U.S. Ambassador Adlai Stevenson, in a speech before the ECOSOC meeting in Geneva, warned that if the United Nations tradition of free debate and democratic decision "should be altered now, we threaten not only the political future of the UN but its economic and social aims."

    The South African Government announced in mid-July that it would not participate in the meeting of the UN Security Council at which its racial policies are currently being discussed. It also declined to take part in an ILO Iron and Steel Trades Committee meeting and the UN Economic Commission for Africa.
    ${ }^{3}$ Algeria, Burundi, Jamaica, Rwanda, Trinidad and Tobago, and Uganda.
    ${ }^{4}$ Canada, China, France, Federal Republic of Germany, India, Italy, Japan, U.S.S.R., United Kingdom, and United States.
    Industrial importance is determined on the following criteria and weights: National income, 6; contributions to ILO, 3 ; economically active population, 1 .
    ${ }^{5}$ Contributions of the 31 African countries to the ILO are just under 4 percent of its income.

[^20]:    I suggest that the philosophy behind this whole proposal is that the Committee of Experts, as soon as a country is labeled a Socialist country or a Communist country, should not be allowed to criticize anything because nothing can be wrong in such a country.

[^21]:    ${ }^{1}$ Editor's Note.-Asking South Africa to withdraw from the ILO.

[^22]:    *The Bureau of Labor Statistics was asked by the Select Subcommittee on Labor of the House Education and Labor Committee to supply background information on hours of work in the American economy. The request specified information on trends of working hours, current pattern of hours worked, extent of paid vacations and holidays, and other materials which might be useful to the subcommittee in its exploration of current developments regarding working time.
    The concept of hours of work as presented in these materials is a broad one. It encompasses not only the daily and weekly hours spent on the job, but also total working time throughout the year. Thus, it embraces developments affecting paid leave in the form of vacations and holidays.

    These materials presented a summary of recent trends and present-day practices affecting various aspects of working time. No attempt was made to assess the benefits or costs of any specific change in working time or to consider relative benefits or costs of any proposed change in working time.

    Those responsible for the preparation of the materials included James E. Blackwood, Division of Employment and Labor Force Analysis; Lily Mary David and Albert A. Belman, Division of Wage Economics; and Kurt Braun, Division of Foreign Labor Conditions.

[^23]:    ${ }^{1}$ This discussion concerns those working more than 40 hours, since data on personal characteristics are not available separately for those working 49 hours or more.

[^24]:    ${ }^{1}$ The scheduled workweek is the number of hours which a majority of the full-time workers on the first or day shift were expected to work at the time of the survey, regardless of whether some hours were paid for at overtime rates.
    ${ }_{2}^{2}$ The regions are: Northeast-Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont; South-Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virgina, and West Virginia; North Central-lllinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North' Dakota, Ohio, South Dakota, and Wisconsin; and West-Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and W yoming.

[^25]:    ${ }^{3}$ Information on establishment practices is obtained annually in 6 of the largest areas and biennially in a rotating cycle in the remaining areas. Data largest areas and biennialy in a rotating cycle in the remaining areas. Data for a majority of the workers rela
    der, to late 1960 and early 1961 .
    der, to late 1960 and early 1961. .
    t
    ${ }_{3}$ Finance, insurance, and real estate. Data are not shown separately for F Finance, insurance, and real estate. Data are not shown separately for
    plant workers in this industry group. Plant workers in real estate firms, plant workers in this industry group. Plat
    however, are included in all-industry data.
    6 Includes weekly schedules other than those presented separately.
    ${ }_{7}$ Less than 0.5 percent.
    Note: Because of rounding, sums of individual items may not equal totals.

[^26]:    ${ }^{1}$ See footnote 1, table 6.

[^27]:    1 See footnote 1 , table 6.

[^28]:    The data for Austria, Canada, Germany, and Switzerland represent hours. actually worked; those for the remaining countries show hours paid for.
    ${ }_{2}$ A verage monthly hours for period of January-A pril 1962.
    ${ }^{2}$ Male.
    4 Female.
    Source: International Labor Review, "Statistical Supplement," March 1963; Quarterly Summary of Australian Statistics, December 1962; Rassegna. di Statistiche del Lavoro, January-February 1963.

[^29]:    ${ }^{1}$ The study was conducted for the Bureau of Labor Statistics by Dr. Arnold Tannenbaum and Gary Grenholm of the Survey Research Center, Institute of Social Research of the University of Michigan, and will be presented in Industrial Retraining Programs for Technological Change (BLS Bulletin 1368, 1963).
    ${ }^{2}$ The division for the younger and older age categories varied from age 36 to age 52 , depending on the course and its requirements.

[^30]:    ${ }^{3}$ See also Comparative Job Performance by Age: Large Plants in Men's Footwear and Household Furniture Industries (BLS Bulletin 1223, 1957), and Comparative Job Performance by Age: Office Workers (BLS Bulletin 1273, 1960).

[^31]:    ${ }^{1}$ In courses 1,2 , and 3 , older trainees include those age 41 and over; in course 4, those 36 and over; and in courses 5 and 6 , those 50 and over.
    ${ }_{2}$ A pass or fail grade in attaining accuracy was given for this course. The percent items across the columns indicate the proportion of trainees who passed (above average grade column) or failed (below average grade column).

[^32]:    1"Above average performance" signifies that speed in interpreting cards was higher than average.
    "Above average performance" signifies that accuracy was better than average, i.e., fewer errors were made.
    "Above average performance" means that the difference between speeds on new and old method was smaller than average. "Below average performance" signifies that the difference was greater than average, i.e., more time needed for new method.

[^33]:    5 The effect of education was eliminated in 4 of the 6 courses, by computing the performance scores for each individual as a deviation from the average performance score of all individuals having the same number of years of formal schooling. These deviations represent the performance of each trainee relative to that of others having the same education.

[^34]:    ${ }^{1}$ The survey was conducted in June of 1961 and 1962 on a sample basis in nine selected Standard Metropolitan Statistical Areas of the South, which had populations of 100,000 to 150,000 (according to the 1960 census). (See table, footnote 3 , for definitions of the areas.) The survey included all nonsupervisory employees of establisbments with four workers or more in major industry divisions except agriculture and government. Other exclusions were petroleum and natural gas production, railroad transportation, and nonprofit religious, charitable, educational, and humane organizations.

    More comprehensive information for the June 1962 payroll period as well as complete tabulations for June 1961 will be issued in a BLS report. The results of the Bureau's June 1961 study were presented in the January 1963 issue of the Monthly Labor Review, pp. 55-57.
    ${ }^{2}$ Fair Labor Standards Amendments of 1961 (Public Law 87-30).
    ${ }^{3}$ Insufficient data were obtained for manufacturing in Huntsville, Ala., to warrant separate presentation.

[^35]:    "See "Changes in Employee Earnings in Retail Trade, June 1961-June 1962," Monthly Labor Review, July 1963, pp. 802-807.

[^36]:    1 Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.
    ${ }_{2}$ Industry groups excluded from the survey were: agriculture, government, petroleum and natural gas production, railroad transportation, and nonprofit religious, charitable, educational, and humane organizations.
    ${ }^{8}$ Metropolitan areas, as used in this study, refer to those city and county areas defined by the Bureau of the Budget as Standard Metropolitan Statistical Areas. Included are counties containing at least 1 central city with a population of 50,000 or more as well as those adjacent counties that are found to be metropolitan in character and economically and socially integrated with the county containing the central city.

[^37]:    ${ }^{5}$ Insufficient data were obtained for manufacturing in Huntsville to warrant calculation of percentage differences.

    - Retail coverage under the act was generally limited to enterprises with $\$ 1$ million or more annual gross. Retail establishments with less than $\$ 250,000$ annual sales which were part of such enterprises would generally be exempt.

[^38]:    ${ }^{1}$ The study covered establishments employing 20 workers or more and primarily engaged in tanning, currying, and finishing hides and skins into leather (industry 3111, except leather converters, as defined in the 1957 edition of the Standard Industrial Classification Manual prepared by the U.S. Bureau of the Budget).

    A more comprehensive account of this study is presented in Industry Wage Survey: Leather Tanning and Finishing, March 1963 (BLS Bulletin 1378). Individual releases providing data on earnings and supplementary benefits were issued earlier for: Boston; Fulton County, N.Y.; Illinois; Maine; Newark and Jersey City; New Hampshire; Philadelphia-Camden-Wilmington; and Wisconsin.
    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 averages presented here exclude premium pay for overtime and for work on weekends, holidays, and late shifts, and average earnings are calculated 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 reported payroll totals. The monthly series includes leather converters which were excluded from this study.
    ${ }^{2}$ For difinition of regions used in this study, see footnote 2 of table.
    ${ }^{3}$ See "Earnings in Leather Tanning and Finishing, May 1959," Monthly Labor Review, October 1959, pp. 1114-1119.

    - For definition, see footnote 4 of table.

[^39]:    ${ }^{5}$ Establishment practices for production workers are briefly described in this article. Additional details for these workers and information on office workers are presented in BLS Bulletin 1378, op. cit.

[^40]:    ${ }^{1}$ Other methods include hedging, which involves use of a counter-balancing transaction; cost plus contracts, which places the risk on one of the parties; target or incentive contracts, which stipulate the original price and a fee, with the fee increased if costs are decreased; and delivery price contracts, which provide that price will be determined by market or cost conditions at the time of future delivery.

[^41]:    ${ }^{2}$ These revisions, based on detailed surveys of workers' incomes and expenditures, are made at intervals of about 10 years. The next revision is scheduled for completion with the January 1964 index. A summary of the major changes incident to the revision was published in the July issue of the Review, pp. 794-795.
    ${ }^{3}$ A more detailed description of the index as currently calculated is available on request.
    4 Offlial monthly indexes are available separately for some of the major groups of commodities, as well as for the total, continuously since 1890. A finer classification by subgroups of commodities is available since 1913. In 1952, the third level of classification- product class-was introduced; these have been extended back to 1947.
    ${ }^{3}$ Questionnaires were sent to the 2,700 names on the mailing list for the monthly press release and to the 4,200 who receive the detailed report. The number of usable returns totaled 3,026 .

[^42]:    Indexes are considered preliminary for 1 month, or until the index for the month following the date of reference is published.

[^43]:    ${ }^{7}$ The reference base for both the CPI and the WPI was changed in 1962 from $1947-49=100$ to $1957-59=100$. Although the indexes are also available on the 1947-49 base, users should consider shifting to the new base as soon as practicable.

[^44]:    -From Index Numbers of Wholesale Prices in the United States and Foreign Countries (BLS Bulletin 173, 1915), p. 26.

[^45]:    *Prepared in the U.S. Department of Labor, Offlce 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.
    ${ }^{1}$ NLRB v. General Motors Corp. (U.S. Sup. Ct., June 3, 1963).
    ${ }_{2}$ General Motors Corp. and United Automobile Workers, 133 NLRB 451 (1961); see Monthly Labor Review, December 1961, pp. 1367-68.
    ${ }^{3}$ General Motors Corp. v. NLRB, 303 F. 2d 428 (1962); see Monthly Labor Review, August 1962, p. 906.

[^46]:    ${ }^{4}$ Retail Clerks International Association, Local 1625 v. Schermerhorn (U.S. Sup. Ct., June 3, 1963).
    ${ }^{5}$ Schermerhorn v. Retail Clerks International Association, Local 1625, 141 So. 2d 269 (Fla. Sup. Ct., 1962).
    ${ }^{6}$ Local 100, United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry v. Borden (U.S. Sup. Ct., June 3, 1963).

[^47]:    ${ }^{7}$ International Association of Machinists v. Gonzales, 356 U.S. 617 (1958); see Monthly Labor Review, July 1958, pp. 772-773.
    ${ }^{8}$ San Diego Building Trades Council v. Garmon, 359 U.S. 236 (1959); see Monthly Labor Review, June 1959, pp. 669-670.
    ${ }^{-}$Local 207, International Association of Bridge, Structural and Ornamental Iron Workers Union v. Perko (U.S. Sup. Ct., June 3, 1963).

[^48]:    *Prepared in the Division of Wage Economics, Bureau of Labor Statistics, on the basis of published material available in mid-July.
    ${ }^{1}$ See Monthly Labor Review, May 1962, pp. 552-554.
    ${ }^{2}$ Employees in the senior group retiring after June 1, 1963, will receive their extended vacation benefits, but the portion in excess of the previous savings-vacation plan benefit iss not payable until after January 1, 1964.

[^49]:    ${ }^{3}$ See Monthly Labor Review, November 1962, pp. 1282-1283. ${ }^{4}$ Ibid., pp. 1281-1282.

[^50]:    ${ }^{5}$ See Monthly Labor Review, August 1962, p. 914.
    ${ }^{6}$ See Monthly Labor Review, June 1963, pp. 707-708.

[^51]:    ${ }^{7}$ See Monthly Labor Review, May 1963, pp. 557 and 562.

[^52]:    ${ }^{8}$ See Monthly Labor Review, July 1963, p. 830.

[^53]:    - See Monthly Labor Review, May 1961, p. 530. ${ }^{10}$ See Monthly Labor Review, July 1963, p. 837.
    ${ }^{11}$ Ibid., pp. 789-793.
    ${ }^{12}$ See Monthly Labor Review, August 1962, p. 886.
    ${ }^{13}$ See Monthly Labor Review, January 1963, p. 67.

[^54]:    1 This table is included in the January, April, July, and October issues of the Review.
    Note: With the exceptions noted, the statistical series here from the Bureau of Labor Statistics are described in Techniques of Preparing Major BLS Statistical Series (BLS Bulletin 1168, 1954), and cover the United States without Alaska and Hawaii.

[^55]:    ${ }^{1}$ For deflnition of production workers, see footnote 1, table A-3.
    2 Preliminary.
    Note: The seasonal adjustment method used is described in "New Seasonal Adjustment Factors for Labor Force Components," Monthly Labor Keview, August 1960, pp. 822-827.

[^56]:    ${ }^{1}$ Beeinning with the December 1961 issue, figures differ from those pre Fously published. The industry structure bas been converted to the 1957 Standard Industrial Classification, and the printing and publishing industry and some seasonal manufacturing industries previously excluded are now included.
    Data include Alaska and Hawall beginning in January 1959; this inclusion has not stenificantly affected the labor turnover rates.
    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 series measures changes during the

[^57]:    See footnotes at end of table.

[^58]:    See footnotes at end of table.

[^59]:    ${ }^{1}$ For comparability of data with those published In Issues prior to December 1961, see footnote 1, table A-2. For employees covered, see footnote 1, table A-3.
    These series cover premium overtime hours of production and related workers during the pay period ending nearest the 15 th of the month. Over-
    either the straight-time workday or workweek or (2) they occurred on weekends or holldays or outside regularly scheduled hours. Hours for whieh ouly shift differentlal, hazard, incentive, or other similar types of premlums were pald are excluded.
    ${ }^{2}$ Preliminary.

[^60]:    ${ }^{1}$ For comparability of data with those published in issues prior to December 1961, see footnote 1, table A-2. For employees covered, see footnote 1, table A-3.
    Spendable average weekly earnings are based on gross average weekly earnings as published in table $\mathrm{C}-1$ less the estimated amount of the workers Federal social security and income tax liability. Since the amount of tar liabllity depends on the number of dependents supported by the worker as

[^61]:    *The Consumer Price Index for June 1963 calculated from a 1947-49
    $=100$ base was 130.8 .
    ${ }_{1}$ The Consumer Price Index measures the average change in prices of goods and services purchased by urban wage-earner and clerical-worker famillies. Data for 46 large, medium-size, and small cities are combined for the all-city average.
    ${ }^{\text {I In addition to subgroups shown here, total food includes restaurant meals }}$
    and other food bought and eaten away from home.
    ${ }^{2}$ Includes eggs, fats and oils, sugar and sweets, beverages (nonalcohollc), and other miscellaneous foods.
    ${ }^{4}$ In addition to subgroups shown here, total housing includes the purchase price of homes and other homeowner costs.
    ${ }^{8}$ Includes yard goods, diapers, and miscellaneous items.

    - Includes food, house paint, solid fuels, fuel oil, textile housefurnishings, household paper, electric light bulbs, laundry soap and detergents, apparel

[^62]:    See footnotes at end of table.

[^63]:    1 The data Include all known strikes or lockouts Involving 6 or more workers and lasting a full day or shift or longer. Figures on workers involved and man-days idle cover all workers made Idle for as long as 1 shift in estab

