

Monthly Labor¹³⁶ Review

Deep

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The Practice of Seniority

1. *In Southern Pulp Mills*
2. *As a Factor in Layoffs*

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Monthly Labor Review

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UNITED STATES DEPARTMENT OF LABOR • BUREAU OF LABOR STATISTICS

LAWRENCE R. KLEIN, *Editor*

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The Labor Month in Review

THE steel settlement, on July 1, brought to a conclusion another crucial major-industry contract negotiation of the summer months. Approximately 400,000 steelworkers received wage increases averaging $7\frac{1}{2}$ percent (about 15 cents per hour) after a strike which lasted only 12 hours. The CIO United Steelworkers a week earlier had rejected a management offer of hourly raises averaging 10.3 cents. The bargaining had been initiated under a wage reopening clause in the contracts with the major steel producers. The contracts as such do not expire until June 30, 1956, and not until then can changes in fringe benefits, which constituted the major improvements written into the new Ford and General Motors agreements early in June, be negotiated. The magnitude of the steel increase was therefore the more remarkable.

LATE IN June the UAW-CIO opened negotiations with the Chrysler Corp. for the kind of settlement entered into with Ford and General Motors. The contract expires August 31. Meanwhile the union rejected a suggestion by Henry Ford, 2d, favoring industrywide bargaining.

An extension of the supplemental unemployment benefits principle was won by the CIO National Maritime Union after a 4-day strike against operators of cargo, passenger, and oil tanker owners on the Atlantic and Gulf coasts. Other maritime unions negotiating at the same time were the AFL Masters, Mates, and Pilots and the CIO engineers' and radio operators' organizations, although the unemployment plan was not an issue with these groups, which secured improved pension, welfare, and vacation benefits in 3-year contracts limited to 2 wage reopenings. Fringe benefits, however, are covered by a 5-year agreement. After the settlement, the three licensed officers' unions began discussion of a federation to coordinate collective bargaining activities. There is also considerable employer pressure to achieve a single expiration date for all maritime union contracts. West Coast negotiations between

the AFL Seafarers' union, sole bargainer for sailors, stewards, and firemen, and the Pacific Maritime Association were under way early in July.

Meanwhile, the House Merchant Marine Committee was holding extensive hearings on the shipping industry, including labor relations matters. One proposal would establish a separate maritime labor board.

THE International Transport Workers' Federation, trade secretariate of merchant seamen's unions from many countries, has opened a drive to organize the seamen on ships under Panamanian, Liberian, and Honduran registry. The Federation alleges that wages and working conditions are markedly low in ships of these countries, and increasing numbers of registrations are made under these flags from among maritime countries with higher standards for sailors.

IN THE main, industrial relations did not augur serious strike situations as of mid-July. Some exceptions included the strike on July 1 against 3 large nonferrous mining and smelting firms by 30,000 members of the Communist-oriented Mine, Mill, and Smelter Workers' Union whose demands include a wage increase and a guaranty of \$60 a week payment against sickness, accidents, or seasonal unemployment. The threat of the strike during June created an upward push to copper prices. On July 8, the union and American Metals Refining Co. settled on the basis of an average wage increase of $11\frac{1}{2}$ cents plus supplementary nonwage benefits.

A strike of Local 255 of the AFL Hotel and Restaurant employees against several Miami area hotels for union recognition and wage increases entered its fourth month on July 13. The dispute has attracted national attention, despite its local character, because of the determined court fight waged by the hotel owners against picketing and of the vigorous campaign waged on the strikers' behalf by the American Federation of Labor. A strike information headquarters has been established in Washington, and New York members of the union demonstrated in Times Square in behalf of the Miami local. The union has petitioned the National Labor Relations Board for representation elections covering 167 hotels in Miami and Miami Beach.

Presidential action in creating an emergency board prevented a strike on July 5 by AFL Teamsters employed by the Railway Express Agency, Inc. in seven large cities. The situation was covered by the Railway Labor Act.

An interesting development arose in the course of the New England textile strike, in progress since April 15. The Berkshire Hathaway mills announced late in June that, under terms of its contract with the CIO Textile Workers, it would pay 10,000 striking workers their regular vacation pay. The strike began over a proposal to reduce fringe benefits and eliminate a cost of living escalator clause.

THE Nation's largest single employer, the United States Government, in June granted pay increases to 500,000 postal workers (totaling 8.1 percent) and to more than 1 million nonpostal employees (7.5 percent). It was the first general pay raise for these groups since 1951.

GOVERNMENT employees in certain foreign countries recently resorted to strikes or strike threats to achieve salary increases, a practice both illegal and inimical to custom with respect to Federal employees in the United States. In France, last minute action early in July averted a strike by Government workers when 14 percent wage increases spread over a 2-year period were granted. In Chile, Government workers were on strike in early July for pay increases and cost-of-living bonuses. Threats of military conscription of strikers ended the walkout, but concessions were promised most groups involved. As in France, most transportation and communication systems are Government operated.

June settlement of the strike of British engineers on the Government-operated railroads left the country in the grip of strikes of dockworkers and seamen. The longshore dispute, jurisdictional in character, was condemned by the British Trades Union Congress. It was called off early in July after a 6-week tieup of shiploading in 7 major ports. The seaman's strike for shorter hours and better overtime pay was unauthorized by the

National Union of Seamen, but was ultimately broken late in June after nearly a month, by the threat to draft strikers for military service.

THE East German Communist Government has outlawed strikes. This was accomplished by having the fourth Congress of the German Labor Union Federation amend its constitution to allow the State complete freedom to maintain labor discipline.

At the very time the East German Communists banned the use of strikes, the 38th general conference of the International Labor Organization, which included delegates from the Soviet Union, supported action favoring the unqualified rights of trade union action, including the right to strike.

Various American trade unions held conventions late in June. The CIO Communications Workers, meeting in St. Louis after a 72-day strike against Southern Bell, voted a general membership assessment of a day's pay to rebuild its strike fund. It reelected Joseph A. Beirne president and endorsed the 5-day, 35-hour week as an immediate union objective. Carlton W. Werkau died in the second week of his new term as secretary-treasurer.

The CIO Newspaper Guild, convening in Albany, voted not to defend the employment rights of proven Communists. Joseph F. Collis was reelected president. Two AFL railroad unions, the Maintenance of Way Employees and the Switchmen, in Detroit and Buffalo, respectively, again chose T. C. Carroll and William A. Fleete for presidential posts. The MWE voted down a 65-year age limit on union officers. The Switchmen made negotiated general wage rates and decisions to arbitrate rate changes subject to referendum vote.

THE AFL-CIO no-raid agreement ended its first year of operation in June with 46 cases—23 initiated by unions of each organization—handled under its terms. More than 100 international unions are signatories to the document which pledges them not to proselytize each other's members. Only 8 cases were presented to the impartial arbitrator provided for by the pact. Ten cases were still in earlier stages of the procedure.

The Practice of Seniority in Southern Pulp Mills

GEORGE W. BROOKS AND SARA GAMM*

Basis of the System

The subject of seniority, even confined to the pulp and paper industry, has such varied meanings that any generalizations are of very limited value, principally because differences in industrial processes alone, apart from differences in size and complexity of establishment, require differentiation in practice. Seniority is therefore examined within the context of only one branch of the pulp and paper industry, the southern kraft or sulphate pulp mill. This is the type of mill operated extensively throughout the Southern States, usually in conjunction with a paper mill and sometimes with corrugated-box or bagmaking facilities.

THE seniority system in southern sulphate pulp mills includes within itself many different elements that are found elsewhere in the pulp and paper industry, but the system is necessarily distinguished from other branches of the industry and from other industries as well. The language of the collective bargaining agreements in the southern mills, like other plants in the pulp and paper industry, gives barely a clue to the operation and significance of the seniority arrangements they provide. Nevertheless, each man in the mills understands how the system operates and where he stands.

Basically, a worker's position depends on the line of progression in which he works, because it defines the steps through which a man must move up, from one job to another. The line is determined in part by the nature of the industrial process, but there is some room for choice on the part of the companies and the union. The decision may be to include a large number of different jobs and different operations in one line, or it may be to set up many different lines which are administered independently of each other. This choice has important effects both for management and for the workers.

The system, once defined, is operated through a set of rosters which make it workable. The primary roster is based on the line of progression. It is used, together with considerations of ability, for all promotions, and together with plant or departmental seniority, for purposes of layoffs.

Agreement Provisions. Normally, the first step in studying seniority would be to examine the collective bargaining agreement. Unfortunately, an examination of hundreds of agreements in the pulp and paper industry showed that either the agreement is too general to have any specific meaning, or the terms used do not mean what they seem to say.

One of the clearest and most concise provisions in the southern sulphate industry begins with the statement: "The principles of seniority shall govern in promotions, layoffs, demotions, filling vacancies, transfers, and rehiring, provided the employee has the necessary qualifications." The agreement goes on to define three types of seniority, "job seniority, departmental seniority, and mill seniority." Job seniority is defined as length of service on a given job within a line of progression. Departmental seniority is defined as "length of service in line of progression." In practice, it should be noted, "lines of progression" are not coincident with administrative "departments," so that the meaning of the term "departmental seniority" under this agreement is not the meaning normally ascribed to the words. This agreement continues with some general descriptions of how the different types of seniority are applied and lays down elaborate steps for handling grievances which arise. Although the agreement is well written and reasonably clear, it does not begin to explain how seniority works in practice.

*Of the International Brotherhood of Pulp, Sulphite and Paper Mill Workers (AFL), Department of Research and Education.

Other agreements are far less specific and exact than the one cited. Yet, an examination of practice in the plants discloses a systematic (even rigid) attention to length of service in promotions, transfers, layoffs, and rehiring; and the meaning of seniority *in practice* is clear and generally understood.

Nature of Mill Operations. Since seniority gets its meaning from technology, a study of seniority in southern pulp mills begins with a brief examination of the operations in this type of mill.

1. The logs come into a *woodyard* where the bark is removed.

2. The logs then travel on conveyors to the *woodroom* where large machines equipped with knives cut the logs into pieces small enough to be cooked in the digesters.

3. The chips travel on conveyors to the *digesters*, the large tanks in which the wood chips are "cooked" with steam and chemicals, under pressure, until the lignin has been dissolved and the cellulose can be separated.

4. When the cooking is done, the digesters are emptied, and the pulp travels to the *wet room* to be washed several times and screened of impurities.

5. The liquor that has been used for the cooking then goes to the *recovery* process where it is burned and treated to permit recovery of the chemicals for use again.

6. The pulp may then go to the *bleach plant* for whitening before it is dried on a pulp machine (if it is going to be shipped) or sent in liquid form to the paper-machine room for use.

The mill operates 24 hours a day, 7 days a week. Therefore, there are 4 separate crews for every operation, working different shifts during the week. Three of the shifts work on any given day during the week; the fourth is the swing shift, necessary because each man works 40 hours for 3 weeks and 48 the fourth week. Thus, there is a minimum of 4 men on each job. Sometimes a crew includes more than 1 man at a given job classification, so that the full number for the classification may be 4, 8, 16, or some other multiple of 4. Shifts are rotated each week.

Job Skills. The operations described above can be grouped roughly into 5 separate parts: the handling of the wood, the cooking of the pulp, the cleaning and refining of the pulp, the recovery of the chemicals, and the bleaching. In addition, there is a maintenance crew. The operations require work forces of varying size and composition with respect to skill and job responsibility.

Within any one operation the jobs are so organized that one man has a very large degree of specialized skill and responsibility, with other men of less skill helping him. Thus, the digester cook, one of the highest paid men in the sulphate pulp mill, is in charge of a crew which does most of the work of filling the digesters, capping them, checking on the progress of the cook, emptying the digesters, and so on. When a man starts to work on the digesters he is a capper, without any skill. As he becomes familiar with the equipment and the process, he moves up from one job to another, each time acquiring more responsibility than he had on the job below. At the top of this ladder is the cook who has a thorough knowledge of the equipment and general responsibility for the whole operation.

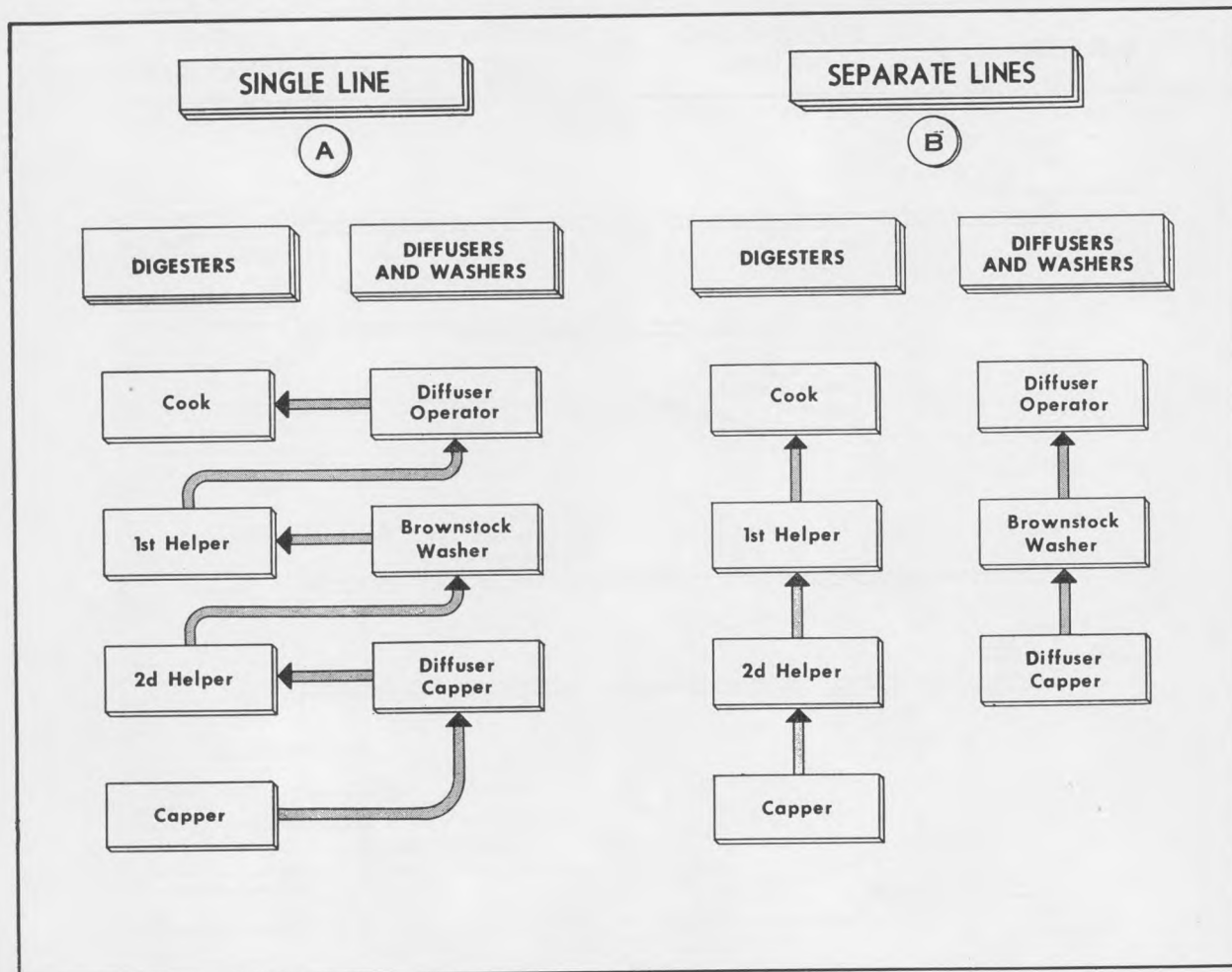
The standard practice in sulphate pulp mills is to do all training on the job. Each man learns how to operate the equipment by working first at a very simple job, then at a more difficult and more responsible job, and so on up the line.

The "Line of Progression"

Within this framework the meaning of seniority becomes clear. A man acquires his experience and his position in the mill—meaning his seniority—by working on a number of different jobs, progressing from the easiest and least responsible up a ladder, step by step, until he has acquired the necessary knowledge and skill for the top job.

The technological requirements of the plant limit the way in which a seniority system can operate, but within these requirements there is considerable area for choice. The choice is exercised in the definition of the lines of progression. There may be numerous separate lines for different operations, or a group of related operations may be combined into a single line, but the single line represents an extreme choice among the many alternatives. For example, in a typical southern mill, it is possible to have either a single line or separate lines of progression for the digesters and the diffusers and washers. In practice, these are two separate but closely connected operations. The stock that is used in the second operation comes directly from the digesters, and the two operations are interdependent. The alternatives are diagrammed in chart 1.

Chart 1. Alternative Lines of Progression (Two Operations in a Typical Mill)



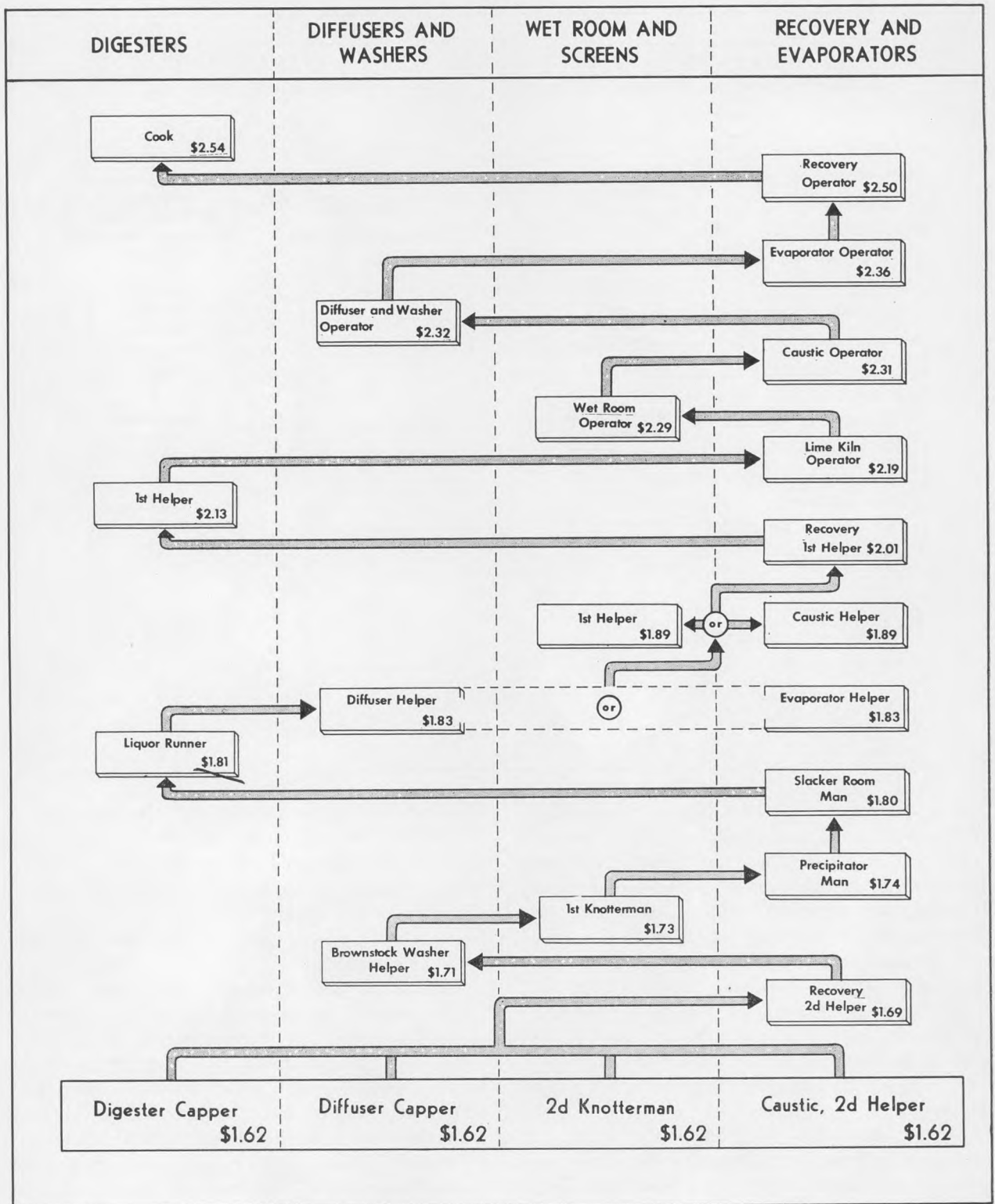
To a considerable extent this same choice exists with respect to the whole pulp mill. It is possible to set up separate lines representing different operations in the mill or to combine operations. Over the years there has been considerable experimentation. The tendency has been in the direction of combining different operations, until today the largest southern producer has one single line of progression for the entire pulp mill. The bleach plant, which is relatively new in the southern industry, is an exception and has its own line. The mechanical crews are also in a separate line.

Chart 2 shows how this single line works. A man starts in 1 of the 4 bottom jobs and from here he moves up, step by step, weaving back and forth

from one operation to another. By the time a worker reaches the top job of cook in the digester room he has mastered all operations in the mill. At two steps of the ladder, where there are alternative jobs for the worker, the company may require him to work some time at each job for their convenience.

This single line represents an extreme choice. At the opposite extreme would be four separate lines of progression. If there were four such lines in the plant diagrammed in chart 2, a man would have to make a choice about where he wanted to work and then go into the bottom job in that operation. If he wanted to work on the digesters, he would begin as digester capper and then move up the digester line, first to liquor runner, then to

Chart 2. A Single Line of Progression in a Southern Pulp Mill



1st helper, and finally to cook. A man who started at the bottom of the recovery and evaporators line would move up from caustic 2d helper to recovery 2d helper, to precipitator man, to slacker room man, and so on through the jobs in that column on the chart. There would be no movement across the broken lines which separate the four operations.

In practice, there are many different combinations of lines which tend to approach the single line, but remain somewhere between the two extreme cases. The limits upon choice, in the final analysis, are practical ones, based upon the need for on-the-job training to meet technical requirements.

Lines of progression tend to become institutionalized. Generally speaking, experience in bargaining in one mill will be carried over to newly organized mills, although some variations arise because of technological differences. Lines of progression also tend to be modified in a number of ways, sometimes to serve special purposes. The lines can be used, for example, to differentiate the opportunities for white and Negro employees. Frequently the lines are modified to avoid "dead end" jobs.

Comparison of Alternative Lines. Certain advantages and disadvantages are implicit in the different types of progression. From the standpoint of the company, the single line offers a number of advantages. The company gets a relatively flexible work force. All of the men on top jobs have had experience throughout the pulp mill and are, therefore, able to substitute for each other or on other jobs in emergency. Even the men lower in the line have some experience in other parts of the mill.

This advantage is particularly useful in developing supervisory staff. Supervisors are typically taken from the top operator jobs, so that the company gets men who have a wide experience throughout the mill and are thus better able to deal with the problems which arise. On the other hand, the personnel process is considerably complicated under a single line of progression. At least one change must be made for every job classification when a vacancy occurs in a top job. Thus, in the pulp mill described, there would be about 15 job changes if a cook left the mill under a single line

of progression, but only 4 under a separate line for the digesters.

From the standpoint of the union, alternative lines also offer certain advantages and disadvantages. If the union is interested in creating the maximum number of opportunities for the older men, taken as a group, the single line is preferable. For any particular worker, the relative advantage of the alternative lines depends upon where he happens to work and what happens in the operation or line in which he is located. For example, if there are 4 or 5 different lines, each with a relatively small number of jobs, a young man at the bottom of 1 line may be better off when vacancies arise in his line than he would be if there were 1 single line for the whole mill. But, for the membership as a whole, the security of the older workers as a group is promoted by the single line.

On the other hand, if there is a single line, each man must learn a large number of jobs, unattractive as well as good ones. With separate lines of promotion, a man can choose to work in a line that he likes, a line that includes work which is fairly attractive to him and excludes some of the dirtier and disagreeable jobs in another operation. The men may want this choice.

In individual circumstances, the issues become complicated by many other considerations. Once a set of lines has been established, it is difficult to change them if there are very real and substantial conflicts of interest among the men in the work force, quite apart from how management feels. Nevertheless, changes are negotiated from year to year, as the companies and the union attempt to correct inadequacies in existing arrangements.

The System in Operation

Any system of seniority requires two things for its administration. The first is a definition of the system itself. Under lines of progression, the worker's seniority rights are defined in terms of his position in the line and his length of service there. For some purposes, as described below, his seniority also depends upon how long he has been in the plant or how long he has been in his line of progression.

Secondly, the operation of this system, like any other, requires a mechanism which permits

Chart 3. Illustrative Plant Setup

OPERATION A			OPERATION B			OPERATION C		
Digesters			Bleach Plant			Screen Room		
COOK Rate \$2.40			BLEACHERMAN Rate \$2.25			SCREEN TENDER Rate \$2.00		
	Hired	Job		Hired	Job		Hired	Job
Dimaggio	1926	1934	Altrock	1919	1932	Coleman	1924	1936
Berra	1921	1936	Boudreau	1922	1934	Ferrell	1929	1937
Dark	1925	1935	Appling	1920	1940	Embre	1927	1935
1st HELPER Rate \$2.20			LIQUOR MAKER Rate \$2.10			SCREEN HELPER Rate \$1.90		
	Hired	Job		Hired	Job		Hired	Job
Johnson	1938	1939	Jackson	1937	1943	Gowdy	1931	1938
Noren	1945	1949	Evers	1928	1944	Hornsby	1934	1940
Groth	1932	1948	Lopat	1942	1947	Kinder	1940	1947
2d HELPER Rate \$1.95			BLEACH HELPER Rate \$1.85			RIFFLER MAN Rate \$1.70		
	Hired	Job		Hired	Job		Hired	Job
Ingersoll	1935	1940	Kennedy	1939	1946	Cobb	1923	1941
Lazzeri	1941	1949	Ostrowski	1947	1948	Irving	1936	1942
Newsom	1946	1950	Mantle	1944	1950	Furillo	1930	1940
BLOWPIT MAN Rate \$1.75			LABOR POOL Rate \$1.60			D - MAINTENANCE		
	Hired	Job		Hired		MECHANIC, CLASS A Rate \$2.30		
Mack	1943	1949	Paige	1948			Hired	Job
Robinson	1951	1951	Ruth	1952		Parnell	1949	1949
Quillan	1950	1952	Thomson	1952		HELPER, A Rate \$2.10		
						Hermanski	1933	1940
						HELPER, B Rate \$1.80		
						Snider	1952	1952

easy, day-to-day administration. This is provided by a set of rosters which contain the names of all employees arranged according to their length of service as defined by the system. In the typical sulphate pulp mill, the rosters are comprised of several parts. The basic roster depends upon job service in the line of progression, but in addition, there are rosters based upon plant service or departmental service which are used for special purposes.

The construction and use of rosters in a simplified pulp mill can be illustrated by reference to chart 3. Unlike an actual mill, the sample mill has 3 men on each shift job instead of 4. There is a bank of digesters manned by a crew of 4, a bleach plant with a crew of 3, and a screen room with a crew of 3. There is a labor pool and a small maintenance crew. For each job are listed the men on the job, the dates they were hired, and the dates they began working on their present jobs.

Although highly simplified, this plant presents a realistic picture of how any given plant might look. Thus, a few men have attained relatively high positions, although they came into the plant much later than other men who are still in relatively low-paying jobs. This situation is not characteristic, but it does happen in actual practice and is, therefore, reflected in the sample plant.

Promotions. Promotions in southern pulp mills are based upon the lines of progression in the mills. Men can move up only in fixed sequences and in no other way. Whether a man moves up to a vacant job above him depends upon his seniority and also his ability to take the higher rated job. Normally, a man can expect to be promoted when the job next above his becomes vacant and he has longer service on his own job than any other man in the same job. This expectation is based on the fact that the line itself is an expression of training requirements of the job. In addition, it provides security of opportunity for the men in the line in the sense that there is a predictable reward for reliable performance. Furthermore, under this procedure a large measure of the difficulty which frequently arises around the issue of "ability" is eliminated because the line of progression enables the company to test

the capacities of the men as they move from one job to another.

The operation of the system cannot be examined without reference to a specific line of progression. The roster cannot be constructed without it. For purposes of illustration, two alternatives are set up for the simplified pulp mill, with the same fictitious rates indicated on the plant setup.

The alternatives are diagrammed in chart 4. Alternative No. 1 provides for separate lines in operations A and B. Alternative No. 2 combines these operations into a single line.

The roster follows the line of progression. If operations A and B are in separate lines, there are two separate rosters for these operations. They are the lists of the men who work in each operation arranged according to their jobs and their length of service on their jobs. The rosters would look like this:

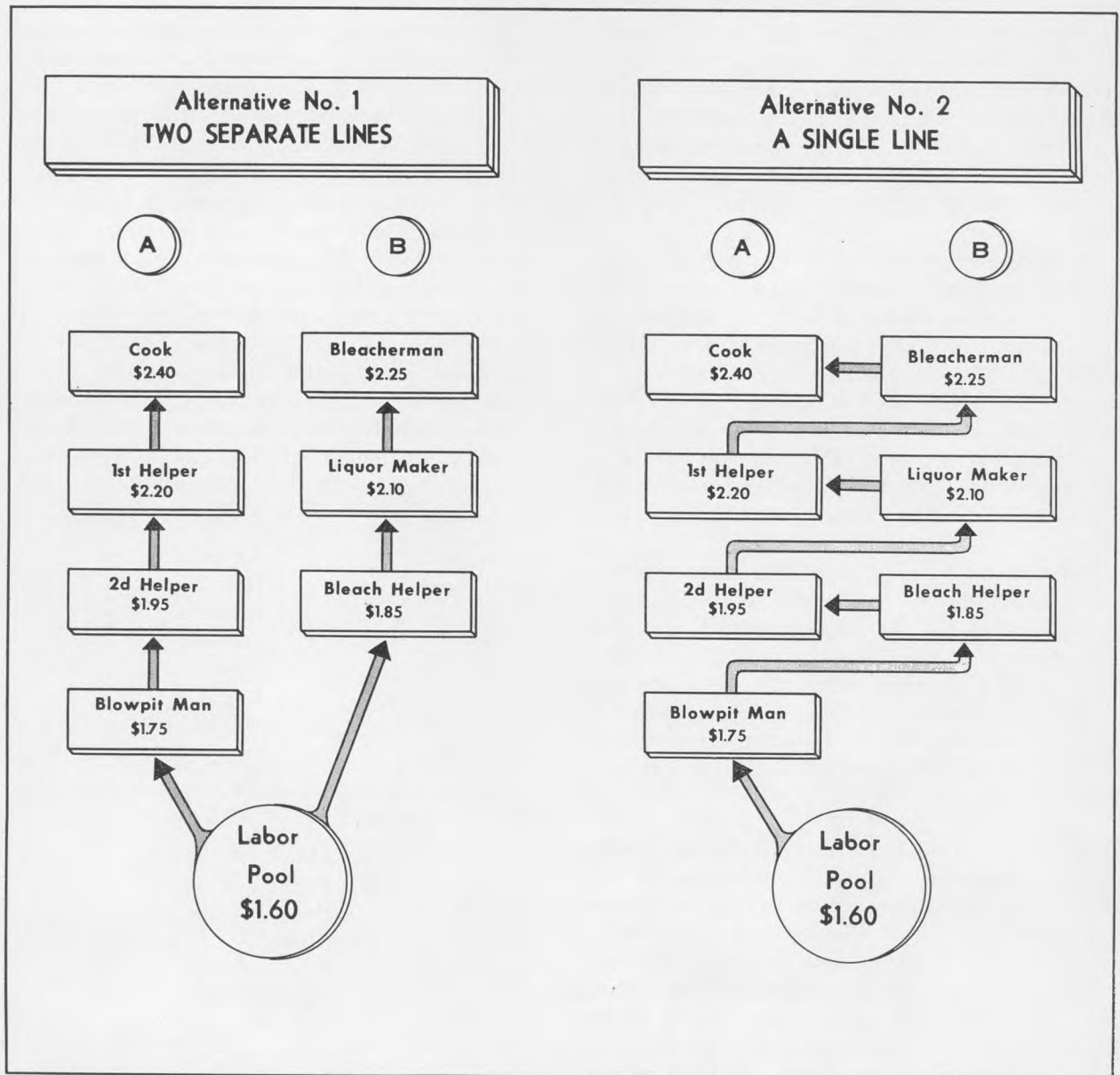
<i>Roster for operation A</i>	<i>Roster for operation B</i>
Dimaggio	Altrock
Dark	Boudreau
Berra	Appling
Johnson	Jackson
Groth	Evers
Noren	Lopat
Ingersoll	and so on
and so on	

If there is a single line for the two operations, there is one roster:

Dimaggio
Dark
Berra
Altrock
Boudreau
Appling
Johnson
and so on

With the rosters set up, it is relatively easy to apply the system. Assume in each case that the senior man has sufficient ability to move up. If Dark leaves the mill, his job of cook is vacant. With separate lines of progression, the vacancy is filled by Johnson who has been in the next job below longer than any of the other men. Johnson's job goes to Ingersoll, and so on. Altrock and Boudreau have no opportunity to move up. However, if there is a single line of progression, Dark's

Chart 4. Alternative Lines of Progression for the Sample Mill



job goes to Altrock, Johnson moves up to Altrock's job, and so on.

Layoffs. The administration of layoffs is a more complicated procedure than for promotions. The lines of progression are used in reverse order. A man moves down in the same pattern that he moved up. However, when actual layoffs are made, one of several variations in practice will occur.

Layoffs may be made on the basis of plant service, with certain restrictions based on position in the line of progression. Men are laid off from jobs at the bottom of the line first, so that a man who stands high in the line of progression is protected even though his plant service is shorter than that of other men lower in the line. (Normally a man's plant service corresponds to his position in the line, but there are exceptional cases.) Sometimes layoffs are made entirely upon the basis of the line of

progression, but more commonly, workers affected by a reduction in force can exercise their plant seniority to "bump" other men in lower jobs. In exceptional cases, layoffs are made on the basis of departmental seniority in the usual sense of the term, combined with the line of progression.

The administration of layoffs under the system most common in the southern mills—use of the line of progression and plantwide seniority—is outlined below.

Assume that the company decided to close its bleach plant because the market for bleached pulp had contracted. The company would lay off 9 men, corresponding to the 3 jobs in chart 3, each with 3 men for the different shifts. The layoffs would be made on the basis of the *plant* roster which lists all employees according to date hired. For the simplified pulp mill, this roster would list 36 names, beginning with Altrock, who was hired in 1919, and ending with Ruth, Snider, and Thomson, all hired in 1952.

The plant roster, in combination with the progression rosters, would determine which nine men shall be laid off. If a man is above the bottom job in his line of progression, he is protected from layoff until all men below him have been laid off, without regard to date hired. He has no protection if he is at the bottom of the line, however, and in the labor pool. Layoffs are made, beginning at the bottom of the plant roster, and in our example, the nine men at the bottom are:

Thomson
Snider
Ruth
Robinson
Quillan
Parnell
Paige
Ostrowski
Newsom

Of the 9 men, 2 are protected by virtue of their positions in the line of progression. They are Parnell, who is a top mechanic, and Newsom, who

is a 2d helper on the digesters. The other 7 men are laid off, including 1 man in the bleach plant. The next two on the roster are Noren who is in a protected position, and Mantle who is not. He is laid off. The next man is Mack, not protected. He makes the ninth man to be laid off.

There are 7 men from the bleach plant who have not been laid off: the bleachersmen, the liquor makers, and 1 bleach helper. They now can bump down their line of progression, taking the best available jobs for which they are qualified.

If alternative No. 1 is the line of progression, with separate lines for the digesters and bleach plant, Altrock, Boudreau, and Appling, the men at the top of their line, will be able to go into the jobs of blowpit man at the bottom of the digesters line, or one of them would take the B helper job in the maintenance crew if he could qualify for it. The other men would have to go into the labor pool.

Under alternative No. 2 (a single line for the 2 operations), Altrock, Boudreau, and Appling would bump the 1st helpers on the digesters, who in turn would bump the 2d helpers. The liquor makers who had been displaced (Jackson, Evers, and Lopat) would take the jobs of blowpit man or B helper in maintenance. The 2d helpers on the digesters, at the bottom of the progression roster, would go into the labor pool.

* * * * *

In actual practice there are many variations. But the basic element in any system is the line of progression which defines the path of movement, both upward and down. The definition of the line determines in any plant how often a man in any given operation will have an opportunity to advance. Furthermore, this line will determine to some extent the amount of protection he has against layoff and demotion in the event of a reduction in force. However, in addition to his position in the line, his plant service or departmental service will influence his fate in the event of layoff.

Contract Clauses on Seniority as a Factor in Layoffs*

THE maintenance of individual job security under the terms of collective bargaining agreements includes the establishment and operation of an equitable layoff procedure should a reduction in force be required. To provide for the possibility of fluctuations in the need for workers, most agreements set forth the basic ground rules governing the order in which workers will be laid off and recalled to work. The principle that relative seniority, or length of service, shall be, if not the only factor, at least an important factor in determining the order of layoffs is firmly established in collective bargaining agreements.

Concern with the safeguarding of plant efficiency has frequently added other considerations to the simple, objective, and mechanical standard exemplified by a straight seniority rule under which length of service alone controls the order of layoffs. To what extent should differences in ability and fitness among workers be considered? Should key employees, employees in the process of training, and union shop stewards be reached for layoff solely on the basis of length of service? Shall the worker's length of service be calculated on the basis of his employment in the company, in the plant, in the department, or in the job classification? These questions are not always answered by the agreement provisions nor are the answers, where given, precisely expressed. However, the agreements usually provide some guidance to the parties for on-the-spot determinations or for the grievance and arbitration machinery that is established by the vast majority of agreements.¹

The clauses quoted below illustrate the variety of ways in which seniority is utilized or modified in determining the order of layoffs. Each of the agreements from which these clauses were ex-

cerpted was in effect during the latter part of 1954 and covered at least 1,000 workers.²

Length of Service as a Factor

Agreements may provide for a reduction in force solely on the basis of relative seniority, or may permit consideration of additional factors together with length of service (qualified seniority). In some cases, length of service governs provided the employee involved meets stated qualifications; in others, seniority becomes the deciding factor only if the ability and fitness of competing employees are approximately equal. Frequently, the same rule applies to promotions, transfers, and reassignments as well as to layoffs; but it is possible that individual qualification would be given more weight in connection with promotions, for example, than with layoffs where a number of workers may be simultaneously involved.

Order of layoff determined on the basis of length of service (straight seniority)

Procedure to be followed in the event of an indefinite layoff of employees:

a. All probationary employees in the department affected will be terminated first provided there are available employees remaining in the department who have seniority in those jobs which are vacated and who are willing to perform the work of the probationary employees to be released.

b. Thereafter, layoffs shall be effected in accordance with the job classification seniority provided for herein and in inverse order to the seniority status of the employees within such job classification . . .

* * * * *

In case it shall become necessary for the employer to lay off one or more employees, seniority rules shall apply, within classifications; the employee who has been with the hotel the shortest length of time shall be the first to be laid off and in rehiring, those laid off first shall be the last to be reemployed . . .

* * * * *

In the event of layoffs, employees shall be laid off according to job classification, but plantwide seniority

*Prepared in the Bureau's Division of Wages and Industrial Relations. This article is based on a section of the forthcoming compilation by the Bureau of Labor Statistics of agreement provisions dealing with layoff, recall, and worksharing procedures.

¹ For a study of the problems of arbitrating disputes arising under a seniority clause which recognized a principle of seniority limited by the factors of ability and physical fitness, see *Arbitration of Labor-Management Grievances: Bethlehem Steel Company and United Steelworkers of America, 1942-52*, BLS Bull. 1159 (pp. 23-30).

² For illustrative clauses compiled in an earlier study, see *Collective Bargaining Provisions: Promotion, Transfer and Assignment; Layoff, Work-Sharing, and Reemployment*, BLS Bull. 908-7.

shall govern, i. e., employees having the least plantwide seniority in that particular job classification shall be laid off first and the employees having the most plantwide seniority in that particular job classification shall be laid off last.

Order of layoff determined on the basis of length of service in combination with other factors (qualified seniority)

In all cases of recall, increase, or decrease of forces, the following factors shall be considered, and where factors (2) and (3) are relatively equal, length of adjusted seniority shall govern:

1. Length of adjusted seniority as hereinbefore defined.
2. Knowledge, skill, and efficiency on the job.
3. Physical fitness for the job.

* * * * *

When layoffs or rehiring take place they shall be on a job or occupational basis. The last one employed shall be the first one laid off and the last one laid off shall be the first one taken back, provided physical fitness and ability to do the job are approximately equal.

* * * * *

In decreasing the working force in any department, length of continuous service shall govern where the employee possesses the qualifications to do the job efficiently.

Qualified seniority: Order of layoffs qualified by needs of department

In case of layoffs occasioned by reduction of force, departmental seniority shall be followed, with due consideration for the efficiency and special needs of the department.

Straight seniority to determine the order of layoff for those employees with 1 or more years of service in their assigned departments; additional factors considered for other workers

Length of service shall govern in all cases of transfers, promotions, and increases or decreases of the working force where (a) ability, skill and efficiency, and (b) knowledge (of assigned and related duties) are relatively equal; provided, however, that in cases of decreases of the working force, length of service shall be the sole determining factor with respect to all employees having 1 year or more of service in their assigned departments.

Qualified seniority: Weight accorded length of service varies by employment date

Layoffs in connection with the decreasing of the working force and the recalling to work of men so laid off shall be governed by the following considerations:

1. For employees first employed prior to November 10, 1947, length of service shall govern, provided that the particular employee has the ability to perform the work.

2. For employees first employed on or after November 10, 1947, skill and ability and length of service shall be the determining factors. Where skill and ability are approximately equal, length of service shall govern.

Seniority Unit for Layoffs

The application of seniority to the problem of layoffs generally has two basic elements: (1) the area of competition or the unit within which workers are to be ranked in the order of retention, e. g., a specific job classification, and (2) the appropriate basis upon which to calculate an employee's seniority, e. g., length of service in the company, in the plant, in the department, or in the particular job classification. Many combinations of the units within which seniority may be accumulated and within which it may be applied are therefore possible. These may be set forth in collective bargaining agreements or reserved for negotiations when the need arises.

The seniority unit within which employees are ranked in order of retention is generally determined by the requirements of plant operation. A broad seniority basis, e. g., plantwide, may be deemed appropriate where occupations within the plant are fairly uniform or are readily learned. Where a wide range of operations and skills is required to manufacture a product, the workers who compose a single production line, a department, or a job classification may be grouped into a seniority unit. The unit may be broadened for employees who meet stipulated service qualifications, or may vary in the case of exceptionally short layoffs. A few agreements also call for the administration of seniority of men and women on a separate basis, thereby establishing distinct seniority units on the basis of sex.

The seniority unit established for layoff purposes may not coincide with the area in which a worker can exercise displacement or "bumping" rights. For example, a worker subject to layoff on the basis of job seniority may "bump" a junior worker in a lower rated job. Provisions dealing with bumping privileges are not included in the following examples.

In multiplant or multiemployer agreements, the seniority unit for layoffs ordinarily cannot be readily identified. In these agreements, the unit, if specified, may be subject to change on the local plant level; if not specified, the agreement usually

stipulates that the unit shall be determined by local negotiations.

Seniority unit: Job classification

It is agreed by the company and the union that it is of prime importance to maintain efficiency in the plant and its various departments. Seniority shall be on a [job] classification basis within the bargaining unit . . .

Seniority unit: Noninterchangeable occupational group

When layoffs are necessary because of lack of work, the company will apply the principle of seniority within non-interchangeable occupational groups . . .

Seniority unit: Department

When layoffs become necessary because of lack of work, seniority by departments shall apply; that is, the last person hired shall be the first one to be laid off . . . In rehiring, the last person laid off in any particular department shall be the first rehired.

Seniority unit: Plant

In the event of layoff on a plantwide bargaining unit basis, employees with the least seniority will be laid off first and employees with the most seniority will be retained subject to their ability to perform the available work without being trained.

Seniority unit: Job classification; seniority accumulated on companywide basis

Employees within each department are classified according to occupational codes, and all recalls to work or reductions in the department working force will be made on the basis of total company seniority applied to the specific occupational code . . .

Seniority unit: Job group; by companywide seniority

Whenever economic or force conditions are considered by the company to warrant laying off regular employees, such force adjustments as it may deem necessary shall be made effective among employees covered by this contract who perform similar work, subject to the following conditions:

(a) Temporary and occasional employees shall be laid off first, provided, however, that such employees may be retained or employed temporarily to meet emergencies or peak load situations.

(b) Employees shall be laid off in inverse order of total company seniority, to the extent deemed by the company to be necessary. The company may retain not more than 5 percent of the employees subject to layoff in each service year involved.

(c) The provisions of this section shall be administered on a companywide basis.

Seniority unit varies with type of layoff

In cases of increase or decrease of the working force, seniority shall operate within noninterchangeable occupational groups . . . The occupational groups as agreed to between the company and the union shall be considered a part of this agreement and attached hereto . . . In case of temporary layoffs of 10 working days or less and recalls thereafter, seniority within classifications and within the department affected shall apply. An employee shall not repeatedly be subject to recurring layoffs under this provision.

Seniority unit varies with different crafts or occupations

When layoffs, other than temporary layoffs, are made by any department, the employee with least seniority shall be laid off first . . .

Seniority [for layoff purposes] in the skilled trades departments shall be by noninterchangeable occupations or trades within a department or group of departments.

Seniority unit varies with different crafts or occupations and with the type of layoff

Skilled trades group. Employees in the skilled group will be laid off strictly in line with seniority in their respective classifications or progression group; that is, the probationary employees within the classification or progression group will be laid off before seniority employees, and then seniority employees will be laid off on the basis of their seniority.

Semiskilled group. Employees in classifications in the semiskilled group will be laid off strictly in line with seniority in their respective classifications or progression groups. If their seniority warrants, they shall be entitled to exercise their seniority by replacing the least senior employee in the basic group in which their seniority warrants.

Basic groups. Employees in the basic groups will be laid off strictly in line with seniority in their respective groups; that is, the least senior employees in each basic group will be laid off first without regard to classification within the group.

Temporary shutdown. Temporary shutdown is a reduction in the force of employees where suspension of operation occurs, in whole or in part, for a period not exceeding 2 weeks. For a temporary shutdown, the company shall have the right to effect the reduction in force by applying the principle of seniority by classification, by department.

Seniority unit varies with length of service

It is understood that both departmental service and plant service shall be taken into consideration in the application of the seniority principle . . . In instances of layoff where an employee has 1 year or more of plant seniority, the seniority considered shall be plant seniority, but where the employee involved has less than 1 year of plant

seniority, the seniority for layoff purposes shall be departmental seniority . . .

Seniority unit determined by joint agreement when necessary

The units within which the seniority rules and promotional schedules shall apply for the respective purposes herein set forth shall be determined from time to time, as necessity shall arise, by mutual agreement between the management and the plant grievance committee and upon such agreement shall be posted in each department.

Multiplant agreement: Seniority unit specified but subject to change by local agreement

The principle of factorywide seniority will apply on transfer, layoff, and rehire. Exceptions to the principle of applying seniority on a factorywide basis may be mutually agreed upon on a local plant level when the occasion arises.

Separate seniority lists for men and women, by department

A seniority list will be compiled by departments, revised at 60-day intervals and a copy delivered to the union. Male and female seniority shall be separate.

Superseniority

To insure the retention of key or specially skilled workers when layoffs are necessary, some agreements provide superseniority to such employees, that is, a place at the top of the list regardless of length of service. Trainees for technical, professional, or managerial jobs who are gaining production experience in the bargaining unit covered by the agreement may also be granted top seniority protection. Agreements often contain more than standard seniority protection for union representatives and shop stewards to assure continued experienced employee representation during and after a reduction in force. The number of employees so retained may be expressed as a fixed number or as a percentage of the total number of employees in the unit. Veterans, aged workers, and physically disabled employees are also extended "top" seniority by the terms of some contracts.

Essential employees retained regardless of seniority, with consent of union

Notwithstanding the [seniority] provisions of the foregoing sections of this article, in the event of layoffs due to a general reduction in force caused by curtailment of

production, the company shall have the right, with the consent of the union, to retain for jobs employees who, by reason of their experience and ability, are needed for such jobs regardless of seniority and to reemploy employees who, by reason of their experience and ability, are needed for such jobs, regardless of seniority.

Essential employees afforded superseniority, provided use is made of their special ability

Employees who, because of special training or ability, are essential to the efficient operation of the plant may be retained, transferred to other departments, or rehired if laid off, regardless of the provisions [relating to seniority], provided such employees are placed on jobs making use of such special training or ability.

Union representatives granted superseniority

Bargaining committee members and union officers shall head the plant seniority list. Stewards shall head the seniority lists in their respective zones. The above shall be continued at work as long as their constituents are working, providing they are qualified to do the work available.

Fixed number of union representatives granted superseniority

In applying the provision for reduction in force, officers and district representatives of the union, not to exceed a total of fourteen, will be granted, during their term of office, senior office service status provided they are qualified to fill positions then existent. The union will provide the company with a certified list of such representatives at least once every 12 months, or more often, when changes occur within the 12-month period.

Union representatives granted superseniority provided they have 1 year's seniority

The officers of the local union, eight chief stewards, and regular stewards shall head the seniority list of their occupational group if they have 1 year's seniority. This preferential seniority shall be used only in case of layoff or transfer off his floor due to a reduction in working forces. Regular stewards' preferential seniority shall not cause an employee with more than 5 years' seniority to be laid off.

Union representatives granted superseniority over employees with less than 20 years' service

In case of layoffs, those employees of 1 year or more of employment who are serving as officers of the union or as members of the grievance committee and negotiating committee, or as stewards, shall, during their term of office, head the seniority list in their respective departments with respect to those employees covered by this agreement (other than those having 20 years or more of service) and will not be laid off for lack of work unless the operation or department is discontinued.

Superseniority for skilled employees matched to that for union representatives

Employees whose skills are of special value to the company may be retained, irrespective of seniority, provided that the total number of such employees shall not exceed the total possible number of stewards, shop chairman, and union officials who have top seniority, and provided further that the number of such employees in each department shall not, in any case, exceed 10 percent of the total employees in such department at the time of a layoff.

Trainees granted superseniority in layoffs during their period of training

The company shall have the right to place persons in a department temporarily for training or experience. Such persons will be exempt from layoff under the seniority provisions during their period of training, and they shall not be used to reduce the working force or workweek of the department, nor to replace regular operators.

Trainees exempted from the seniority provisions of the contract for not more than 3 months

The company shall have the right to exempt from all seniority and wage requirements such employees as may be enrolled for the purpose of training and experience, with a view to other assignments or for some purpose other than ultimate permanent employment within the unit covered by this agreement. Such trainees shall not exceed a total of 10 at any 1 time, and no individual trainee shall be exempt for more than 3 months and they shall not displace any employee.

Disabled employees exempted from seniority provisions

Employees handicapped by major physical disabilities resulting from accidents at work in the plant are considered exempt from the seniority provisions which apply to layoffs for lack of work and may be retained by mutual agreement between the company and the union regardless of seniority status.

Disabled employees considered to have a minimum of 5 years' plant seniority in the event of layoff

Employees disabled by occupational accident or disease or disabled while on military leave may be awarded a job which they can satisfactorily perform if such job is held by an employee with less plant seniority or with less than 5 years' seniority. Such restricted employees shall be considered to have a minimum of 5 years' plant seniority in the event of reduction of force.

Less Than Normal Seniority Protection

In some instances, certain groups or categories of workers are granted no seniority protection, or

less than their length of service would otherwise command under the agreement. These workers compose a unit by themselves, and are laid off, if necessary, before "regular" employees are reduced in force.

Women accumulate seniority only in specific classifications; cannot displace men at time of layoff

Female employees will accumulate seniority in female classifications only.

Female employees engaged in occupations classified as male jobs will be considered as temporary, and no seniority provision will apply with respect to male jobs. In cases of layoff only: Female employees engaged in male occupations may exercise their seniority rights on other female jobs within their department.

Women who fill men's jobs during a period of labor shortage may be laid off without regard to seniority

If, during a period of labor shortage, it becomes impossible to hire a sufficient number of qualified male employees, the company may then open bidding in jobs where shortages exist to female employees for as long as the labor shortage continues.

When such labor shortage no longer exists, reductions in force and layoffs may be accomplished without regard to seniority insofar as women employees are concerned, in order to revert back to the status existing before the labor shortage occurred.

Seniority Disregarded in Special Cases

Sometimes an exception to the use of seniority in determining the order of layoffs may be permitted by the agreement under extraordinary or emergency conditions. These circumstances, if defined by the contract, often cover such contingencies as emergency situations arising from material shortages or power failures. Exceptions to the use of seniority may be left to management's discretion or jointly determined under special conditions or circumstances.

Seniority provisions inapplicable in layoffs caused by an emergency

The [seniority] provisions of this article shall be suspended and shall not apply in the case of a force surplus brought about by an emergency over which the company has no control or advance notice, and which results in a sudden drop in the workload, except that, insofar as possible, the company will be guided by seniority in making layoffs.

Seniority provisions inapplicable in determining the order of layoff during a temporary reduction in operations

In the application of the seniority provisions of this article, a layoff shall be considered an interruption of employment caused by a reduction in force due to a reduction in regular operating schedules, as distinct from temporary layoffs which are due to material shortage, equipment failure, power failure, labor dispute, or other similar circumstances which cause a temporary cessation or reduction in operations of such nature that application of the regular seniority provisions would not be feasible.

Departure from seniority procedures jointly determined by the company and union during slack periods

It is recognized that it may become necessary specifically in times of reduced business volume, for a departure from strict interpretation of seniority as herein defined in order to maintain operating efficiency and avoid losses which may jeopardize the existence of the company and the livelihood of its employees. Should such course become necessary, the management will discuss and negotiate same with the shop bargaining committee to the best interest of all.

Company notifies union representative before departing from seniority principle during layoff

The company recognizes the principle of seniority and, in accordance therewith, in the event that it becomes necessary to reduce the number of employees working, those employees last hired in each department shall be laid off first, and in rehiring, employees who were regular employees at the time of their layoff shall be restored to work in each department in the reverse order in which they were laid off; provided, however, that in case any departures from the strict principle of seniority are necessary, the company, when consistent with the proper and efficient operation of the company, shall give the appropriate department's shop steward at least 24 hours' notice.

Differences submitted to arbitration if parties fail to agree on departure from seniority principle

In the event the employer claims that the maintenance of the employer's standards of production requires an exception to any of the foregoing provisions of the seniority clause in any specific instance, the employer may request the union for an appropriate exception in any such specific instances and if no agreement is reached, the matter shall be submitted to arbitration . . .

Summaries of Studies and Reports

Worker Mobility in Three Skilled Occupations

RECENT Bureau of Labor Statistics mobility studies of tool and die makers, foundry molders, and electronic technicians show that skilled workers, after learning their trade, very seldom change their occupation; moreover, they have a strong attachment to their employers and to their city of employment. The flexibility of the American skilled worker is demonstrated, however, by the fact that a sizable minority of workers were willing to change employers and even geographical location, and that workers while continuing to work in their skill specialty were able to move freely among employers regardless of industry or type of plant. Good business conditions, more than anything else, produce the most voluntary job changes. These studies supported the belief that mobility rates decline with advancing age and longer service on the job and that marriage and homeownership restrict geographic mobility.

Job interest and aptitude were the chief reasons workers chose to become electronic technicians or tool and die makers, but the influence of family and friends was the primary factor for men who became molders and coremakers.

Studies of labor mobility throw considerable light on such questions as: How deliberate are workers in their job choice? How do workers find jobs? How much effect do job changes or the possibility of such changes have on wage determination? Why do some workers change jobs often and others not at all?

To manpower analysts, worker mobility is one of the principal factors in gaging the supply and flexibility of the skilled work force, and hence particularly significant in connection with mobilization problems.

The Bureau has made three studies of mobility in skilled occupations: Namely, tool and die makers, foundry hand molders and coremakers, and electronic technicians. In each study, be-

tween 1,700 and 2,000 individual workers were interviewed to obtain data on their backgrounds and personal characteristics and a complete work history from 1940 to the date of the survey (1951 or 1952).¹

While some general conclusions regarding skilled workers is made on the basis of the three occupations studied, it is recognized that individual skilled occupations might show considerable variety in mobility patterns. The three occupations were selected for study primarily because of their importance in a mobilization period, and also because of the contrasting characteristics of the occupations and the backgrounds of the workers in them.

Patterns of Mobility

Recent mobility studies give the impression of both stability and flexibility among skilled workers in the United States. The Bureau of Labor Statistics surveys and other recent studies reveal that skilled workers show strong attachment to their employers and even stronger attachment to their skill specialty and to their geographical location or city of employment. The 6-city survey of occupational mobility² showed that skilled workers made relatively fewer job changes than semiskilled or unskilled workers. Although the 6-city study revealed that skilled workers made relatively more job changes than professional, managerial, or clerical workers, the design of the survey and the tabulation of the data may have caused the mobility rate of skilled workers to be overstated.

¹ See BLS Bull. 1120, *The Mobility of Tool and Die Makers, 1940-51* (summarized in the *Monthly Labor Review* for December 1952, p. 605, January 1953, p. 8, and March 1953, p. 254); Bull. 1150, *The Mobility of Electronic Technicians, 1940-52* (summarized in the *Review* for March 1954, p. 263); and Bull. 1162, *The Mobility of Molders and Coremakers, 1940-52*.

The Department of the Air Force financed these studies as part of a program to develop methods of systematically determining the manpower feasibility of military programs. The sample designs called for representation of the major activities in which these occupations are utilized; the surveys were confined to eight large- and medium-sized cities. The names of the individual workers were obtained from the payroll records of a selected sample of establishments in the employing industries.

² Gladys L. Palmer, *Labor Mobility in Six Cities, A Report on the Survey of Patterns and Factors in Labor Mobility, 1940-50*, New York, Social Science Research Council, 1954.

If the work histories of skilled workers had been tabulated only after they had qualified in a skilled occupation, it is likely that skilled workers would have ranked among the least mobile of the occupational groups. It was found that workers became much less likely to change employers once they were in a skilled job. Thus, whereas only 26 percent of the skilled workers in the 6-city study had only 1 employer during the 10-year period, 56 percent had only 1 employer while working in their skilled occupations.³ About 57 percent of the tool and die makers interviewed in the Bureau of Labor Statistics survey had worked for only 1 employer after qualifying in the trade during the 11-year period 1940–51.⁴ Similarly, less than one-half of the molders had changed jobs between 1940 and 1952.⁴ About two-thirds of the electronic technicians, however, had worked for at least two employers during the survey period.⁴ A substantial number of workers in this young and rapidly expanding field had interrupted their "careers" as electronic technicians to go into the Armed Forces or to obtain further technical schooling and many of them did not return to the same employer. Thus, a larger proportion of workers in this occupation had worked for more than one employer.

Skilled workers show a high degree of occupational attachment. The work experience of persons in skilled occupations shows that once having qualified in a skilled trade they did not often transfer to other fields of work. Only about 5 percent of the electronic technicians interviewed had worked in jobs in other fields after having worked once as an electronic technician. During the 11-year period studied, more than 90 percent of the tool and die makers worked only as tool and die makers after qualifying in the trade.

³ Charles A. Myers and George P. Schultz, *Patterns of Mobility of Skilled Workers and Factors Affecting Their Occupational Choice, Six Cities, 1940 Through 1951*, Cambridge, Industrial Relations Section, Massachusetts Institute of Technology, February 1951. This report is based on an analysis of the 10-year work histories obtained in interviews with male skilled workers who were employed during 1950 in 6 large cities. The work histories were obtained as part of the 6-city study of occupational mobility cited in footnote 2.

⁴ Although work histories were obtained for an 11-year period for tool and die makers and a 12-year period for molders and electronic technicians, only the period after the worker had qualified in the trade was considered in determining mobility rates. Thus, on the average, tool and die makers were in the labor force in that trade less than 9 years, molders about 10 years, and electronic technicians about 7½ years during the periods covered.

⁵ Internal Migration in the United States, April 1940 to April 1947, U. S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-20, No. 14, April 15, 1948.

Among molders, it was found that during the 12-year period only about 15 percent of the workers interviewed had worked in an occupation other than molding; and, in all, only about 3 percent of the time that the molders spent in the labor force during the period 1940–52 was in jobs other than molding. The 6-city study revealed that 76 percent of the skilled workers were attached exclusively to one skilled occupation during the 10 years studied.

To complete the picture of relative stability, it was found that only a small percentage of the skilled workers interviewed had made geographical moves. The work histories of 2 of the 3 skilled occupations surveyed by the BLS indicated considerably less geographical mobility than for the labor force as a whole. Census data⁵ show that in April 1947, 21 percent of the labor force lived in a different county than they did 7 years previously. In the tool and die maker study, less than 10 percent of these craftsmen had changed their city of employment during the 11-year period. Likewise, only 10 percent of the molders had changed their city of employment during the 12-year period. But as would be expected, a greater proportion of the electronic technicians—about 20 percent—changed their city of employment during the same 12 years since, as was mentioned earlier, many did not return to former employers after attending technical schools in other cities. The low rate of geographical mobility of skilled workers may also be seen from examination of the entire work history records of one skilled occupation, that of molders. Three out of four of this older group of workers were still working in the same cities in which they had qualified as journeymen.

Despite the large proportion of skilled workers not changing jobs, other data show evidence of flexibility among skilled workers. First of all, there was a sizable minority of the workers who were willing to change employers and even geographical location. Data for skilled workers as a whole show that this mobile group made a fairly large proportion of all the job changes made by skilled workers. Among tool and die makers, for example, 60 percent of the job changing was done by 14 percent of the workers. Among molders, 63 percent of all the job changes were made by only 17 percent of the workers who changed jobs 3 or more times during the period surveyed. Myers

and Shultz estimate that among the skilled workers in the 6-city study this mobile minority ran as high as 20 or 25 percent.

The flexibility of skilled workers is also demonstrated by the type of job changes made. Skilled workers show an occupational attachment independent of their attachment to employer or industry. Workers qualified in a skilled trade that is used in many different types of establishments were able to move freely among employers regardless of industry or type of plant. For example, when a tool and die maker changed employers, it was a better-than-even chance that his new employer was in a different industry. In all, about one-third of the tool and die makers worked in more than one industry during the 11-year period covered by the survey. Similarly, molders were able to shift between various types of foundries. The study showed that 4 out of 5 molders who changed jobs had worked with more than one kind of metal and almost one-half of the workers who had changed jobs had worked in both captive and independent shops. Electronic technicians also had considerable mobility between different types of electronic establishments. For example, half of the electronic technicians working in research laboratories at the time of the survey and nearly half of those employed in aircraft manufacturing had had electronic technician jobs in other fields during the 12-year period.

Some of the findings regarding the amount and patterns of mobility have implications for manpower planning. For example, the conclusion that workers in skilled occupations utilized in several different types of establishments were able to move freely among employers regardless of industry or type of plant is significant in a mobilization period. For example, new defense plants, located in centers where workers in particular skilled occupations are employed, would have a potential pool of experienced skilled workers for recruitment. The fact that only a limited number of workers in these skilled occupations moved from one geographical area to another also has important manpower planning and plant location implications.

Factors Affecting Mobility

The BLS surveys, as well as other mobility studies, found a consistent relationship existing

between certain personal characteristics of skilled work groups and their mobility rates. The belief that mobility rates decline with advancing age was supported by all three BLS studies. In the molders study, for example, when workers were grouped by the age at which they changed jobs, more than twice as many job changes per man-year were made by molders under 35 years old than those 50 or over.

Closely related to age, but apparently to some extent an independent factor, is length of service on the job. By and large, studies have found a decreasing tendency for workers to change jobs voluntarily as length of service increases. This was indicated in the BLS studies of tool and die makers and of molders. Reynolds, in his study of New Haven manual workers,⁶ indicates that time on the job is even more important than age. According to BLS findings, job security, as formalized in seniority arrangements, is a major cause of lower mobility among long-service workers. In the molders study, it was found that the average duration of jobs which were covered by seniority programs was significantly greater than those which were not so covered.

One might expect that married men or those with families would be less likely to make voluntary job changes than unmarried men. However, BLS studies indicated that married men changed employers just about as frequently as the unmarried. Such small differences as did appear could be attributed to age. On the other hand, marital status did affect geographical mobility. The unmarried tool and die makers, for example, changed cities of employment proportionately twice as often as did the married workers.

An attempt was made to measure the effect of homeownership on mobility in the studies of the molders and of the electronic technicians. Here, homeownership appeared to be a particularly strong factor restricting job changing, even after allowing for the influence of age (homeowners being a considerably older group). With respect to geographic mobility, molders who were non-homeowners were three times as mobile.

It is difficult to generalize on the relationship between the extent of formal education and the rate of mobility for skilled workers. There has been some evidence of a tendency for mobility

⁶ Lloyd G. Reynolds, *The Structure of Labor Markets*, New York, Harper and Brothers, 1951.

and years of schooling to be positively correlated for some groups of workers. In only 1 of the 3 BLS studies was this found. Among tool and die makers, workers who had not gone beyond the eighth grade averaged less than one job change during the period 1940-51 while those with some college training averaged almost two shifts. Men with partial or complete high school education had mobility rates between these two extremes. Even when years of schooling were standardized by age, the relationship between education and mobility persisted. However, for molders and for electronic technicians, the extent of education apparently was not related to the tendency of these workers to change jobs; such differences as did appear could be attributed to age.

The factor which could have the greatest effect on the volume of job changing, both voluntary and involuntary, is the level of business activity. A given propensity to move for a particular group will produce greater rates of voluntary movement in prosperity than in depression simply because of the greater availability of job openings. It was found in the BLS studies that fluctuations in mobility reflected changes in general economic and labor market conditions. For example, among molders, the highest annual rate of job movement in the 1940-52 period was double that of the lowest year. Fluctuations in the rate of job changing and in the proportion which was voluntary closely paralleled changes in foundry activity.

Reasons for Job Choice

Each worker in the BLS studies was asked to indicate the influences which he thought led him into the particular skilled occupation. Of particular interest is the fact that half of the electronic technicians indicated that they were interested in

electronics long before they even thought seriously about the kind of work they wanted to do. Fifteen percent said they had been interested in electronics since early youth. Hobby work was mentioned specifically by 36 percent. Another sizable group, 14 percent, entered electronics because they were assigned and trained in this field while in the Armed Forces. The influence of families or friends was cited by 9 percent. Another 9 percent of the group entered electronics primarily because they thought it offered favorable opportunities for a successful career. Only about 6 percent attributed their interest to their previous job experience. A very small proportion, less than 2 percent, said that their entering this field was accidental, that they "just drifted into electronics."

The replies of foundry molders revealed a very different set of influences leading them into the trade and their replies were quite specific. Perhaps the most striking fact is that only about 8 percent said they entered the occupation because of job interest. About 20 percent entered because it offered an opportunity to learn a skilled trade, to improve their social status, or to earn higher wages. The largest single explanation—given by nearly one-half of the men—was influences of family members or friends.

About three-fourths of the tool and die makers gave fairly definite reasons why they entered the trade and the remainder indicated they had just drifted into it. About one-half of those who could give definite reasons said they were mechanically inclined and had looked for an occupation in which they could use their aptitudes. Another 30 percent reported entering the occupation because of the advice or example of their families or friends. One-third of those interviewed reported other members of their family in the trade.

—SOL SWERDLOFF

Division of Manpower and Employment Statistics

Wages and Related Practices in the Machinery Industries, 1954-55

STRAIGHT-TIME average hourly earnings of production workers in nonelectrical machinery manufacturing establishments rose 3 percent between 1954 and 1955, according to the latest annual survey of these industries conducted by the Bureau of Labor Statistics in the winter of 1954-55.¹ Total employment and scheduled weekly hours were reduced slightly over the year in nearly all of the 21 labor market areas studied. As in preceding years, pay levels were highest in Detroit. Tool and die makers, the highest paid occupation studied, were the only group of workers whose average exceeded \$2 an hour in all 21 areas. Little change in the percentage of workers covered by various supplementary wage benefits was noted, although some of the benefits were liberalized during the year.

TABLE 1.—Indexes of straight-time average hourly earnings¹ in machinery manufacture in selected areas and occupations, January 1954 and January 1955, and percent increases to selected periods from specified dates

Area and occupation	Indexes (1947-49=100)		Percent increases from—			
	January 1954 ²	January 1955 ²	January 1945 to January 1955	December 1951 to January 1953	January 1953 to January 1954	January 1954 to January 1955
<i>Area</i>						
All areas combined ³	130.9	135.0	88.2	6.6	4.4	3.1
Baltimore ⁴	126.4	136.4	88.5	8.3	4.4	7.9
Boston.....	128.4	132.5	90.4	5.9	5.1	3.2
Chicago.....	131.9	136.5	95.5	7.3	4.7	3.5
Cleveland.....	127.2	130.4	78.5	4.7	5.1	2.5
Dallas.....	129.3	131.6	70.0	5.7	5.8	1.8
Detroit.....	130.9	134.7	73.3	5.6	5.4	2.9
Hartford.....	132.1	135.9	90.2	8.7	4.6	2.9
Houston.....	128.3	133.2	80.2	5.9	4.6	3.8
Los Angeles.....	129.3	134.3	74.7	8.0	3.6	3.9
Milwaukee.....	134.3	138.4	104.1	7.1	4.1	3.1
Minneapolis-St. Paul.....	133.4	137.7	92.2	7.7	5.1	3.2
Newark-Jersey City.....	128.8	132.6	80.6	6.2	3.0	3.0
New York City.....	129.1	134.0	89.5	6.2	4.9	3.8
Philadelphia.....	135.6	140.0	96.5	9.5	5.2	3.3
Pittsburgh.....	136.5	139.3	100.3	6.8	7.5	2.1
St. Louis.....	135.8	141.2	108.6	6.3	9.8	4.0
San Francisco-Oakland.....	128.3	132.0	72.7	3.3	6.8	2.9
<i>Occupation</i>						
Laborers, materials handling.....	135.8	140.8	105.4	7.0	4.8	3.7
Tool and die makers (other than tool and die jobbing shops).....	128.7	132.5	75.9	5.9	6.1	2.9

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

² Data apply to months ranging from September to February.

³ Includes data for Buffalo, Denver, Portland, Oreg., and Worcester, not shown separately. Information for years 1945 through 1953 based on 29 areas, for 1954 on 20, and for 1955 on 21.

⁴ A normal increase from January 1954 to January 1955 largely due to shifts in employment in several companies rather than to actual wage increases.

Since the first annual BLS survey of the machinery industries in 1945, straight-time average hourly earnings of production workers have risen 88 percent (table 1), at an average annual rate of 6.5 percent.² During the past decade, annual average increases among the selected areas ranged from 5.4 percent in Dallas to 7.6 percent in St. Louis. The increases among the occupations studied likewise varied. Materials-handling laborers had average annual increases during the 10-year period of 7.5 percent, while the skilled tool and die makers had average increases of 5.8 percent. (See chart 1.) These increases refer to the rise in average hourly wage rates or, in the case of incentive workers, in average straight-time hourly earnings. Although basic wage rate adjustments were a primary factor in the upward movement of pay levels, other factors, such as interplant fluctuations in employment, the retention of higher rated workers, and changes in the relative size or importance of the machinery industries in the cities surveyed, may have exerted minor effects on the movement of the index during the 10-year period.

Characteristics of the Industry

About 1,110,000 production workers were employed in the nonelectrical machinery industries in January 1955 and, for the most part, they were concentrated in the larger urban areas. About 40 percent of these workers were located in the 21 areas studied by the Bureau. Production-worker employment within the scope of the study ranged from less than 4,000 in Dallas, Denver, and Portland (Oreg.), to nearly 70,000 in Chicago. Eight of the areas had over 25,000 production workers, 6 had between 10,000 and 20,000, 4 between 5,000 and 10,000, and 3 less than 4,000 workers.

Two-thirds of the workers in the 21 areas surveyed were in establishments with 250 or more employees. Size of establishment in the machinery

¹ These studies included machine-tool accessory establishments with 8 or more workers and other nonelectrical machinery establishments with 21 or more workers. Data were collected by field representatives under the direction of the Bureau's regional wage analysts. Detailed reports for each area and job descriptions used in classifying workers in the selected occupations studied are available upon request. A comprehensive report summarizing results of these studies in the 21 areas will be published in a forthcoming BLS report.

² The methods used in constructing the indexes are described in Wage Trends in Machinery Manufacturing, 1945-51, Monthly Labor Review, January 1952 (p. 48). However, in computing the indexes for January 1953, 1954, and 1955, constant weights, based on an average of 1953 and 1954 employment, were used.

industries, however, varies from jobbing shops with a few workers, to very large plants with several thousand workers engaged in mass production. In New York City, 60 percent of the workers were in plants with less than 250 employees and nearly a third were employed in plants with less than 50 employees. Seventy percent of the workers in Milwaukee and Hartford, on the other hand, were in plants with 1,000 or more workers and only about 15 percent were in plants with less than 250 workers.

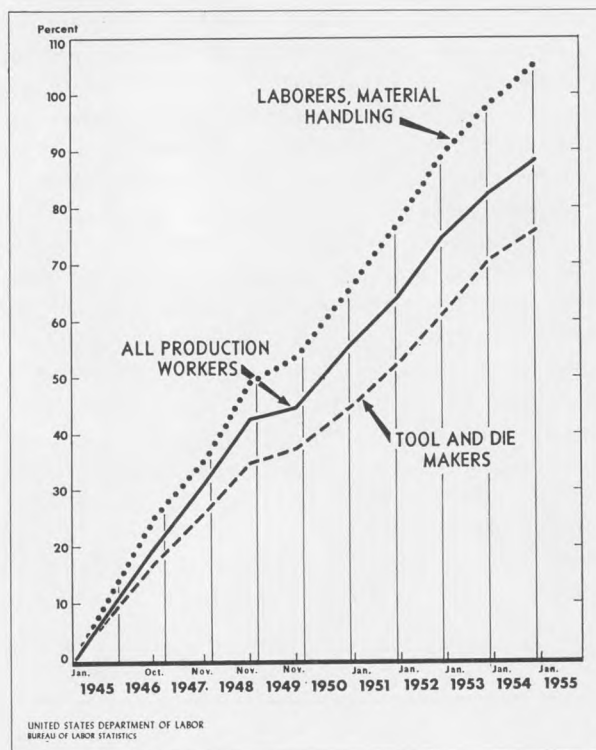
The diversification of products in the machinery industries, noted in all of the areas covered by the study, was especially pronounced in the Midwest. At the same time, certain areas were identified with products used in specific industries, for example, agricultural machinery in Chicago, Milwaukee, and Minneapolis-St. Paul and oil-field machinery in Dallas, Houston, and Los Angeles, although a majority of the area's machinery workers were not engaged in their production. Despite the variations in size and complexity of machines produced and the differences in labor requirements and method of production, the machinery industries are characterized by a general similarity of processes and compete for the same types of labor.

Earnings, 1954-55

Average straight-time hourly earnings for the selected occupations studied were generally highest in Detroit (table 2). Next in line were the larger Midwestern machinery centers (Milwaukee, Cleveland, and Chicago) and San Francisco-Oakland. For most occupations, Dallas, Baltimore, Worcester, and Boston had the lowest average earnings. An intercity difference of from 50 to 75 cents between the highest and lowest average for a job was not unusual; percentagewise, the largest differences usually appeared in the lower skilled jobs. Average hourly earnings of tool and die makers in San Francisco were about 30 percent higher than the average for similar workers in Dallas. Janitors and laborers handling materials, on the other hand, earned about 60 percent more in Detroit than in Dallas.

Straight-time average hourly earnings of tool and die makers engaged in the maintenance or production of tools, dies, jigs, and fixtures for use within their own shop ranged from \$2.02 in Dallas

Chart 1. Percent Increases in Average Straight-Time Hourly Earnings for All Production Workers and Two Selected Occupations in Machinery Manufacturing, January 1945 to Specified Dates



to \$2.67 in San Francisco. Tool and die makers employed in tool and die jobbing shops tended to have somewhat higher earnings; these workers averaged from \$2.16 in Boston to \$3.01 in Detroit. (See tables 2 and 3.) Class A machine-tool operators, setting up their own machines and working to close tolerances on diversified work, averaged between \$1.82 an hour in Dallas and \$2.74 in Detroit, with 18 of the areas falling between \$2.02 and \$2.38. Average earnings of skilled assemblers, inspectors, electricians, machinists, and welders also exceeded \$2 an hour in all except a few areas.

Women constituted less than 10 percent of the production workers in all of the 21 areas studied with the exception of Hartford (nearly 25 percent) and San Francisco (about 15 percent). Most of the women were found in the larger plants and usually they engaged in such work as routine assembly and inspection or performing repetitive machine-tool operations. Typically, their earnings were between \$1.45 and \$1.65, and averaged from 9 to 17 cents below those for men in com-

parable jobs. (These comparisons, of course, are not based on earnings in identical establishments.)

Nearly a fourth of the production workers in the machinery industries were paid under incentive systems of wage payment. Generally, incentives were not important in the southern or far western areas studied. No workers were reported under incentive systems in Dallas or Portland (Oreg.). In the other areas, the proportions ranged from less than 2 percent in San Francisco-Oakland to 53 percent in Hartford. In Philadelphia, Pittsburgh, and Milwaukee, over 40 percent of the workers were paid under such systems. In nearly all instances in which comparisons could be made, workers paid on an incentive basis earned more than workers paid time rates in the same jobs. The effect of incentive earnings on job averages in an area depends not only on the difference between time and incentive earnings but also on the relative number of workers under each system. The greatest effect of incentives was found in Milwaukee and Philadelphia where a large pro-

portion of the workers were paid under incentive systems and the differences between time and incentive earnings were substantial. But in Hartford, which had the largest proportion of workers on incentives, the effect was small because time and incentive earnings were about the same.

In Cleveland, Hartford, and Worcester, earnings for selected occupations in the machine-tool industry were nearly always higher than in the machinery industries combined for each area. (See table 4.) Average earnings for workers in this industry in Cleveland were much higher generally than in the other two areas.

Extent of Union Coverage

Over four-fifths of the production workers were in establishments with labor-management agreements covering a majority of the production workers in Buffalo, Cleveland, Detroit, Hartford, Houston, Milwaukee, Newark-Jersey City, Philadelphia, Portland (Oreg.), St. Louis, and San Francisco-Oakland. In Los Angeles about half

TABLE 2.—*Straight-time average hourly earnings¹ for men in selected occupations in machinery manufacturing plants in 21 areas surveyed between September 1954 and February 1955²*

Occupation	Balti- more	Boston	Buffalo	Chicago	Cleve- land	Dallas	Denver	Detroit	Hart- ford	Hous- ton	Los Angeles
Assemblers, class A	\$1.97	\$2.04	\$2.03	\$2.28	\$2.28	\$1.73	\$2.06	\$2.48	\$2.09	\$2.02	\$2.09
Assemblers, class B	1.63	1.86	1.87	2.03	2.03	1.53	1.78	2.08	(3)	1.83	1.88
Assemblers, class C	1.61	1.51	1.74	1.73	1.75	1.34	1.53	(3)	1.64	1.72	1.53
Electricians, maintenance	2.02	2.03	2.05	2.37	2.26	1.85	2.04	2.57	2.07	2.46	2.42
Inspectors, class A	2.07	1.99	2.17	2.26	2.17	1.91	2.03	2.55	1.94	2.26	2.19
Inspectors, class B	1.80	1.75	1.95	2.01	2.11	1.61	(3)	2.11	1.79	(3)	1.96
Inspectors, class C	1.47	1.55	(3)	1.74	1.94	(3)	(3)	1.98	1.63	1.72	1.76
Janitors, porters, and cleaners	1.33	1.38	1.50	1.58	1.62	1.14	1.43	1.85	1.44	1.50	1.55
Laborers, materials handling	1.35	1.52	1.59	1.65	1.74	1.21	1.53	1.90	1.50	1.43	1.58
Machine-tool operators, production, class A ⁴	2.02	2.07	2.09	2.34	2.27	1.82	2.18	2.74	2.11	2.12	2.21
Drill-press operators, radial, class A	2.00	2.10	2.07	2.27	2.29	(3)	1.89	2.68	2.01	2.05	2.09
Drill-press operators, single- or multiple-spindle, class A	(3)	2.20	1.75	2.16	2.28	(3)	(3)	(3)	2.02	(3)	2.06
Engine-lathe operators, class A	1.96	2.01	2.04	2.33	2.23	1.90	2.17	2.70	2.10	2.30	2.20
Grinding-machine operators, class A	2.10	2.12	2.15	2.43	2.33	(3)	2.18	2.75	2.19	2.12	2.31
Milling-machine operators, class A	2.08	2.18	2.03	2.38	2.25	1.88	2.29	2.72	2.04	2.15	2.14
Screw-machine operators, automatic, class A	(3)	2.10	(3)	2.47	2.37	1.84	2.29	2.34	2.25	(3)	2.23
Turret-lathe operators, hand (including hand screw machine), class A	2.08	1.99	2.03	2.29	2.28	1.86	2.16	2.47	2.10	2.17	2.18
Machine-tool operators, production, class B ⁴	1.81	1.73	1.86	2.05	2.08	1.59	1.81	2.08	1.88	1.98	1.94
Drill-press operators, radial, class B	1.77	1.74	1.90	2.03	2.09	1.45	1.97	(3)	1.90	1.84	1.94
Drill-press operators, single- or multiple-spindle, class B	1.81	1.69	1.83	2.00	1.98	1.47	1.73	2.04	1.66	(3)	1.81
Engine-lathe operators, class B	1.57	1.76	1.85	2.03	2.27	1.70	1.78	2.15	1.83	(3)	1.95
Grinding-machine operators, class B	(3)	1.78	1.79	2.05	2.16	(3)	1.79	2.14	1.95	(3)	1.97
Milling-machine operators, class B	(3)	1.80	2.00	2.04	2.01	1.60	(3)	2.13	1.82	(3)	1.98
Turret-lathe operators, hand (including hand screw machine), class B	1.67	1.72	1.86	2.09	2.02	1.63	1.89	2.06	1.86	1.92	1.93
Machine-tool operators, production, class C ⁴	1.72	1.51	1.65	1.79	1.75	1.39	1.57	1.94	1.78	1.72	1.72
Drill-press operators, single- or multiple-spindle, class C	(3)	1.77	1.68	1.72	1.69	1.24	(3)	1.95	1.79	(3)	(3)
Engine-lathe operators, class C	(3)	(3)	1.74	1.82	1.88	1.54	(3)	(3)	(3)	(3)	1.78
Grinding-machine operators, class C	1.58	(3)	1.70	1.76	1.78	(3)	(3)	1.98	1.83	(3)	1.68
Milling-machine operators, class C	(3)	1.71	(3)	1.89	1.79	(3)	(3)	1.91	1.71	(3)	(3)
Turret-lathe operators, hand (including hand screw machine), class C	(3)	1.44	(3)	1.88	1.81	1.42	(3)	(3)	1.66	(3)	1.79
Machine-tool operators, toolroom	(3)	1.94	2.00	2.28	2.30	1.76	2.06	2.50	2.30	(3)	2.29
Machinists, production	1.98	2.20	2.04	(3)	2.13	1.91	1.92	(3)	(3)	2.25	2.25
Tool and die makers (tool and die jobbing shops)	(3)	2.16	2.33	2.87	2.51	(3)	(3)	3.01	2.17	(3)	2.54
Tool and die makers (other than tool and die jobbing shops)	2.25	2.19	2.23	2.59	2.43	2.02	2.14	2.63	2.25	2.41	2.44
Welders, hand, class A	2.00	1.94	2.12	2.34	2.21	1.77	1.96	2.33	2.02	2.27	2.19
Welders, hand, class B	(3)	1.88	1.98	2.02	2.00	1.53	1.80	2.17	(3)	(3)	1.94

TABLE 2.—Straight-time average hourly earnings¹ for men in selected occupations in machinery manufacturing plants in 21 areas surveyed between September 1954 and February 1955²—Continued

Occupation	Milwaukee	Minneapolis-St. Paul	Newark-Jersey City	New York City	Philadelphia	Pittsburgh	Portland (Oreg.)	St. Louis	San Francisco-Oakland	Worcester
	Assemblers, class A	\$2.42	\$2.03	\$2.24	\$2.24	\$2.13	\$2.25	\$2.20	\$2.08	\$2.23	$2.05
Assemblers, class B	2.18	1.87	1.88	1.85	2.01	2.11	1.99	1.78	1.93	1.85
Assemblers, class C	1.97	1.73	1.75	1.45	1.76	(3)	(3)	1.64	1.86	1.51
Electricians, maintenance	2.29	2.16	2.23	2.27	2.16	2.26	2.27	2.37	2.37	1.97
Inspectors, class A	2.21	2.08	2.15	2.27	2.12	2.49	2.24	2.21	2.21	1.92
Inspectors, class B	2.04	1.85	1.90	1.92	2.05	2.04	(3)	1.93	2.00	1.89
Inspectors, class C	1.90	(3)	1.74	(3)	1.74	1.70	(3)	(3)	(3)	(3)
Janitors, porters, and cleaners	1.63	1.55	1.50	1.47	1.51	1.62	1.76	1.47	1.75	1.46
Laborers, materials handling	1.73	1.63	1.60	1.61	1.64	1.68	1.80	1.55	1.86	1.57
Machine-tool operators, production, class A ⁴	2.30	2.12	2.21	2.24	2.26	2.25	2.20	2.38	2.28	1.97
Drill-press operators, radial, class A	2.24	2.10	2.14	2.27	2.12	2.02	2.17	2.29	2.23	1.89
Drill-press operators, single- or multiple-spindle, class A	2.21	(3)	1.95	2.10	1.97	(3)	(3)	(3)	2.23	1.98
Engine-lathe operators, class A	2.28	2.10	2.19	2.25	2.30	2.19	2.20	(3)	2.24	1.91
Grinding-machine operators, class A	2.35	2.14	2.15	2.26	2.26	2.25	2.19	2.36	2.20	1.99
Milling-machine operators, class A	2.32	2.13	2.25	2.29	2.26	2.19	2.20	2.43	2.21	1.92
Screw-machine operators, automatic, class A	2.33	2.12	(3)	2.22	(3)	(3)	(3)	(3)	2.27	(3)
Turret-lathe operators, hand (including hand screw machine), class A	2.26	2.10	2.22	2.22	2.28	2.11	2.19	2.22	2.30	1.98
Machine-tool operators, production, class B ⁴	2.11	1.89	1.96	1.83	2.10	2.03	2.01	1.95	1.99	1.83
Drill-press operators, radial, class B	2.09	(3)	2.01	1.87	1.93	(3)	1.98	(3)	2.02	1.76
Drill-press operators, single- or multiple-spindle, class B	2.07	1.79	1.85	1.83	1.81	1.97	1.98	1.92	1.96	1.85
Engine-lathe operators, class B	2.14	1.96	1.84	1.89	1.95	1.99	(3)	1.97	(3)	1.77
Grinding-machine operators, class B	2.23	1.93	2.09	1.83	2.18	1.94	(3)	(3)	2.09	1.78
Milling-machine operators, class B	2.11	(3)	1.91	1.86	2.33	2.09	2.07	1.94	1.90	1.84
Turret-lathe operators, hand (including hand screw machine), class B	2.08	1.92	1.87	1.88	2.22	2.01	2.03	1.98	2.01	1.86
Machine-tool operators, production, class C ⁴	1.95	1.72	1.73	1.59	1.81	1.96	(3)	1.86	1.89	1.56
Drill-press operators, single- or multiple-spindle, class C	1.98	1.70	1.64	1.47	1.71	1.88	(3)	1.60	(3)	(3)
Engine-lathe operators, class C	1.87	(3)	(3)	1.50	(3)	(3)	(3)	(3)	(3)	(3)
Grinding-machine operators, class C	1.91	(3)	1.75	(3)	(3)	(3)	(3)	1.94	(3)	1.49
Milling-machine operators, class C	2.07	(3)	(3)	1.64	1.89	(3)	(3)	1.79	(3)	1.57
Turret-lathe operators, hand (including hand screw machine), class C	1.89	1.77	(3)	(3)	1.72	1.96	(3)	(3)	(3)	1.69
Machine-tool operators, toolroom	2.21	2.10	2.23	2.23	2.20	2.29	2.29	2.33	2.34	1.95
Machinists, production	(3)	(3)	2.04	(3)	2.20	(3)	2.23	(3)	2.28	(3)
Tool and die makers (tool and die jobbing shops)	2.58	(3)	2.42	2.44	2.66	(3)	(3)	(3)	(3)	(3)
Tool and die makers (other than tool and die jobbing shops)	2.40	2.33	2.33	2.47	2.40	2.39	(3)	2.63	2.67	2.13
Welders, hand, class A	2.31	2.03	2.41	2.08	2.41	2.19	2.19	2.35	2.25	(3)
Welders, hand, class B	2.05	1.92	1.98	(3)	(3)	(3)	(3)	1.94	(3)	(3)

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

² Data relate to September 1954 in Buffalo; to October 1954 in Cleveland, Dallas, and Houston; to November 1954 in Minneapolis-St. Paul; to December 1954 in Denver, Hartford, Portland, Oreg., San Francisco-Oakland, and Worcester; to January 1955 in Baltimore, Boston, Detroit, Los Angeles, Milwaukee, Newark-Jersey City, New York City, Philadelphia, Pittsburgh, and St. Louis; and to February 1955 in Chicago. Standard Metropolitan areas except: Newark-Jersey City (Essex, Hudson, and Union Counties,

N. J.); New York City (the 5 Boroughs); Philadelphia-Camden (Philadelphia and Delaware Counties, Pa., and Camden County, N. J.); Chicago (Cook County); and Hartford-New Britain-Bristol (Hartford Metropolitan Area and Berlin, Bristol, New Britain, Plainville, Plymouth, and Southington, Conn.).

³ No data or insufficient data to warrant presentation.

⁴ Includes data for operators of other machine tools in addition to those shown separately.

TABLE 3.—Straight-time average hourly earnings¹ for men in selected occupations in machine-tool accessory manufacturing establishments in 8 selected areas surveyed between October 1954 and February 1955²

Occupation	Chicago		Cleveland		Detroit		Hartford		Los Angeles		Milwaukee	Newark-Jersey City	New York City
	Production shops	Jobbing shops	Production shops	Jobbing shops	Production shops	Jobbing shops	Production shops	Jobbing shops	Production shops	Jobbing shops			
Inspectors, class A	\$2.26	(3)	\$2.07	\$2.30	\$2.40	(3)	\$1.86	\$2.05	\$2.30	\$2.61	(3)	(3)	(3)
Janitors, porters, and cleaners	1.58	\$1.43	1.56	1.49	1.77	\$1.92	(3)	1.37	1.55	1.49	\$1.60	(3)	\$1.39
Machine-tool operators, production, class A ⁴	2.43	2.68	2.14	2.25	2.44	2.98	2.19	2.05	2.29	2.41	2.34	\$2.15	2.18
Engine-lathe operators, class A	2.44	2.64	2.10	2.17	2.36	2.91	2.16	2.08	2.32	2.32	2.37	2.18	2.13
Grinding-machine operators, class A	2.48	2.69	2.13	2.37	2.44	3.01	(3)	2.14	2.36	2.44	2.19	2.10	2.16
Milling-machine operators, class A	2.44	2.56	2.14	2.10	2.44	2.91	(3)	(3)	2.33	2.33	(3)	(3)	(3)
Machine-tool operators, production, class B ⁴	2.06	2.05	2.06	1.93	2.14	(3)	1.99	1.72	2.02	1.98	1.94	1.96	1.73
Engine-lathe operators, class B	2.05	(3)	(3)	(3)	(3)	(3)	(3)	1.72	(3)	2.11	(3)	(3)	(3)
Grinding-machine operators, class B	2.06	2.08	1.98	2.11	2.13	(3)	1.98	1.76	2.01	(3)	1.92	(3)	(3)
Milling-machine operators, class B	2.09	2.10	2.10	1.93	2.13	(3)	(3)	(3)	(3)	(3)	(3)	(3)	1.77
Machine-tool operators, production, class C	1.78	1.71	1.81	1.64	(3)	(3)	(3)	1.44	1.73	(3)	1.82	1.62	1.50
Tool and die makers (tool and die jobbing shops)	(3)	2.87	(3)	2.51	(3)	3.01	(3)	2.17	(3)	2.54	2.58	2.42	2.44

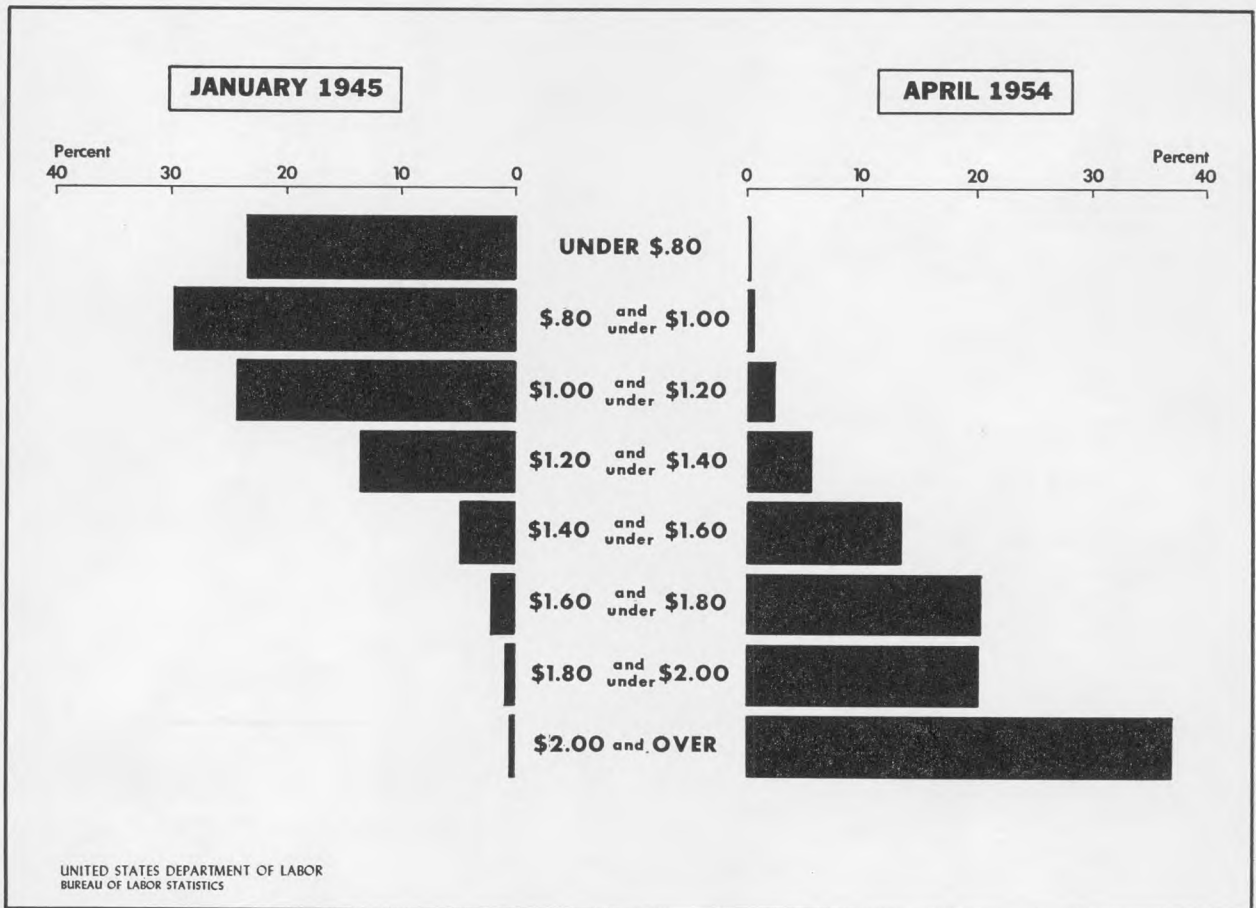
¹ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

² See table 2, footnote 2.

³ No data or insufficient data to warrant presentation.

⁴ Includes data for operators of other machine tools in addition to those shown separately.

Chart 2. Percentage Distribution of Production Workers in the Machinery Industries, by Straight-Time Average Hourly Earnings, January 1945 and April 1954



of the production workers were in plants with agreements. A majority of the production workers in each of the other areas were employed in establishments with labor-management agreements governing wages and working conditions, except in Baltimore, Dallas, and Worcester.

A Decade of Change

Some interesting changes have occurred in the machinery industries since 1945, the date of the Bureau's first annual survey. Total employment was at about the same level in January 1955 as in January 1945. Employment levels, however, generally declined through the first 5 years and then, with the Korean hostilities, increased to a peak in 1953. In 1954, employment again gradually declined. Most of the machinery groups followed this same general pattern, but

there were some variations. For example, the household machinery group showed a sharp increase in employment after World War II, reflecting the pent-up demands for products unavailable during the war. In January 1945, close to the end of World War II, about 1 out of 6 workers were women. By January 1955, the proportion of women had decreased to less than 1 in 10.

Earnings. Wage data for the machinery industries as a whole (rather than for selected localities only) are available for 2 periods in this 10-year span: January 1945 and April 1954.³ The na-

³ Data for 1945 are from Wage Structure Bulletins, Series 2, Nos. 1, 2, and 3. U. S. Department of Labor, Bureau of Labor Statistics. (Information was combined for Machinery, Machine-Tool Accessories, and Machine Tools.) Averages and distributions for April 1954 are from BLS Bull. 1179, Factory Workers' Earnings: Distributions by Straight-Time Hourly Earnings, April 1954 (table 13, p. 30).

tional level of hourly earnings in these 2 periods was \$1 and \$1.89, respectively, as shown below: ⁴

	Average hourly earnings—	
	January 1945	April 1954
United States.....	\$1.00	\$1.89
Northeast.....	.97	1.83
South.....	.83	1.68
Middle West.....	1.03	1.94
Far West.....	1.13	1.98

Even though average hourly earnings in the South doubled as compared with a 75-percent increase in the Far West, the actual cents-per-hour increases were the same (85 cents). The largest monetary increase (91 cents) occurred in the Middle West. In January 1945, more than 80 percent of the workers were earning less than \$1.25 an hour, as contrasted with less than 5 percent in April 1954. (See chart 2.)

The percentage differential between the wages of skilled and unskilled workers narrowed substantially between January 1945 and January 1955 in nearly all cases. This compression of pay differentials occurred largely as a result of cents-per-hour increases granted across the board. Average rates for laborers increased 105 percent, in contrast to 76 percent for tool and die makers.

Establishment Practices. In January 1945, the typical workweek was 48 hours or more, whereas in January 1955, three-fourths of the production workers in all areas covered except Dallas were in establishments with scheduled workweeks of 40 hours or less. In addition to the longer workweek in January 1945, about 1 of every 4 workers was in establishments operating late shifts as compared with 1 out of 6 in January 1955. Only about three-fourths of the establishments operating extra shifts provided extra pay for such work in 1945, whereas in 1955, virtually all shops provided extra pay for extra shift work. As in the case of employment, weekly hours and shift operations have fluctuated from year to year.

About the same proportion of workers (around 23 percent) were working under incentive wage systems in both periods. In January 1945, about two-thirds of the production workers were in establishments with labor-management contracts

TABLE 4.—Straight-time average hourly earnings¹ for men in selected occupations in machine-tool manufacturing establishments in 3 cities, late 1954

Occupation	Cleveland, October 1954	Hartford, December 1954	Worcester, December 1954
Assemblers, class A.....	\$2.44	\$2.22	\$2.13
Inspectors, class A.....	2.28	1.93	(²)
Janitors, porters, and cleaners.....	1.73	1.39	1.55
Machine-tool operators, production, class A ³	2.41	2.21	2.08
Drill-press operators, radial, class A.....	2.42	(²)	1.95
Engine-lathe operators, class A.....	2.35	2.14	2.00
Grinding-machine operators, class A.....	2.49	2.22	2.09
Milling-machine operators, class A.....	2.42	2.19	(²)
Turret-lathe operators, hand (including hand screw machine), class A.....	2.48	2.18	(²)
Machine-tool operators, production, class B ³	2.36	1.97	1.80
Drill-press operators, radial, class B.....	2.28	(²)	(²)
Milling-machine operators, class B.....	(²)	1.93	1.79
Machine-tool operators, production, class C.....	1.77	(²)	1.67

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

² No data or insufficient data to warrant presentation.

³ Includes data for operators of other machine tools in addition to those shown separately.

governing wages and working conditions as compared with about three-fourths of the workers in such establishments in January 1955.

In 1945, provisions for supplementary benefits available to workers were not nearly as widespread or as liberal in the machinery industries as in 1955. In the latter year, virtually all production workers in these industries were in establishments furnishing at least 6 paid holidays a year, vacations of at least 1 week after 1 year of service and 2 weeks after 5 years of service, and large proportions in most areas received 3 weeks of vacation pay after 15 years of service. Nearly all workers were in establishments providing some type of health, insurance, or pension plan and in many establishments the production worker was provided with life insurance, hospitalization, medical and surgical insurance, sickness and accident insurance, and a pension at retirement.⁵

—ALEXANDER N. JARRELL

Division of Wages and Industrial Relations

⁴ Over the slightly longer period from January 1945 to January 1955, the wage index presented in table 1 shows an increase of 88 percent. That index is based on data for selected occupations in 21 areas rather than on average earnings for all workers in the industry. In view of the differences in worker and geographic coverage and in the method used in construction of the index, the correspondence of these two measures of change is remarkably close.

⁵ See Wages and Related Practices in the Machinery Industries, 1953-54, Monthly Labor Review, June 1954, table 5, (p. 655) for information on availability of health, insurance, and pension plans. Such data were not collected in 1955.

Military Manpower— Requirements and Supply, 1955–59

MAJOR POLICY ISSUES before the Congress in the spring of 1955 required information on future military manpower requirements and supply. These were the planned reduction of the Armed Forces to 2.9 million by June 30, 1956, the proposed legislation for strengthening the reserve forces, and the extension of the induction authority. This article presents estimates of available manpower, developed by the Bureau of Labor Statistics, which indicate that the supply of manpower is more than adequate to meet expected military needs in the next few years.¹ The article also discusses some problems which are likely to arise if military requirements continue at current levels.

Historical Review

Expansion of the Armed Forces from 340,000 in August 1939 to a peak level of 12 million in World War II created manpower shortages in many industries and in many occupations. After the outbreak of the Korean emergency, the Armed Forces, which had declined to 1.5 million, more than doubled, reaching a level of 3.6 million by July 1952. This expansion was achieved to a great extent by the large scale callup of Reserves to active duty, which created serious manpower problems for the civilian economy.

Since the end of the Korean emergency the Armed Forces have declined to about 3 million and are currently being maintained at about that level partly through the operations of the Selective Service machinery. Selective Service laws and regulations have been modified in a number of ways since 1950 in order to maintain the Armed Forces at the necessary levels. The length of required service was extended from 18 months to 2 years, physical acceptance standards were lowered, deferments for husbands who were not fathers and those who became fathers after August 25, 1953, were eliminated, and the deferment of students was made subject to certain fixed standards. Moreover, the number of deferments of men in critical occupations has gradually decreased.

Projections, 1955–59

The relationship of supply and demand for military manpower weighs heavily in discussions of proposed legislation to create a substantial and effective reserve force and to change the Selective Service laws and regulations accordingly.

On the supply side, projections of the Selective Service manpower pool—the number of men who, at any specific time, are physically and otherwise qualified, who are liable for induction, and who would not be exempt or otherwise deferrable if reached for induction—are of great importance. The size of the Selective Service Pool has been projected for each fiscal year through 1959 by starting with the estimated pool in July 1954, adding to this base period pool the number of men becoming eligible each year, and subtracting the estimated Armed Force requirements.

It is estimated that in July 1954, 710,000 physically fit, nondeferred men were available for induction (table 1). (Of the total of about 1.6 million Selective Service registrants not in deferred or exempt classes in July 1954, it is estimated that about 900,000 were physically unfit for service or deferrable as students and therefore unavailable for induction at that time.) The number of men becoming available after July 1954—called inflows and added to the base period pool—will average about 700,000 a year until July 1959. An average of 1.1 million men will be turning 18½ each year during this period; however, some will be physically or mentally unfit, others will receive deferments as students and still others will enter the Armed Forces without ever becoming a part of the Selective Service pool. Of the 700,000 who will become available each year, between 400,000 and 500,000 will be young men turning age 18½ and the remainder will be slightly older men—mostly students whose grounds for deferment will have expired.

Estimates of the number of men needed for military service were supplied by the Department of Defense (table 2). In preparing these estimates, the main assumptions were that the induction authority under the Universal Military

¹ A technical description of how these estimates were derived is available in *Military Manpower Requirements and Supply, 1955–59* (processed, February 1955). An earlier report in the series, *Military Manpower Requirements and Supply, 1954–60* (BLS Bull. 1161, 1954) contains a more detailed exposition of the methods used in preparing the estimates.

TABLE 1.—*Projections of the Selective Service manpower pool and the average age of inductees, fiscal years 1955-59*

[In thousands]

Pool	Fiscal year				
	1955	1956	1957	1958	1959
Pool, start of year.....	710	820	1,000	1,230	1,550
Men becoming available for service, total.....	660	680	700	710	730
Nondeferred men reaching 18½ years of age.....	420	430	450	450	470
Deferments expiring.....	240	250	250	260	260
Men leaving to enter the Armed Forces.....	-550	-500	-470	-390	-490
Pool, end of year.....	820	1,000	1,230	1,550	1,790
Average age of inductees at the end of the year.....	21.5	23.5	23.0	24.0	24.5

Training and Service Act of 1951 would be extended through fiscal year 1959, and that the Armed Forces would decline 100,000 from a July 1, 1955, level of about 3 million by the end of fiscal year 1956 and would remain at that level through 1959.

These estimates indicate that most of the men needed in the next few years will be supplied by the Selective Service pool. Of the 3.8 million men who will be needed from civilian life from July 1954 to July 1959, about 2.4 million men will come from the pool. The remainder of the military requirements—about 1.4 million—will come from the Reserve Officers' Training Corps, other Reserve callups from among men who enlist under the age of 18½, men who have had prior service, and from women who volunteer to serve in the various women's military corps.

Because the inflows into the pool will be larger than the requirements during the entire period, the pool will increase each year. Since only 550,000 men will be required to meet Armed Forces requirements during the fiscal year 1955, for example, the pool will increase by 110,000 to a total of 820,000 men by the end of the year. By July 1959, the pool will have increased to almost 1.8 million men—more than 3 times the size of estimated military requirements. (See chart.)

This increase in the size of the pool will be accompanied by an increase in the average age of induction from 21 years to about 24.5 years (table 1). A high average age of induction creates problems for both inductees and the Armed Forces. While most men would become available for service at age 18½, they would not be called

for induction until they reached age 24. Such a situation would disrupt the personal lives of prospective inductees for a long period of time. It would be harder for them to get career jobs, and some of them would have to postpone plans for establishing families. Those who manage to get permanent jobs would have their careers interrupted at a crucial stage. This would also make it difficult for employers, who would lose the services of men with several years of experience. The Armed Forces would be getting older men instead of men of the ages of 19 or 20, who are generally considered more adaptable. Furthermore, the Armed Forces would have to bear the expense of dependency allowances for the families of married men.

Effects of Varying Assumptions

The size of the pool and average age of induction would be substantially different if there were moderate increases or decreases in the main variable factors—size of the Armed Forces and reenlistment rate. The size of the Armed Forces, as already indicated, has fluctuated since the beginning of the Korean emergency and the limited information available during the early Korean emergency indicates that reenlistment rates varied considerably. For example, a net strength level 5 percent above the 2.9 million assumed above, combined with a 35- rather than a 30-percent reenlistment rate would increase the size of the pool to 2.2 million and the average age of induction to almost 25 years in 1959. Com-

TABLE 2.—*Estimated military manpower requirements, fiscal years 1955-59*

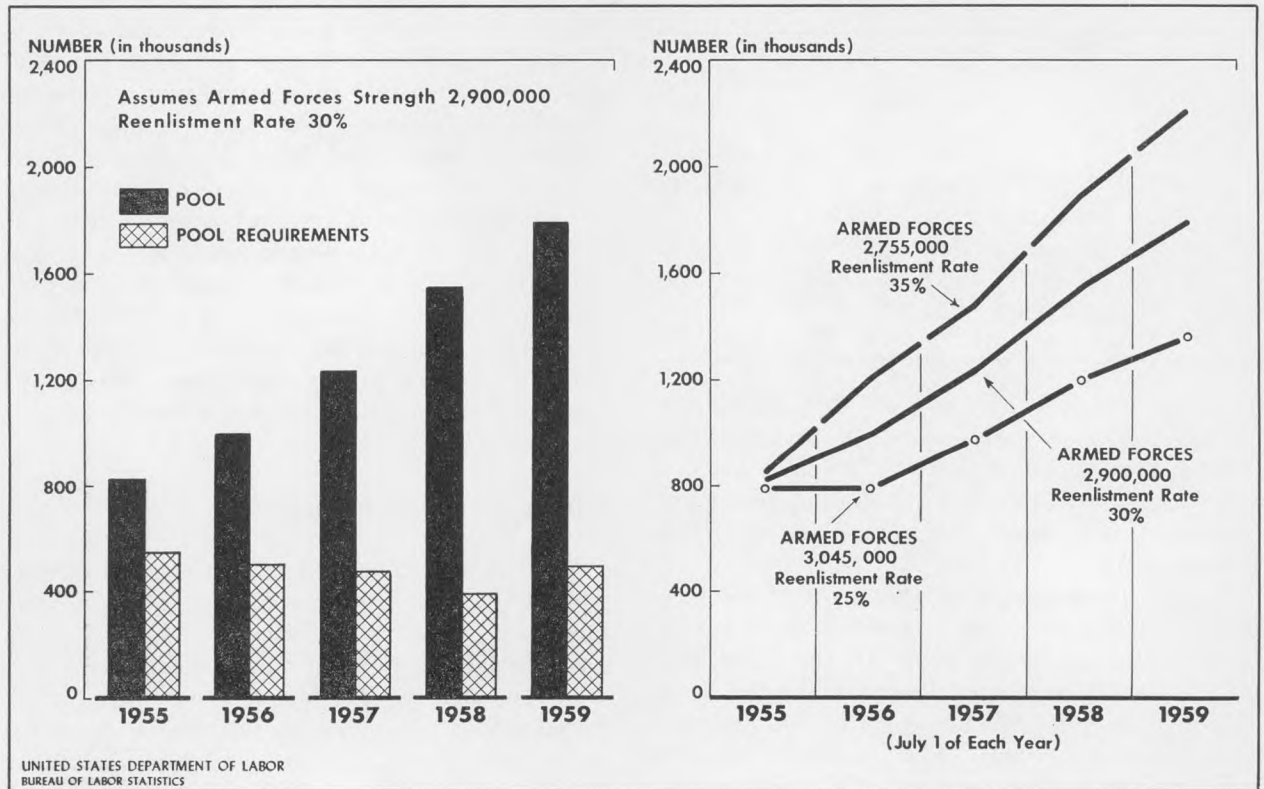
[In thousands]

Armed Forces	Fiscal year				
	1955	1956	1957	1958	1959
Strength, beginning of year.....	3,330	2,980	2,890	2,890	2,890
Inflow.....	840	770	740	650	760
From the Selective Service manpower pool.....	550	500	470	390	490
From outside the Selective Service manpower pool ¹	290	270	270	260	270
Outflow.....	1,190	860	740	650	760
Strength, end of year.....	2,980	2,890	2,890	2,890	2,890

¹ Includes officer gains from ROTC, Reserves, and direct commissions; men enlisting before age 18½, reenlistments of men who have had prior service, and women enlistees.

Source: Department of Defense, February 1955.

Selective Service Pool in Relation to Military Requirements, 1955-59



pared with the projections presented above, the pool would be 400,000 larger and the age of induction about one-half year higher.

With a different combination of circumstances—a slightly higher Armed Forces net strength and a slightly lower reenlistment rate—both the size of the pool and the average age of induction would increase more slowly than under the previous assumptions. Using a net strength 5 percent higher than 2.9 million combined with a reenlistment rate of 25 percent, the pool would be 1.4 million men and the median age of induction, 24 years by July 1959.

The projections in this article are based on a number of assumptions and great care must be used in interpreting the results. The article demonstrates the effects of small changes in the net strength of the Armed Forces or in reenlistment rates. If there is a significantly greater change in these factors than is assumed for illustrative purposes, the conclusions would have to be modified accordingly.

—STUART H. GARFINKLE AND
RAYMOND D. LARSON

Division of Manpower and Employment Statistics

The Fourth World Congress of the ICFTU, May 1955

STRENGTHENING of regional programs to achieve a more effective challenge to communism in underdeveloped areas of the free world characterized the Fourth World Congress of the International Confederation of Free Trade Unions (ICFTU), held in Vienna May 20–28, 1955. These actions took on added significance because they apparently resolved differences on how best to oppose Communist imperialism which had developed between the American Federation of Labor and the British Trades Union Congress.

No other significant policy changes took place. The congress restated its stand with respect to dictatorships, forced labor, independence for colonial areas, and opposition to association with Yugoslav unions.

Despite the Austrian Treaty, which created an atmosphere for the congress somewhat different from that resulting from the East German revolts which preceded the 1953 meeting, there was no indication of a softening of policy toward the Soviet Union. Rather, the Austrian Treaty was interpreted as evidence that persistent resistance to communism carries its ultimate rewards. Neutrality seemed to lack proponents, although an Indian delegate held that co-existence was advantageous to the free world because free institutions were superior to totalitarianism.

A prominent feature of the congress was the unity and influence of the United States delegation, representing the American Federation of Labor, the Congress of Industrial Organizations, and the United Mine Workers. Both the United States and British delegations denied the existence of contention between the two for influence in the ICFTU, although such rivalry had been widely discussed prior to the congress.

Some issues, such as relationships to Yugoslav unions and the sponsoring of co-determination (joint managerial responsibility), evoked disagreement, but a great degree of harmony prevailed.

Participation

The 111 affiliates of the ICFTU embrace more than 54 million workers from 75 different countries or territories, and 53 million were represented by delegates at the congress. Each affiliate in good standing is entitled to at least 1 delegate and, in proportion to membership, additional delegates up to 10. The ICFTU increased its membership by 1.3 million, to a total of 54,525,288, since the 1953 congress in Stockholm.¹ Sixteen additional organizations had joined, including Histadrut from Israel, the 5 Zenro unions of Japan, the Philippine Trade Unions Council, the Northern Rhodesia Trades Union Congress (which includes the native mine workers), the newly formed Labor Union of Morocco, and 2 new petroleum workers' unions from Aruba and Curacao. The executive board did not, however, act on a number of affiliation applications from organizations in countries where there was already an affiliate.

Policies and Discussion

The congress agenda included these policy matters: (1) Financing the organization of trade unions in underdeveloped areas; (2) trade union action for economic and political independence in underdeveloped areas; (3) human rights and labor rights; (4) labor-management relations; and (5) peace and prosperity and their relation to free labor.

Member organizations had submitted 30 resolutions for consideration, including proposals for: control of atomic weapons and experiments; defense of the free world; self-determination for Cyprus; opposition to admission of Spain into the specialized agencies of the United Nations; opposition to relationships with Yugoslav unions; sponsoring co-determination; opposition to racial discrimination in the Union of South Africa; and

¹ See Monthly Labor Review, October 1953 (p. 1055).

The membership figure published at the time of the 1953 congress, i. e., 54,235,143, would indicate that the increase cited above is a gross figure which takes no account of fluctuations in the membership of affiliates or of withdrawals. The 16 new affiliations reported also would appear to represent a gross count, in view of the fact that 102 member organizations were claimed in 1953, compared with 111 in 1955.

association of free unions without regard to religion, race, or political differences. Most of these resolutions were adopted in some form.

One of the more important resolutions was that relating to atomic energy. The congress indicated awareness of the advantages which might accrue to labor in both industrial and underdeveloped areas from the development of atomic energy for peaceful uses, but expressed deep concern about its military effects. The executive board voted to call a conference in Geneva of worker representatives from countries utilizing atomic energy, prior to the United Nations conference on that subject August 8-20, and pronounced itself against the use of thermonuclear weapons. It concluded that only general disarmament with adequate supervision and controls could be effective in this regard.

Commenting on a Norwegian proposal that trade unions press for co-determination, Thomas Kennedy (UMW) and Charles J. MacGowan (AFL) defended reliance upon collective bargaining for promoting worker interests. Mr. MacGowan, however, conceded that in some countries co-determination might be desirable for labor as a means of contending with big business, just as nationalization might be in certain countries where management was inefficient. He noted that collective agreements were tending to include many matters formerly regarded as exclusive managerial prerogatives. Both delegates regarded collective bargaining as best for labor in the United States.

Greatest attention centered on the issue of trade union organization in the underdeveloped areas. The congress seemed to regard the development of free trade unions as the most important action in which the ICFTU could engage to accomplish its objectives of resisting and defeating communism, improving standards and conditions of life for workers, opposing dictatorships and advancing democratic institutions, and promoting self-government and independence for colonial peoples. The United States and Canadian delegations proposed an administrative reorganization to make this program more dynamic and effective as an anti-Communist tool. The AFL had in the past been dissatisfied with the ICFTU program, feeling that the ICFTU general secretary followed the less militant viewpoint of the British Trades Union

Congress. An open clash between the two groups did not develop, although the American representatives spoke openly for a positive anti-Communist program of action, while the British held that the best policy against communism was improvement of the economic conditions of workers in underdeveloped areas. Observers credited the leaders of the American delegation, though outspoken in behalf of their policies, with using diplomacy and consideration for the views of others to win the congress to their viewpoint.

A decision was reached with respect to administrative reorganization, with which both delegations expressed satisfaction. The congress established a new office of director of organization, with three or more assistants, directly responsible to the executive board but serviced by the secretariat. This new agency will carry on the regional programs. A special committee will recommend a candidate for the directorship. Omer Becu, ICFTU president, and Pat Conroy, Canadian labor attaché to the United States and former general secretary of the Canadian Congress of Labor, are mentioned as possible candidates.

The executive board was authorized to seek consent for an annual assessment equivalent to 1 cent per member of those affiliates deemed by the executive board as able to pay full dues (a total of about 33,000,000 members) to finance this operation. Thus a total of about \$330,000 per year is anticipated for trade union organization work, compared with the \$812,000 raised on a voluntary basis for the 3-year period, 1951-54. United States affiliates are expected to contribute about \$100,000 a year more to the ICFTU under this arrangement than heretofore.² George Meany, AFL president, stated during the congress that the foreign organizing activities of the AFL would be coordinated with the ICFTU operations, while the Free Trade Union Committee of the AFL would blend its work in the field of propaganda and information with that of the ICFTU.

Prior to the congress, the general secretary received communications from the Communist-

² The Free Trade Union Committee of the AFL contributed only a nominal amount to the ICFTU regional fund and the AFL itself has not heretofore contributed to this ICFTU program, but the CIO gave \$175,000 and has also advocated integration of the foreign activities of affiliates under the ICFTU program. Until now the AFL has had a separate program of international activities.

controlled World Federation of Trade Unions (WFTU) inviting cooperation on a charter of trade union rights and collaboration in action against war. He reported to the congress that he had rejected both proposals on the grounds of ideological incompatibility and had suggested to the WFTU that it was desirable first to apply such rights in the Soviet countries.

A resolution was adopted, in the face of some opposition, reproaching two International Trade Secretariats (the Miners International Federation and the International Federation of Building and Woodworkers) for accepting the affiliation of Government-controlled Yugoslav unions.

During the congress it was learned that 9 of the 32 Indian trade unionists visiting Red China had discontinued their tour and returned home in protest against restrictions imposed on their travel and attempts to have them endorse an Asian Federation of Trade Unions. A number of speakers at the congress urged that free trade unionists eschew invitations to visit countries where there was not full freedom to investigate conditions.

The executive board decided to investigate the trade union situation in Iceland, where the most recent Iceland Federation of Labor elections placed this ICFTU affiliate under the domination of left-wing Socialist and Communist elements.

Elections

The congress unanimously reelected J. H. Oldenbroek (Netherlands) as general secretary and made a few changes in the 25 members of the executive board as proposed by regional caucuses. The United States representatives (George Meany, Walter P. Reuther, and John L. Lewis) and those from Canada (Donald MacDonald and Claude Jodoin) were reelected. The new executive board reelected Omer Becu (Belgium) president and Sir Vincent Tewson (Great Britain) to replace the late Arthur Deakin, as 1 of the 7 vice presidents.

The new executive board was authorized to move the organization's headquarters from Brussels to Paris.

—JOSEPH L. HARMON

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U. S. Department of Labor

Principles and Objectives in U. S. Labor Federation Constitutions

THE American Federation of Labor and the Congress of Industrial Organizations in May 1955 gave executive approval to a constitution for the organization to be created by their merger. Comparison of this document with the constitutions adopted in the past by the two federations suggests the evolution in American labor's principles and objectives which has taken place over the past 75 years. It also focuses the issues which led to the schism in labor's ranks in 1935, which has now been closed. Pertinent excerpts from these charters are presented below.

American Federation of Labor

The preamble to the 1881 Declaration of Principles of the Federation of Organized Trades and Labor Unions, the predecessor of the AFL, stated:

A struggle is going on in the nations of the civilized world between the oppressors and the oppressed of all countries, a struggle between capital and labor, which must grow in intensity from year to year and work disastrous results to the toiling millions of all nations if not combined for mutual protection and benefit. The history of the wageworkers of all countries is but the history of constant struggle and misery engendered by ignorance and disunion; whereas the history of the nonproducers of all ages proves that a minority, thoroughly organized, may work wonders for good or evil. It behooves the representatives of the workers of North America, in Congress assembled, to adopt such measures and disseminate such principles among the people of our country as will unite them for all time to come, to secure the recognition of the rights to which they are justly entitled. Conforming to the old adage, "In union there is strength," the formation of a Federation embracing every trade and labor organization in North America, a union founded upon a basis as broad as the land we live in, is our only hope. The past history of Trades Unions proves that small organizations, well conducted, have accomplished great good, but their efforts have not been of that lasting character which a thorough unification of all the different branches of industrial workers is bound to secure.¹

Article II of the accompanying Plan of Organization (drafted by a committee of which Samuel J.

¹ Proceedings of the American Federation of Labor, 1881-1888; reprinted in 1905.

Gompers was chairman) stated the "objects" of the Federation as follows:

Section 1. The encouragement and formation of Trades and Labor Unions.

Section 2. The encouragement and formation of Trades and Labor Assemblies or Councils.

Section 3. The encouragement and formation of National and International Trades Unions.

Section 4. To secure legislation favorable to the interests of the industrial classes.

The original AFL constitution, adopted in 1886, contained virtually the same preamble but added to the object of encouraging the formation of national and international unions that of securing their autonomy. It also listed as an object the promotion of State and Provincial federations of trades and labor unions.

Congress of Industrial Organizations

Although the unions which constituted the core of the CIO left the AFL in 1936, the new federation was not formally organized until 1938. The preamble and objects contained in the constitution adopted at the CIO's first convention were as follows:

Preamble. The Committee for Industrial Organization formed in November 1935 presented a program to the unorganized workers of this country. In less than 3 years a magnificent record of achievement and overwhelming mass support established the Committee for Industrial Organization as the most powerful and progressive labor force in this country. Active organizing campaigns in the mass production and basic industries have brought into being unions with millions of members in unorganized industries.

A new freedom has been brought by the Committee for Industrial Organization to American workers and it has forged the instrumentality whereby labor will achieve and extend industrial and political democracy.

For the purpose of providing a permanent basis for the continued achievement and success on behalf of the workers of America, this constitution and the principles embraced therein have been adopted.

The objects of the organization are:

First. To bring about the effective organization of the working men and women of America regardless of race, creed, color, or nationality, and to unite them for common action into labor unions for their mutual aid and protection.

Second. To extend the benefits of collective bargaining and to secure for the workers means to establish peaceful relations with their employers, by forming labor unions capable of dealing with modern aggregates of industry and finance.

Third. To maintain determined adherence to obligations and responsibilities under collective bargaining and wage agreements.

Fourth. To secure legislation safeguarding the economic security and social welfare of the workers of America, to protect and extend our democratic institutions and civil rights, and liberties, and thus to perpetuate the cherished traditions of our democracy.

The Merged Federation

The proposed constitution for governing the organization created by the impending AFL-CIO merger states in its preamble:

The establishment of this federation through the merger of the American Federation of Labor and the Congress of Industrial Organizations is an expression of the hopes and aspirations of the working people of America.

We seek the fulfillment of these hopes and aspirations through democratic processes within the framework of our constitutional government and consistent with our institutions and traditions.

At the collective bargaining table, in the community, in the exercise of the rights and responsibilities of citizenship, we shall responsibly serve the interests of all the American people.

We pledge ourselves to the more effective organization of working men and women; to the securing to them of full recognition and enjoyment of the rights to which they are justly entitled; to the achievement of ever higher standards of living and working conditions; to the attainment of security for all the people; to the enjoyment of the leisure which their skills make possible; and to the strengthening and extension of our way of life and the fundamental freedoms which are the basis of our democratic society.

We shall combat resolutely the forces which seek to undermine the democratic institutions of our Nation and to enslave the human soul. We shall strive always to win full respect for the dignity of the human individual whom our unions serve.

Grateful for the fine traditions of our past, confident of meeting the challenge of the future, we proclaim this constitution.

Article II of the constitution lists the following objects and principles for the new federation:

To aid workers in securing improved wages, hours and working conditions with due regard for the autonomy and integrity of affiliated unions.

To aid and assist affiliated unions in extending the benefits of mutual assistance and collective bargaining to workers and to promote the organization of the unorganized into unions of their own choosing for their mutual aid, protection, and advancement, giving recognition to the principle that both craft and industrial unions are appropriate, equal, and necessary as methods of union organization.

To affiliate national and international unions with the federation and to establish such unions; to form organizing committees and directly affiliated local unions and to secure their affiliation to appropriate national and international unions affiliated with or chartered by the federation; to establish, assist, and promote state and local central

bodies composed of local unions of all affiliated organizations and directly affiliated local unions; to establish and assist trade departments composed of affiliated national and international union and organizing committees.

To encourage all workers without regard to race, color, or national origin to share in the full benefits of union organization.

To secure legislation which will safeguard and promote the principle of free collective bargaining, the rights of workers, farmers and consumers, and the security and welfare of all the people.

To protect and strengthen our democratic institutions, to secure full recognition and enjoyment of the rights and liberties to which we are justly entitled, and to preserve and perpetuate the cherished traditions of our democracy.

To give constructive aid in promoting the cause of peace and freedom in the world and to aid, assist, and cooperate with free and democratic labor movements throughout the world.

To preserve and maintain the integrity of each affiliated union in the organization to the end that each affiliate shall respect the established bargaining relationship of every other affiliate and that each affiliate shall refrain from raiding the established bargaining relationship of any other affiliate and, at the same time, to encourage the elimination

of conflicting and duplicating organizations and jurisdictions through the process of agreement, merger or other means, by voluntary agreement in consultation with the appropriate officials of the federation; to preserve, subject to the foregoing, the organizing jurisdiction of each affiliate.

To aid and encourage the sale and use of union-made goods and union services through the use of the union label and other symbols; to promote the labor press and other means of furthering the education of the labor movement.

To protect the labor movement from any and all corrupt influences and from the undermining efforts of Communist agencies and all others who are opposed to the basic principles of our democracy and free and democratic unionism.

To safeguard the democratic character of the labor movement and to protect the autonomy of each affiliated national and international union.

While preserving the independence of the labor movement from political control, to encourage workers to register and vote, to exercise their full rights and responsibilities of citizenship, and to perform their rightful part in the political life of the local, State, and national communities.

Wisconsin Law Banning Political Contributions by Unions

THE Governor of Wisconsin, on May 20, 1955, approved an act¹ prohibiting political contributions by labor unions, corporations, and certain other organizations and specifying penalties for violation. Significant excerpts from this law are reproduced below.

SEC. 346.12. (1) No foreign or domestic corporation, no association organized under ch. 185 doing business in this State, and no labor union or labor organization shall contribute any money or thing of value, directly or indirectly, to any political party, political organization, political committee, or individual candidate for any political purpose whatsoever, or to promote or defeat the candidacy of any person for nomination or election to any political office.

(2) Nothing contained in this section shall affect the right of any individual to form, join, contribute to or participate in voluntary organizations provided for in sec. 12.09, other than labor organizations or labor unions, to support political candidates and purposes of his own choosing, nor his right to subscribe to a regularly published organization newspaper. Nothing contained in

this section shall prohibit the publication by corporations labor unions and labor organizations, and cooperatives in the regular course of conducting their affairs, of periodicals advising their members, stockholders or customers of dangers or advantages to their interests of election to office of men espousing certain measures.

SEC. 346.13. Any officer, employee, agent or attorney or other representative of any corporation, labor union or labor organization, acting for and in behalf of such corporation, labor union or labor organization, who shall violate secs. 346.12 to 346.16 shall be fined not less than \$100 nor more than \$5,000, or imprisoned not less than 1 nor more than 5 years, or both, in the discretion of the court or judge before whom such conviction is had, and if the corporation, labor union or labor organization shall be subject to a penalty, then by forfeiture in double the amount of any fine so imposed . . . and if a domestic corporation, it may be dissolved . . . and if a foreign or nonresident corporation, its right to do business in this State may be declared forfeited.

SEC. 346.14. The violation of secs. 346.12 to 346.16, by any officer, employee, agent, attorney or other representative of a corporation, labor union or labor organization, shall be prima facie evidence of said violation by such corporation, labor union or labor organization.

¹ Ch. 135, Laws of 1955 (A. 419), amending secs. 346.12, 346.13, and 346.14 of the statutes relating to political contributions by labor unions and providing penalties.

Salaries of Firemen and Policemen, 1952-54

NEARLY all cities of 100,000 or more population advanced salary scales of policemen and firemen between January 1952 and January 1954; only 4 percent of the patrolmen and firefighters were employed where scales remained unchanged. During this period the increase in maximum annual scales for these city employees averaged \$422, or 10.5 percent (table 1).¹

During 1952 the increases were larger on the average and more widespread than they were during 1953, with the salary scales for all firemen and policemen rising an average of 6.7 percent in 1952 and 3.6 percent in 1953.² The increase in the latter year was proportionately smaller than in any previous postwar year except 1950 (table 2).

The total increase in average scales of firemen and policemen from 1939 to the beginning of 1954 amounted to about 90 percent (table 2). This

TABLE 1.—Average increases in maximum salary rates of firemen and policemen in cities of 100,000 population or more,¹ by city size group, 1952-54

Period and city size group	Firemen and policemen		Firemen		Policemen	
	Dol-lars	Per-cent	Dol-lars	Per-cent	Dol-lars	Per-cent
<i>1952-54</i>						
All size groups.....	\$422	10.5	\$421	10.7	\$423	10.5
1,000,000 and over.....	451	10.3	445	10.3	455	10.4
500,000 and under 1,000,000..	394	9.9	425	10.8	373	9.4
250,000 and under 500,000..	459	12.1	448	11.9	470	12.5
100,000 and under 250,000..	371	10.6	365	10.4	378	10.8
<i>1952-53</i>						
All size groups.....	268	6.7	260	6.6	273	6.8
1,000,000 and over.....	388	8.9	393	9.1	387	8.9
500,000 and under 1,000,000..	158	4.0	183	4.6	142	3.6
250,000 and under 500,000..	220	5.8	209	5.6	231	6.1
100,000 and under 250,000..	189	5.4	190	5.4	189	5.4
<i>1953-54</i>						
All size groups.....	154	3.6	161	3.8	150	3.5
1,000,000 and over.....	63	1.3	52	1.1	68	1.4
500,000 and under 1,000,000..	236	5.7	242	5.9	231	5.6
250,000 and under 500,000..	239	6.0	239	6.0	239	6.0
100,000 and under 250,000..	182	4.9	175	4.7	189	5.1

¹ Based on data in all cities of over 100,000 (with the exception of 2 communities of 100,000 but under 250,000 population). Data refer to changes in maximum rates for fire fighters and patrolmen effective on January 1 of each year.

In these tables, average increases were computed by multiplying the rise in maximum scales for fire fighters in each city by total employment in the entire fire department in that city, adding these, and then dividing the aggregate rise by the total number of fire department employees in all cities studied. For patrolmen, data were computed in the same manner, using scales for patrolmen and total employment in the police department of each city. In developing the distributions, total employment in fire and police departments was also used.

TABLE 2.—Indexes of maximum salary rates¹ for firemen and policemen in cities of 100,000 population or more, 1939-54

Year	Index (1947-49=100)		
	Firemen and policemen	Firemen	Policemen
1939.....	73	72	73
1940.....	73	72	73
1941.....	73	72	73
1942.....	² 74	74	74
1943.....	76	76	76
1944.....	80	80	80
1945.....	85	84	85
1946.....	86	85	89
1947.....	93	93	92
1948.....	100	100	100
1949.....	108	107	108
1950.....	110	110	111
1951.....	116	116	117
1952.....	124	124	125
1953.....	132	132	133
1954.....	137	137	138

¹ Data refer to changes in maximum rates for firefighters and patrolmen effective on January 1 of each year.

² Revised.

may be compared with an advance of less than 80 percent in average salary rates of Federal Government (Classification Act) employees and a rise in average salaries of urban public school teachers of 96 percent between the 1938-39 and the 1952-53 school years.³ Average weekly earnings of factory production workers tripled from 1939 to early 1954.

Variation in Increases, 1952-54

The most common salary increases for patrolmen and firefighters from January 1952 to January 1954 amounted to 7.5 but less than 12.5 percent, with three-fifths being employed in cities where changes of this size were put into effect (table 3). Measured in dollar terms, increases ranging from \$300 to less than \$500 went into effect in cities employing 3 out of every 5 firemen and policemen; in communities employing about 1 of every 8, the gain was \$500 but less than \$600 a year.

¹ This article brings up to date indexes presented in the Monthly Labor Review for June 1950 (p. 633), January 1952 (p. 52), and July 1953 (p. 723). Methods used in constructing the indexes are discussed in these earlier articles and in Wage Movements Bulletin, Series 3, No. 2, U. S. Department of Labor, Bureau of Labor Statistics. Data on salary scales for firemen are from the special salary tabulations prepared by the International Association of Fire Fighters (AFL); for policemen, data are from the Municipal Year Book, published by the International City Managers Association.

² Changes in scales between January 1952 and January 1953 are referred to as 1952 increases and those between January 1953 and January 1954 as 1953 increases, even though some of the new scales may have gone into effect on January 1 of the following year.

³ See Salary Trends of Federal Classified Employees, Monthly Labor Review, April 1955 (p. 421) and Changes in City Public-School Teachers' Salaries, Monthly Labor Review, February 1955 (p. 195).

TABLE 3.—Percentage distribution of firemen and policemen¹ in cities of 100,000 population or more, by percentage and dollar increases in maximum annual salary scales, 1952-54

Increase	Firemen and policemen		Firemen		Policemen	
	Percent of—		Percent of—		Percent of—	
	Total	Number receiving increases	Total	Number receiving increases	Total	Number receiving increases
<i>Expressed in percentage terms</i>						
No change.....	3.9		3.1		4.5	
Under 2.5.....	0	0	0	0	0	0
2.5 and under 5.0.....	4.0	4.1	4.4	4.5	3.7	3.8
5.0 and under 7.5.....	7.2	7.5	8.2	8.5	6.4	6.8
7.5 and under 10.0.....	35.4	36.8	36.2	37.4	34.8	36.4
10.0 and under 12.5.....	24.5	25.5	21.8	22.5	26.4	27.7
12.5 and under 15.0.....	12.1	12.6	11.0	11.3	12.9	13.5
15.0 and under 17.5.....	5.2	5.5	6.4	6.6	4.4	4.6
17.5 and under 20.0.....	1.5	1.5	2.0	2.1	1.1	1.1
20.0 and under 22.5.....	2.2	2.3	2.4	2.5	2.1	2.2
22.5 and over.....	4.0	4.2	4.5	4.6	3.7	3.9
Total.....	100.0	100.0	100.0	100.0	100.0	100.0
<i>Expressed in dollars</i>						
No change.....	3.9		3.1		4.5	
Under \$100.....	0	0	0	0	0	0
\$100 and under \$200.....	5.1	5.3	6.3	6.5	4.3	4.5
\$200 and under \$300.....	7.6	7.9	8.1	8.4	7.2	7.5
\$300 and under \$400.....	33.4	34.8	34.2	35.3	32.9	34.5
\$400 and under \$500.....	23.3	24.2	21.9	22.6	24.2	25.3
\$500 and under \$600.....	12.6	13.1	12.2	12.6	12.8	13.5
\$600 and under \$700.....	8.4	8.8	7.9	8.1	8.8	9.2
\$700 and under \$800.....	.8	.8	.9	.9	.7	.7
\$800 and over.....	4.9	5.1	5.4	5.6	4.6	4.8
Total.....	100.0	100.0	100.0	100.0	100.0	100.0

¹ Based on 1954 total employment in fire and police departments.

Comparison of 1952 and 1953

The average salary increase was smaller in 1953 than in 1952, not only because the proportion of firemen and policemen in cities making salary adjustments declined from four-fifths to a little more than one-half, but also because the increases were smaller in amount (table 4). In 1953, 46 percent of the workers were employed by cities which did not change their salary scales, as compared with 19 percent in 1952. In communities where scales were advanced during the year, the average increase was 7.0 in 1953 compared with 8.2 in the earlier year.

Most of these differences between the 2 years occurred in the 5 cities of more than a million population. In the year ending January 1953 all 5 had granted salary increases, which averaged 8.9 percent. During the following year only 2 out of the 5 gave pay increases. Salary advances in the smallest communities averaged 5.4 percent in 1952 compared with 4.9 percent during the following year. In communities with 250,000

but less than 1,000,000 population, however, the gain in salaries in 1953 exceeded that in 1952.

Almost 2 out of 5 policemen and firemen were employed in areas where salary scales were raised in both years; in some cases one of these adjustments was described as a cost-of-living increase and was for a relatively small amount. The average increase over the 2-year period in cities that adjusted scales twice was 13.4 percent—distinctly higher than in communities that gave a single increase during this period.

Intercity Variation in Salary Levels

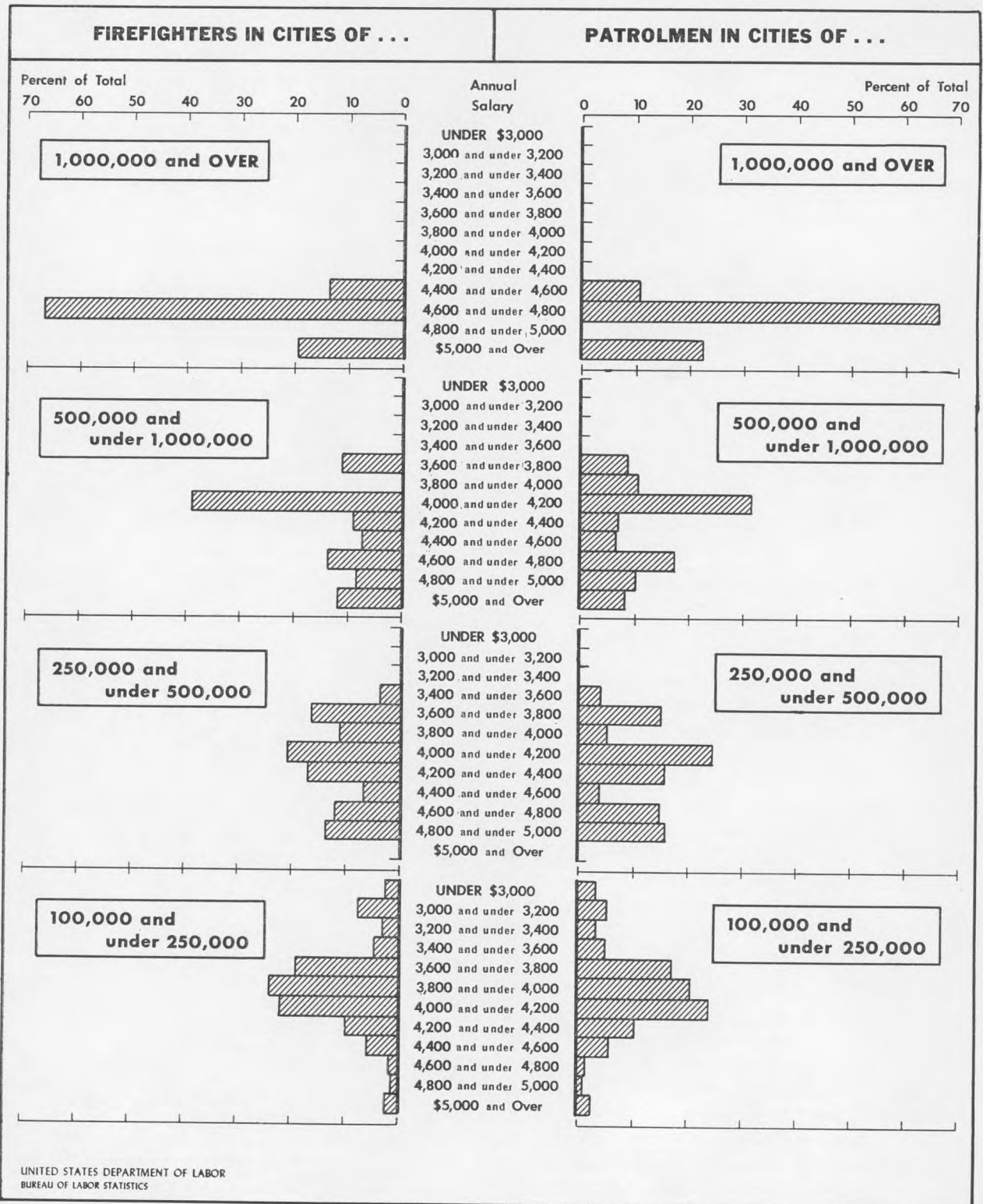
Maximum salary scales for patrolmen and firemen in 1954 ranged from less than \$3,000 to more than \$5,000 a year, with about 4 out of 10 of the patrolmen and 3 out of 10 firemen being employed in communities with maximums of \$4,600 but under \$4,800. (See chart.) In the 5 cities of more than 1 million population—Chicago, Detroit, Los Angeles, New York City, and Philadelphia—no maximum rate of less than \$4,400 was reported. Two-thirds of both the policemen and firemen

TABLE 4.—Percentage distribution of firemen and policemen¹ in cities of 100,000 population or more, by percentage increase in maximum annual salary scales, 1952-53 and 1953-54

Year and percentage increase	Firemen and policemen		Firemen		Policemen	
	Percent of—		Percent of—		Percent of—	
	Total	Number receiving increases	Total	Number receiving increases	Total	Number receiving increases
<i>1952-53</i>						
No change.....	19.0		18.8		19.2	
Under 2.5.....	1.1	1.4	1.4	1.7	.9	1.1
2.5 and under 5.0.....	12.3	15.2	14.5	17.9	10.7	13.3
5.0 and under 7.5.....	18.7	23.1	19.2	23.7	18.4	22.7
7.5 and under 10.0.....	28.4	35.0	25.5	31.3	30.4	37.6
10.0 and under 12.5.....	9.6	11.9	9.3	11.5	9.8	12.2
12.5 and under 15.0.....	7.3	8.9	7.3	9.0	7.2	8.9
15.0 and under 17.5.....	2.9	3.6	3.0	3.7	2.9	3.5
17.5 and under 20.0.....	.4	.5	.7	.8	.2	.3
20.0 and over.....	.3	.4	.3	.4	.3	.4
Total.....	100.0	100.0	100.0	100.0	100.0	100.0
<i>1953-54</i>						
No change.....	46.4		44.6		47.6	
Under 2.5.....	.2	0.3	.4	0.8	0	0
2.5 and under 5.0.....	14.7	27.4	14.8	26.7	14.6	27.8
5.0 and under 7.5.....	17.3	32.3	14.9	26.8	19.0	36.3
7.5 and under 10.0.....	10.5	19.6	13.4	24.3	8.5	16.2
10.0 and under 12.5.....	9.2	17.3	9.6	17.4	9.0	17.2
12.5 and under 15.0.....	.9	1.6	1.1	1.9	.7	1.4
15.0 and under 17.5.....	.6	1.1	.9	1.7	.4	.7
17.5 and under 20.0.....	0	0	0	0	0	0
20.0 and over.....	.2	.4	.3	.4	.2	.4
Total.....	100.0	100.0	100.0	100.0	100.0	100.0

¹ The 1952-53 distribution is based on 1953 total employment in fire and police departments and the 1953-54 distribution on 1954 employment.

Distribution of Firefighters and Patrolmen in Cities of 100,000 or More Population, by Maximum Annual Salary Scales and of City Size, January 1954



UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

were employed where the top salary in their rank ranged between \$4,600 and \$4,800; this group included employees of New York and Chicago. In the 5 largest cities, scales for firemen and policemen were identical. Of all cities studied, only 6 reported salary differences of \$100 or more in 1954.

Salaries became progressively lower in each smaller city size group. In communities of 500,000 but under 1 million population, almost two-fifths of the firefighters and a third of the patrolmen were employed where maximum scales ranged from \$4,000 to less than \$4,200. Among the smallest cities studied, scales ranged from less than \$3,000 a year to more than \$5,000.

Occupational Comparisons

Variations among the proportion of policemen and firemen employed by the communities of different size, rather than differences in pay within the same community, explain the difference in average salary levels and salary trends between the two occupational groups. Employment for both groups, by city size group, was as follows in January 1954:

<i>City size group</i>	<i>Firemen</i>	<i>Policemen</i>
All size groups ¹	65,347	95,097
1,000,000 and over.....	21,727	43,877
500,000 and under 1,000,000.....	15,256	21,765
250,000 and under 500,000.....	11,651	13,107
100,000 and under 250,000.....	16,713	16,348

¹ Based on all cities of over 100,000 (with the exception of 2 communities of 100,000 but under 250,000 population).

Greater proportions of patrolmen are employed in the larger communities. Since salary scales in the larger cities tend to be higher than in the

smaller communities, the average salary level in all cities combined for policemen is somewhat higher than for firemen. Hence, an almost identical dollar rise in pay amounted to slightly less in percentage terms for policemen than for firefighters: from January 1952 to January 1954, annual salaries of firemen rose \$421, or 10.7 percent, while policemen's scales increased \$423, or 10.5 percent.

The smallest relative increase over the 2 years in firemen's salaries—10.3 percent—was recorded for the largest cities. For policemen, however, maximum scales in communities of between 500,000 and 1 million population rose less than in any other group.⁴ The smallest dollar increase in firemen's salaries occurred in the smallest cities studied, but the percentage increase in communities of this size was practically the same as that in the largest size communities. Salaries in population centers of 250,000 but under 500,000 showed the highest gains for both firemen and policemen—11.9 and 12.5 percent, respectively—and the dollar increases were also greatest for these cities.

The advance in salaries for firemen was slightly smaller than that for policemen in 1952 but was slightly greater in 1953. This minor reversal in relationship again is traceable to employment of policemen in proportionately greater numbers in the largest communities which gave most of their salary increases in 1952.

—RUTH W. BENNY
Division of Wages and Industrial Relations

⁴ No increase in maximum scales of patrolmen was recorded for one city (St. Louis) in this group, although the city raised scales for firefighters. Pay of St. Louis police is determined by the State legislature, whereas firefighters' rates are set by the city.

Wage Chronology No. 1: American Woolen Co.

Supplement No. 2—1953-54¹

IN January 1953, the American Woolen Co. requested a wage reopening of its contract with the Textile Workers Union of America (CIO). The parties failed to agree on the company's request for a wage decrease and the issue was submitted to arbitration in accordance with the contract. On May 19, 1953, the arbitrator denied the company's application for a 20-percent general wage reduction. With the exception of a supplemental agreement shifting the cost-of-living escalator clause from the old to the revised Consumer Price Index of the Bureau of Labor Statistics, the contract was continued in force through its termination date in March 1954.

When negotiations began on a new contract in March 1954, the union rejected the company's request for a general wage reduction of 21½ cents

an hour and a 6-week strike ensued. The dispute was settled on June 5 by a new agreement providing for a 9½-cent wage reduction and a decrease in supplementary benefits. In addition, the 5-cent cost-of-living allowance then in effect was decreased by 1 cent, the remaining 4 cents being incorporated into base rates, and the escalator provision was discontinued. The contract, effective June 7, 1954, was to remain in effect until April 30, 1957, with provisions for general wage reopenings in April 1955 and 1956. It covered approximately 3,500 workers employed in 11 mills in Maine, New Hampshire, Vermont, Massachusetts, Connecticut, and Kentucky.² Neither party exercised the option to reopen the contract in April 1955.

The following tables bring the American Woolen Co. chronology up to date through mid-1955.

¹ See Monthly Labor Review, December 1948 (p. 584) and November 1952 (p. 522).

² Other mills of the company have been closed. Effective Feb. 24, 1955, American Woolen Co. was merged with Textron, Inc., and Robbins Mills, Inc., to form Textron American, Inc., but this merger did not affect the contract provisions described in this chronology.

A—General wage changes

Effective date	Provision	Applications, exceptions, and other related matters
Dec. 31, 1952----- Mar. 31, 1953-----	No change----- 3 cents an hour <i>decrease</i> -----	Quarterly cost-of-living review. Quarterly adjustment of cost-of-living allowance.
May 19, 1953-----	No change-----	Arbitration award of May 19, 1953, denied company request for a 20-percent (average 31 cents) pay cut under March 1953 reopening provision.
June 30, 1953----- Sept. 30, 1953 (by supplemental agreement of Sept. 3, 1953).	No change----- 2 cents an hour <i>increase</i> -----	Quarterly cost-of-living review. Quarterly adjustment of cost-of-living allowance. Based on revised Consumer Price Index. ¹
Dec. 31, 1953----- June 7, 1954 (by agreement of same date).	No change----- 10½ cents an hour <i>decrease</i> -----	Quarterly cost-of-living review. Included 9½-cent decrease in base pay and 1-cent decrease in existing 5-cent cost-of-living allowance. Remaining 4-cent cost-of-living allowance incorporated into base rates and the escalator clause discontinued.

¹ Because of discontinuance of the Old Series Consumers' Price Index, the parties agreed to the following revision of the escalator provision (supplemental agreement of Sept. 3, 1953): "Effective Sept. 30, 1953, and Dec. 31, 1953, respectively, a cost-of-living adjustment equal to 1 cent per hour plus or minus shall be added to or subtracted from, as the case may be, the exist-

ing rates of all employees for each 0.71 increase or decrease in the Consumer Price Index . . . from Feb. 15, 1951, with a converted index of 111.2, to Aug. 15, 1953, and Nov. 15, 1953, provided, however, that no cost-of-living adjustment shall be made which will reduce rates of pay below those that were effective on Mar. 15, 1951."

B—Minimum plant wage rates

Effective date	Provision	Applications, exceptions, and other related matters
June 7, 1954.....	\$1.21.	

C—Related wage practices

Effective date	Provision	Applications, exceptions, and other related matters
<i>Holiday Pay</i>		
June 7, 1954.....	Changed to: No pay for holidays falling on Saturdays or within vacation period.	To qualify for holiday pay, an employee must have been employed at least 13 weeks preceding the holiday week, worked the regularly scheduled workdays before and after the holiday unless excused, and worked at least 1 full shift during scheduled workweek within or prior to that in which holiday fell.
<i>Paid Vacations</i>		
June 7, 1954.....	Added: Employees with 6 months' but less than 1 year's service—1 week's vacation. Eliminated: Minimum vacation pay guarantee of 40, 60, and 80 hours' pay for employees with 1, 3, and 5 years' service, respectively, if they worked 1,320 hours during the prior year.	Vacation pay reduced to 2 percent of straight-time earnings during previous year, exclusive of vacation and holiday pay, for employees with 6 months' but less than 3 years' service; 3 percent for those with 3 but less than 5 years; and 4 percent for those having at least 5 years' service.
<i>Faulty Material</i>		
June 7, 1954.....	Changed to: Piece or incentive workers to be compensated for loss in earnings because of faulty material only if the average earnings for the week in which the loss occurred was at least 5 percent below average straight-time hourly earnings in the prior social security quarter.	
<i>Technological Displacement Pay</i>		
June 7, 1954.....	Eliminated.	
<i>Health and Welfare Benefits</i>		
June 7, 1954.....	<i>Weekly accident and sickness benefits:</i> Changed to flat \$25 a week for 13 weeks. <i>Accidental death or dismemberment:</i> Changed to \$1,500 for loss of life, both eyes, both hands, both feet, 1 hand and 1 foot; \$750 for loss of 1 hand, 1 foot, or 1 eye. <i>Medical expense:</i> Eliminated. <i>Maternity benefits:</i> Eliminated.	Computation of benefits based on percentage of average weekly earnings eliminated.

State Ratios of Strike Idleness to Total Time Worked, 1952-54

A MEASURE of strike activity that expresses the amount of idleness incurred as a percentage of the estimated total time worked takes into account both the number of workers on strike and the duration of the stoppage in relation to the total number of man-days in the year.¹ Data on this basis have been computed for a number of years for the Nation as a whole; this year, for the first time, similar calculations are presented on a State-by-State basis—they cover 1952-54.

The proportion of idleness to total working time in 1954 was about one-fifth of one percent (0.21) for the United States as a whole. Among the individual States (including the District of Columbia), 16 experienced a higher idleness ratio and 33 a lower ratio than the national average. The range was from less than 0.005 percent in two essentially nonindustrial States (South Dakota and Wyoming) to 1.87 percent in Oregon, where the impact of the prolonged lumber strike was sharply felt. In most States, however, the proportions fell between 0.07 and 0.26 percent.

A ranking of States according to their idleness ratios for 1952, 1953, and 1954 reveals widespread year-to-year shifts. In a number of instances

these variations in idleness ratios are related to the fact that a relatively small number of stoppages—or even one long or large stoppage—can have a sharp effect for an individual State, particularly where nonagricultural employment is small. Thus Montana had the 3d highest proportion of idleness in 1954 (construction and nonferrous mining and smelting stoppages) but ranked 6th from the lowest in 1952. A long strike of construction workers raised the idleness ratio in Delaware to the highest of any State in 1953 but it was ninth from lowest in 1954. Only a few States, notably Connecticut, Massachusetts, Nebraska, New York, North Carolina, North Dakota, Ohio, Pennsylvania, Texas, and Utah, maintained about the same rank in all 3 years.

The effect of the industrial composition of a State upon strike incidence rates is illustrated by the fact that in 1952 most States in which coal mining is relatively important showed comparatively higher proportions of strike idleness than in 1953 and 1954 when widespread reductions in coal-mining activity were accompanied by declines in the number and duration of work stoppages. In other States, the idleness was largely traceable to strikes in a few industries, such as nonferrous mining, smelting and refining, and construction in Utah.

¹ The total number of man-days worked is computed by multiplying average employment by the number of normally scheduled working days.

Idleness of workers involved in work stoppages as percent of estimated working time of all workers, by State, 1952-54

States	Percent of estimated working time of all workers in—			States	Percent of estimated working time of all workers in—		
	1952	1953	1954		1952	1953	1954
United States.....	0.57	0.26	0.21	Montana.....	0.09	0.30	1.35
Alabama.....	1.23	.20	.26	Nebraska.....	.20	.12	.08
Arizona.....	.20	.10	.26	Nevada.....	.11	.19	.13
Arkansas.....	.35	.20	.26	New Hampshire.....	.11	.05	.07
California.....	.56	.35	.13	New Jersey.....	.35	.30	.20
Colorado.....	.65	.08	.12	New Mexico.....	.14	.12	.14
Connecticut.....	.48	.25	.23	New York.....	.32	.23	.15
Delaware.....	.26	.97	.05	North Carolina.....	.12	.09	.04
District of Columbia.....	.09	.04	.05	North Dakota.....	.03	.06	.02
Florida.....	.08	.12	.04	Ohio.....	1.07	.34	.27
Georgia.....	.13	.06	.19	Oklahoma.....	.20	.23	.20
Idaho.....	.20	.07	.03	Oregon.....	.49	.13	1.87
Illinois.....	.57	.18	.10	Pennsylvania.....	1.36	.35	.37
Indiana.....	1.15	.47	.18	Rhode Island.....	.16	.19	.09
Iowa.....	.12	.28	.18	South Carolina.....	.03	.10	.01
Kansas.....	.16	.27	.17	South Dakota.....	.02	.08	(¹)
Kentucky.....	1.03	.31	.13	Tennessee.....	.29	.33	.23
Louisiana.....	.50	.19	.26	Texas.....	.25	.14	.14
Maine.....	.02	.05	.07	Utah.....	.86	.60	.36
Maryland.....	.69	.11	.08	Vermont.....	.53	.24	.30
Massachusetts.....	.21	.15	.08	Virginia.....	.24	.08	.05
Michigan.....	.67	.43	.20	Washington.....	.57	.38	1.44
Minnesota.....	.57	.15	.17	West Virginia.....	1.38	.30	.26
Mississippi.....	.22	.07	.02	Wisconsin.....	.39	.31	.27
Missouri.....	.37	.42	.30	Wyoming.....	.34	.12	(¹)

¹ Less than 0.005 of 1 percent.

Major Wage Developments, First Quarter of 1955

WAGE RATE INCREASES were provided for by 91 percent of a group of 221 labor-management contracts, each affecting 1,000 or more workers, negotiated during the first 3 months of 1955. (See table.) Contracts providing these increases applied to an estimated 820,000 workers of the 959,000 affected by the entire group of agreements.

Automatic cost-of-living escalator clauses were either renewed or established in 10 settlements covering 240,000 workers. A similar number of agreements, affecting 37,000 workers, discontinued escalator clauses. Among the settlements that raised rates of pay during the January-March period, 25 affecting 288,000 workers also specified certain pay increases which will become effective in subsequent contract years.

Health and welfare plans were liberalized or inaugurated more often than any other supplementary benefit. These situations, which included trucking, dress, and some aircraft agreements, affected about 485,000 workers. Some agreements

for the first time included so-called "catastrophe" insurance to cover major medical expenses.

Although pension plans were established or increased in 1 out of 8 establishments, 3 out of 8 workers included in the tabulation were affected. New plans were established for more than 200,000 workers, primarily in trucking.

Comparisons of the first quarter of 1955 with the first quarter of 1954 must be qualified since the industries in which the settlements were reached were markedly different in the two periods. The number of settlements affecting 1,000 or more workers recorded during the first quarter of 1954 and the first quarter of 1955 was virtually the same, but more workers were affected by the current settlements—over 950,000 compared with about 800,000 in the first 3 months of 1954. Wages were increased by a higher proportion of settlements during the first quarter of 1955 than during the same period of 1954, but the proportion of workers affected by such contracts was identical in the two periods. Settlements accounting for more than a third of the workers in the first quarter of 1955 were in petroleum refining, trucking, and West Coast lumber, which had practically no major settlements in that quarter of 1954.

Wage changes and changes in supplementary practices provided by selected collective bargaining settlements, January 1-March 31, 1955*

Type of wage action	Wage changes				Number of settlements											
	Settlements		Workers covered		Establishing or liberalizing supplementary practices										Not changing supplementary practices	Reducing supplementary practices
	Number	Per-cent ¹	Approximate number	Per-cent ¹	Total ²	Premium pay	Shift differentials	Holidays	Vacations	Pensions ³	Health and welfare plans ³	Other practices ⁴				
All actions ⁵	221	100	959,000	100	129	7	16	39	49	27	75	27	91	1		
No change.....	19	9	137,000	14	17			4	4	3	11	2	2			
Increases.....	201	91	820,000	86	112	7	16	35	45	24	64	25	89			
Under 5 cents.....	21	10	82,000	9	14		1	3	8	1	7	1	7			
5 and under 7 cents.....	66	30	200,000	21	40	1	10	12	12	6	21	12	26			
7 and under 9 cents.....	59	27	184,000	19	25	3	4	11	8	2	13	7	34	(⁶)		
9 and under 11 cents.....	34	15	284,000	30	16		1	5	9	7	12	2	18			
11 and under 13 cents.....	6	3	20,000	2	5	1		3	2	2	5	1	1			
13 cents and over.....	8	4	41,000	4	6	2		1	4	2	3	2	2			
Not specified.....	7	3	9,000	1	6				2	4	3		1			
Decreases.....	1	(⁷)	2,000	(⁷)										1		

*This tabulation relates to settlements involving 1,000 or more workers concluded during the 3-month period. It includes all wage changes negotiated during the January-March period that are scheduled to go into effect during the contract year, i. e., the 12-month period following the effective date of the agreement. In summarizing percentage increases, it has been necessary to estimate their value in terms of cents on the basis of available information on wage levels in the industry. The tabulations exclude: (1) Settlements involving fewer than 1,000 workers; (2) settlements in construction, the service trades, finance, and Government; (3) instances in which contract reopening privileges were not exercised; (4) wage increases and changes in supplementary practices that went into effect during the period but that were negotiated earlier (for example, deferred wage increases, cost-of-living adjustments, or annual improvement factor increases.

¹ Because of rounding, sums of individual items do not necessarily equal totals.

² This total is smaller than the sum of the individual items since some settlements related to more than 1 item.

³ Includes settlements in which the agreement provided for increased contributions to maintain existing benefits.

⁴ Paid sick leave, paid funeral leave, and supplemental jury duty pay were the most commonly reported.

⁵ Does not include 9 settlements affecting 49,000 employees in which wages were not an issue but supplementary practices were established or increased.

⁶ One settlement that liberalized vacation, welfare, and sick leave practices eliminated 2 paid half holidays.

⁷ Less than 0.05 percent.

Sickness Absenteeism in the New York Telephone Co.¹

TODAY, and on every working day in this country about 2 million employees are away from their jobs because of sickness (including absence due to accidental injury as well as to illness). During the past 30 years the percentage of absentees has been on the increase. Great changes have taken place in the treatment and management of disease. Most of these tend to shorten illness; however, the medical profession has developed a greater caution in the management of convalescence, and this, of course, increases the days of absence. Another and perhaps more important factor is the change in the economic status of the disabled worker.² Employees when sick are better able to stay away from work. Here we see the development of an attitude. When employees have a greater incentive to stay at home, they have less incentive to work and then absence rates go up. The dollar cost of industrial sickness absence to employers in the United States is a staggering sum—\$10 billion per year is probably a conservative estimate.

The New York Telephone Co. employs about 75,000 persons—about 50,000 women and 25,000 men. During an average working day, because of sickness, we have approximately 3,000 absentees—about 2,300 women and 700 men.³ Sickness absence costs the company more than \$10 million per year.

Distribution of Absentees

At first thought we might expect that this absence is fairly evenly distributed. Actually, studies that we and others have made⁴ show that in a given year, about one-third of the employee group have almost a perfect attendance, while the other two-thirds have all the absence. The top one-third cause about three-quarters of the absence; the very top 10 percent cause about 45 percent of the absence.

Our employee group of 75,000 have about 250,000 absences each year. Approximately 25,000 have no absences; the second 25,000 have an estimated 60,000 absences, while the third 25,000 have about 190,000. The worst 10 percent (7,500 alone) have about 110,000 absences.

From these figures, the size of the problem in managing 250,000 absences can be appreciated. Furthermore, it can be recognized that it is unnecessary to direct attention to all 75,000 employees. If we direct attention to 10 percent, or 7,500 with the highest absence, we are concentrating our efforts on a rather small group that account for almost one-half the absences.

Analysis of Trends

The year-to-year percentage of total sickness absence to scheduled working time at the New York Telephone Co., from 1923 through 1953, shows that the fluctuations follow known changes in economic and social conditions, but do not show a relationship to known changes in disease conditions. In general, the peaks and valleys of the curve of industrial activity in the United States are reflected in the sickness absence curve for the New York Telephone Co. We had a depression in the 1930's, hitting a lowest point in 1932 and 1933, and the absence curve also hit a low level at that time. The years 1942-45 were the war years, years of full employment, and also years of high absence. In the years since the war, with high employment, absence has remained at a high level but has declined from the 1945 peak. This gradual increase in absenteeism has come at a time when the overall health of our people has been improving remarkably. It has occurred during the period when pneumonia and most other acute infections have almost disappeared, when deaths from tuberculosis have dropped very low, when diabetes has been almost completely controlled, and when general health has been im-

¹ Excerpts from Sickness Absenteeism (*In* AMA Archives of Industrial Health, Mar. 1955, pp. 218-230)—an article by Norman Plummer, M. D., medical director for the New York Telephone Co., and Lawrence E. Hinkle, Jr., M.D., assisted by R. P. Schaen of the company's general statistician's office. Both Dr. Plummer and Dr. Hinkle are assistant professors of clinical medicine at Cornell University Medical College.

² The authors make reference here to higher wage levels, development of company and union benefit and welfare plans, new State accident and sickness compensation laws, and increasing participation in voluntary accident and insurance plans.

³ The discussion of sickness absence includes all absences resulting from both sickness and accidental injury, occupational and nonoccupational, and absences of both long and short duration. It does not include vacations, excused absences for jury duty or personal reasons, maternity leave, or other nondisability leaves.

⁴ See Life Stress and Industrial Absenteeism (*In* Industrial Medicine, August 1952, pp. 363-375); Records—"Seeing Eye" of Industrial Medicine (*In* Industrial Medicine, January 1944, pp. 1-35); Public Health and Medical Relationships in Industrial Health (*In* American Journal of Public Health, October 1942, pp. 1157-1163); and Absenteeism (*In* Manual of Industrial Hygiene and Medical Service in War Industries, Philadelphia, W. B. Saunders Co., 1943).

proved immeasurably. It is true that in the industrial population, cardiovascular disease, cancer, and nervous and mental diseases are increasing, but not anywhere near the point where these increases offset the decreases mentioned. We can only conclude that the increasing number of absences is more related to social and economic factors than to medical factors having to do with disease morbidity.

A month-to-month curve of percentage of sickness absence to scheduled working time in the entire company from January 1950 through June 1954 shows seasonal peaks in January or February each year. In 1951 and 1953 in the New York area small epidemics of influenza helped to elevate the peaks. From 1951 through June 1954, the trend has been slightly downward.

A month-to-month curve of sickness absence, confined to the women employees of one division in 1950 and 1951, shows the concentration of absence in a small segment. Our supervisory personnel in this division, guided by the findings of our studies, have been particularly active in their efforts to understand and control absenteeism. Over the 4½-year period there has been a decided decline, with the 1954 percent of absence somewhat less than one-half of what it was in 1950.

Comparative Rates for Men and Women

In studying sickness absence, one of the most striking findings one encounters is the much higher rates for women than for men. In the New York Telephone Co., every year since 1939 the rate is about twice as high for women as for men. In 1953, our women were losing 4.6 percent of their working time, an average of 12.1 working days, while our men were losing 2.5 percent of their working time, or an average of 6.6 days.

These differences between the rates show clearly there are factors other than organic disease. There is a striking economic factor in that, as a rule, the woman employee is not the "breadwinner of the household." This circumstance has a bearing on motivation and, in turn, on attitude and, finally, on percentage of absence. Social and cultural factors have a strong influence, and these help to explain the difference between the rates. Women take much more responsibility for the care of the home and the bringing up of the

family. Another factor is that, as a rule, supervisors are apt to follow different standards for justifying absence of women and of men.

Individual Susceptibility

Now we shall consider individual susceptibility. A study of the absence patterns of a homogeneous group of 1,297 women employees throughout their careers with the company demonstrates the concentration of absence in a small segment of employee population. We found that the group with the highest absence in their first years had the highest average absence throughout their entire periods of service. The group with 0 to 5 days of absence in the first year had an average of 12 days per year throughout their entire terms. The group with 24 to 29 absent days in their first year had an average of 27.8 days for each year of service.

It can be seen that employees, not only by the year but also by the period of employment, can be separated into a low-absence group and a high-absence group. We have sickness-prone and also absence-prone employees. Of course, the crux of this whole problem is to identify the high-absence employee and to treat the condition. In this study of 1,297 women employees we found a rather large group with little or no absence and a much smaller segment with a very high absence. Out of the 1,297 women we had 336 with 20 or more years of service and out of these we selected the 20 with the lowest and the 20 with the highest absence. Each of these 40 women was interviewed and examined and for each we made a careful study of our medical records, which in most instances went back to an applicant examination some 20, 30, or more years previously.

First, we had a small stack of records for the low-absence employee, whereas each record for a high-absence employee was voluminous. The 20 employees in the low-absence group had 360 visits to the Medical Department, while the high-absence employees were having 2,927 visits. The same disproportion was noticed in numbers of certificates from private physicians, telephone investigations, frequent illness investigations, and referrals to a rest home.

The average age of the low-absence employee was 48 years with 28 years of service in the company. The average age of the high-absence

employee was 46 years, with 26 years of company service. The 20 low-absence employees had a total of 667 days of sickness absence, while the 20 high-absence employees were away for a total of 24,185 days.

The 20 low-absence women had 35 absences due to respiratory infections, while the 20 high-absence women had 423 respiratory attacks. While some of the difference is a greater susceptibility to infection in the high-absence person, of greater importance is a different reaction, a different behavior, which adds up to excessive absenteeism in the one group.

The chief difference between the high-absence and the low-absence employee is the difference in degree of susceptibility to the disorders of feeling state, thought, and behavior. The 20 high-absence women in their periods of service with

the company had 492 absences caused primarily by attacks of nervousness, tension, anxiety, and hysteria, together with two cases of major mental disease. This does not include all the nervousness, anxiety, and tension that these women had associated with respiratory, gynecological, and other systemic disease. The low-absence women had only 23 absences because of nervous and emotional disturbance.

The interviews confirmed much of what had already been discovered by analysis of the attendance and medical records. In addition, we found that the women in each group had personality characteristics of that group. The average low-absence employee was found to be a happy and contented person. The average high-absence employee was found to be unhappy, discontented, and resentful.

Out of approximately 1,000 awards made in fiscal year 1954 by arbitrators selected from lists provided by the Federal Mediation and Conciliation Service, only about 1 percent involved disputes over the terms of new contracts. Disciplinary disputes accounted for 28 percent of the issues, seniority 17 percent, and job rates about 17 percent. In contrast, well over 95 percent of the disputes in which regular staff mediators were active during the same period involved modification of existing contracts under reopenings or the negotiation of new ones.

—From an address by Joseph F. Finnegan, Director of the Federal Mediation and Conciliation Service, before the American Management Association, New York, May 16, 1955.

Technical Note

BLS Historical Estimates of Earnings, Wages, and Hours

EDITOR'S NOTE.—*The following article describes the data and the methods of computation used in early series of earnings and wages published by the Bureau of Labor Statistics. It is presented for what historical interest it has and because it gives some indication of the progress of the Bureau's work in this field of research. It is based on parts of a memorandum prepared in 1951 by Witt Bowden, then a Bureau staff member.*

Hours and Earnings Series

THE BUREAU OF LABOR STATISTICS current series of average weekly and hourly earnings and weekly hours in manufacturing and various non-manufacturing industries were initiated in 1931 in the depth of the depression. The figures for 1932, the first year covered, were abnormal in comparison with the predepression wage structure. The project for extending the new series back of 1932 was initiated because of this abnormality and to meet a considerable demand for historical data.

Defects in existing historical wage series, together with extensive interest in long-term trends, stimulated the decision to develop a new series.¹ Limitations of the basic data, however, resulted in a decision to confine the study to specific areas of employment and to periods affording broadly comparable and continuous data. The areas of employment selected were manufacturing, mining, and railroad transportation. The periods chosen were limited by the availability of comparable data, including Census of Manufactures data of "factory" employment. The series presented here cover manufacturing only for the years 1909, 1914, and 1919–32.² Estimates were not attempted for years between the manufacturing

censuses of 1909, 1914, and 1919 because of the fragmentary nature of the wage data, the rapid and uneven changes in the wage structure, and the lack of Census data for checking the representativeness of the available wage statistics. Estimates were also computed for 1904, but these were not included in the series.

Before the initiation in 1932 of the present earnings series,³ occupational wage rates and average hourly earnings had been emphasized by the Bureau. The concepts of average weekly earnings and average weekly hours were rarely given consideration. Hours data were usually scheduled hours—either "prevailing" hours (Census) or "full-time" hours (BLS). Weekly earnings data were almost invariably full-time earnings.

However, with data adequate for computing average hourly earnings, and with satisfactory statistics of hourly employment and payrolls, simple computations made possible the deriving for the earlier period of the other two averages of a type consistent with the current series, namely, average weekly earnings (aggregate weekly wages divided by average employment) and average weekly hours

¹ The series for hourly earnings, weekly earnings, and weekly hours before 1932 were first published in the Monthly Labor Review for September 1940 (pp. 517–544) and in a slightly revised form in the Handbook of Labor Statistics, 1944 edition (vol. 2, pp. 5–18). These series as first published were computed, however, before the 1943 revision of the Bureau's series back to 1932. Before that revision, discrepancies existed in the three series as a result of the methods used from 1932 to 1943. The averages of hourly earnings and weekly hours were derived from man-hour samples; and the weekly earnings averages were obtained from larger samples which included establishments not reporting man-hours.

The effect of the 1943 revisions of the Bureau's regular series was to make the three series mutually consistent, so that any one of the series could be derived as a product or as a quotient of the other two series. Since the averages for the period before 1932 had been computed on the basis of the internal consistency of the three series, slight adjustments were made for conformity to the series beginning in 1932. After the 1943 revisions of the later series, the earlier series as originally computed required no adjustments for linking to the 1932 series. The series as published in the Monthly Labor Review of September 1940 and in the 1944 Handbook were therefore discarded in favor of the original computations.

² The 1943 revisions primarily affected manufacturing. Railroad figures, derived from Interstate Commerce data, were not affected. This article is concerned only with the manufacturing series; the original combination of manufacturing, mining, and railroad transportation has limitations, especially in respect to the data available for mining, which seem to outweigh its advantages.

³ A full description of the present series of hours and earnings data appears in BLS Bull. 1168, Techniques of Preparing Major BLS Statistical Series (pp. 51–56).

(average weekly earnings divided by average hourly earnings). The same figure of average weekly hours can of course be computed from data on man-hours (aggregate wages divided by hourly earnings) and employment.

Estimates for 1904. The Bureau of Labor, in its annual series of wages and hours of labor from 1890 to 1907, published a vast amount of information about wages per hour and full-time hours per week on an occupational basis for a large number of industries. These data were carefully examined and tested to select those industries for which data were given for unskilled or common laborers as well as for typical occupations and for which there was satisfactory geographical as well as occupational coverage.

The representativeness of the reported data was tested by using Census of Manufactures weekly earnings by industry and the corresponding Bureau of Labor industry figures of hourly earnings to compute average weekly hours. As the Bureau of Labor series of hourly earnings and full-time hours extended only to 1907 and the latest preceding Census of Manufactures was for 1904, it was necessary to use 1904 data for the test. The census of that year was also the first calendar-year census and the first census "confined to establishments conducted under what is known as the factory system."⁴

TABLE 1.—Average hourly earnings and average weekly hours, selected industries, 1904¹

Industry	Average hourly earnings ²	Average weekly hours ³
Brick	\$0.1764	47.3
Carpets .....	.1639	48.5
Cars, steam railroad .....	.2447	47.2
Cotton goods .....	.1298	45.1
Dyeing, finishing, and printing of textiles .....	.1795	46.6
Flour .....	.1997	48.8
Foundries and machine shops .....	.2427	44.6
Hosiery and knit goods .....	.1272	45.9
Iron and steel, blast furnaces .....	.1608	64.6
Leather .....	.1763	51.5
Liquors, malt .....	.2528	54.6
Lumber .....	.1753	49.6
Paper and wood pulp .....	.1651	56.5
Planing mills .....	.2101	47.5
Shipbuilding .....	.2531	43.8
Slaughtering and meatpacking .....	.1829	57.3
Woolen and worsted goods .....	.1496	49.9

¹ Selected from industries covered in Bureau of Labor Bull. 65, July 1906, on basis of representative character of hourly earnings data.

² Computed from the detailed occupational earnings and employment data for 1904 in bulletin referred to in note 1.

³ Computed by dividing average weekly earnings (derived from Census of Manufactures data) by average hourly earnings (first column).

Tests of the consistency of average hourly earnings with average weekly earnings, average weekly hours, and full-time hours were applied to the industries surveyed by the Bureau of Labor in 1904.⁵ "Hand and neighborhood industries," formerly classified as manufactures, were excluded. The industry data were also inspected for regional as well as occupational coverage. Only 17 industries met the tests to a degree that indicated adequately representative data of hourly earnings, but these included large and highly diversified types of manufacturing activities. They represented all major types of production, all areas, and unskilled workers as well as skilled occupations, and accounted for about 36 percent of all factory wage earners.

The 17 industries are listed in table 1. Industry averages of hourly earnings were computed from the 1904 Bureau of Labor sample data. Average weekly hours were computed by dividing average weekly earnings (derived from Census employment and payrolls) by hourly earnings. The 17-industry average of hourly earnings, computed by combining the industry averages by use of industry man-hours (Census payrolls divided by average hourly earnings), is \$0.182. The general average appears to be closely representative of all manufacturing.

The full-time workweek, as computed by Paul Douglas⁶ from Bureau of Labor data, averaged 57.7 hours. Average actual working time (average weekly hours), derived by dividing average weekly earnings for all factory industries (from Census data) by the 17-industry average of hourly earnings, was 50.4 hours. The ratio of average weekly hours to full-time hours, 0.873, is lower than in later years when direct information is available, but the longer scheduled workweek tended to lower the ratio.

The estimated average of weekly hours for 1909 was 51.0 hours (table 2), somewhat above the 1904 estimate. The 1904 average appears to have been lowered somewhat by short time accompanying the recession of that year in production and employment. It is probable, however, that the actual average of weekly hours in 1904 was no lower than in 1909; the full-time workweek was

⁴ Census of Manufactures, 1905, Part I (pp. xxiv, xxxv).

⁵ See Bureau of Labor Bull. 65, July 1906.

⁶ See Real Wages in the United States (p. 116).

somewhat longer. The employment figures used in computing the averages in both years are Bureau of the Census averages of the number of wage earners, but they were obtained by somewhat different methods. For 1904, employers were requested to report the average number employed each month, and the sum of these figures was divided by 12 for the annual average. Beginning in 1909, employers were requested to report the number of wage earners on the 15th of each month, or "the nearest representative day." The change was made because it was found that few establishments kept their books in such a way as readily to show the monthly averages.⁷ The average for the month as reported for 1904 was no doubt usually higher than would have been the mid-month count, and the derived averages of weekly earnings and weekly hours are correspondingly lower than if the mid-month count had been used.

The validity of the 1904 estimate of average hourly earnings, being derived solely from Bureau of Labor data, is not affected by the change in the Census Bureau's method of counting employment. Nevertheless, since the 1904 method of enumerating employment probably gives a downward bias, as compared with 1909, to the derived averages of weekly earnings and weekly hours, the BLS series of earnings and hours as published omitted the 1904 data.

The 1909 Estimates. The next Census of Manufactures after 1904 covered 1909. After 1907, the Bureau of Labor discontinued its extensive hours and wages series, but made special surveys in several important industries, for which indexes of hours and earnings were computed. These, together with occupational data for some additional industries, made possible the computation of an index of hourly earnings which approximates the trend for manufacturing from 1907 to 1909.⁸ Wages fell somewhat between 1907 and 1909 as a result of the 1908 decline in employment, production, and prices. Comparing the 1907 to 1909 index with that for 1904 to 1907,⁹ the change

TABLE 2.—*Estimated hours and earnings of production workers in manufacturing, 1909, 1914, 1919-54*¹

Year	Average weekly earnings	Average weekly hours	Average hourly earnings	Year	Average weekly earnings	Average weekly hours	Average hourly earnings
1909.....	\$9.84	51.0	\$0.193	1936.....	\$21.78	39.2	\$.556
1914.....	11.01	49.4	.223	1937.....	24.05	38.6	.624
1919.....	22.08	46.3	.477	1938.....	22.30	35.6	.627
1920.....	26.30	47.4	.555	1939.....	23.86	37.7	.633
1921.....	22.18	43.1	.515	1940.....	25.20	38.1	.661
1922.....	21.51	44.2	.487	1941.....	29.58	40.6	.729
1923.....	23.82	45.6	.522	1942.....	36.65	42.9	.853
1924.....	23.93	43.7	.547	1943.....	43.14	44.9	.961
1925.....	24.37	44.5	.547	1944.....	46.08	45.2	1.019
1926.....	24.65	45.0	.548	1945.....	44.39	43.4	1.023
1927.....	24.74	45.0	.550	1946.....	43.82	40.4	1.086
1928.....	24.97	44.4	.562	1947.....	49.97	40.4	1.237
1929.....	25.03	44.2	.566	1948.....	54.14	40.1	1.350
1930.....	23.25	42.1	.552	1949.....	54.92	39.2	1.401
1931.....	20.87	40.5	.515	1950.....	59.33	40.5	1.465
1932.....	17.05	38.3	.446	1951.....	64.71	40.7	1.59
1933.....	16.73	38.1	.442	1952.....	67.97	40.7	1.67
1934.....	18.40	34.6	.532	1953.....	71.69	40.5	1.77
1935.....	20.13	36.6	.550	1954.....	71.86	39.7	1.81

¹ Figures for average weekly earnings, average hourly earnings, and average weekly hours for manufacturing for 1909, 1914, and 1919-32 conform without adjustment of the originally computed figures to the series beginning in 1932 as revised in 1943. See also the Bureau's multilithed historical summary tables, *Production—Worker Employment, Payrolls, Hours and Earnings in All Manufacturing Industries, 1909-38, 1939-50, and 1951-54*, all of which are available on request.

indicated for 1904 to 1909 is a net increase of 5.9 percent in average hourly earnings. Applying this increase to the 1904 average (\$0.182), the estimated average of hourly earnings in 1909 is \$0.193. Professor Douglas, using substantially the same basic data (although he also included union rates) but combining the data by different methods, shows nearly the same increase—6.8 percent. The Douglas estimates of hourly earnings are too high as to level and their trend is biased downward over the period (1890 to 1926) covered in his *Real Wages*; but his figures for 1904 to 1909 undoubtedly give a close approximation of the trend between those years.

There is another test of the validity of the 1909 estimate of hourly earnings (\$0.193). Weekly earnings for 1909, computed from Census data for all manufacturing, averaged \$9.84; weekly hours (weekly earnings divided by hourly earnings) averaged 51.0 hours. Prevailing or scheduled hours as computed from Census frequency distributions averaged 56.8 hours per week.¹⁰ The ratio of hours actually worked to prevailing or scheduled hours is 0.898, a figure consistent with the usual relationship when scheduled hours are at the relatively high level prevalent in 1909.

The 1914 Estimates. The next manufacturing census after that of 1909 covered the year 1914. The Census Bureau count of employment was

⁷ Thirteenth Census, 1910, Vol. IX, *Manufactures* (p. 11).

⁸ BLS Bulls. 128, 129, 134, 137, 151, and 163.

⁹ Bureau of Labor Bull. 77, July 1908 (p. 7).

¹⁰ Leo Wolman, *Hours of Work in American Industry*, National Bureau of Economic Research, Bull. 71 (p. 2).

comparable for the 2 years. Average weekly earnings derived from Census data rose 11.9 percent from 1909 to 1914. Prevailing hours of work computed from Census data declined 3.0 percent.¹¹ The slight change in work schedules and the general similarity of the industrial structure in 1909 and 1914 make reasonable the assumption that average hours actually worked followed closely the trend of prevailing or scheduled hours. On that assumption, average hourly earnings rose 15.4 percent (111.9 divided by 97.0). Applying the 15.4-percent rise to the 1909 average (\$0.193), the 1914 average is \$0.223. Weekly earnings in 1914 averaged \$11.01. Dividing by average hourly earnings, the computed figure of average weekly hours is 49.4 for 1914.

The Bureau of Labor Statistics (so named in 1913 after the creation of the Department of Labor) continued several of the industry wage surveys which were initiated in 1907. During the years 1913 to 1915, surveys were made of 13 industries. The average of hourly earnings for these 13 industries was \$0.214. The figure already given (\$0.223) is believed to be more nearly representative of manufacturing as a whole, but the direct computation from industry data for 1913 to 1915 provides a significant test of the validity of the average actually used.

The 1919 Estimates. The Bureau of Labor Statistics undertook extensive industry wage surveys in 1919, which was the next manufacturing census year after 1914. Therefore, a general average of hourly earnings for 1919 was computed directly from the data of the wage surveys¹² and the result checked by using the Census data. The BLS 1919 survey yielded figures for 27 industries, separately for men and women. These were combined into industry averages on the basis of the survey's employment data. The industry averages in turn were weighted by man-hours derived by use of industry hourly earnings and Census of Manufactures industry payroll figures. The result is an estimate of \$0.477 as the general average of hourly earnings for 1919.

Weekly earnings in 1919 averaged \$22.08. Dividing weekly earnings by hourly earnings (\$0.477), the computed 1919 average workweek was 46.3 hours.

Estimates of prevailing hours (Census data) and full-time hours (BLS data) are available for 1919 as well as 1914. Prevailing hours, as computed from Census data, show a decline of 7.6 percent. Assuming the same decline in average weekly hours, and dividing the resulting figure into average weekly earnings in 1919, the derived figure of average hourly earnings is \$0.484, somewhat higher than the figure of \$0.477 derived from the BLS special surveys for 1919. If the estimates of full-time hours as computed by Professor Douglas are used in place of Census data of prevailing hours, the derived figure of average hourly earnings is \$0.472, somewhat lower than the special survey figure of \$0.477. The figures on length of work schedules, whether Census prevailing hours or BLS full-time hours, are less dependable for 1919 than are those for other years because of the exceptional shifts in work schedules during the war and the first postwar year. Nevertheless, the tests making use of full-time hours and prevailing hours tend to verify the average (\$0.477) derived from the extensive 1919 survey of hourly earnings.

The 1920-22 Estimates. Although the Bureau of Labor Statistics developed an extensive series of industry surveys of hours and earnings in the twenties, for the years 1920-22, they were hardly adequate for use in the historical series of hours and earnings. For these 3 years, the main source of information on hourly earnings is a study by the National Bureau of Economic Research.¹³

The figures of average hourly earnings as computed in the National Bureau of Economic Research study for 1920-22 cover both wage earners and salaried employees. The figures are quarterly averages, and they extend only to the first quarter of 1922. By adjustment to levels of the averages of wage earners (on the basis of the comparative earnings of wage earners and salaried employees according to the manufacturing censuses of 1919 and 1923), and by interpolation for the full year

¹¹ Op. cit. (p. 2).

¹² See BLS Bull. 265.

¹³ *Employment, Hours, and Earnings in Prosperity and Depression, United States, 1920-22*, New York, National Bureau of Economic Research, 1923. The information used was collected under a cooperative arrangement between the NBER, the Bureau of the Census, and the President's Conference on Unemployment.

1922, averages for wage earners were computed for the years 1920 to 1922.¹⁴

Estimates for 1923 to 1932. Data for 12 industries which were included in the Bureau of Labor Statistics extensive series of industry surveys of average hourly earnings and full-time weekly hours and earnings, developed during the 1920's, are the main sources of the computations for 1923 to 1932. The industries were: (1) Boots and shoes; (2) cotton goods; (3) foundry and machine shop products; (4) hosiery and underwear, knitted; (5) iron and steel; (6) men's clothing; (7) motor vehicles; (8) printing and publishing, book and job; (9) printing and publishing, newspapers and periodicals; (10) sawmills; (11) slaughtering and meatpacking; (12) woolen and worsted goods.¹⁵

The industry wage surveys of the twenties, unlike some of those for 1890 to 1907, were designed to obtain representative hourly earnings data, not merely rates for distinctive occupations.

¹⁴ See BLS Bull. 852 (p. 14) and BLS report *Production Worker Employment, Pay Rolls, Hours and Earnings in All Manufacturing Industries, 1909-1938* (processed).

¹⁵ Although the whole series of BLS industry bulletins, together with supplementary sources, were used, the principal publications were as follows: (1) Bull. 579; (2) Bull. 539; Bull. 616, p. 875; (3) *Monthly Labor Review*, December 1933, p. 1460; (4) Bull. 591; (5) Bull. 567; Bull. 616, p. 875; (6) Bull. 594; (7) *Monthly Labor Review*, June 1933, p. 1365; March 1936, p. 523; Serial R-356; (8) NICB, *Wages, Hours, and Employment*; BLS, *union wage series*; (9) NICB, *Wages, Hours, and Employment*; BLS, *union wage series*; (10) Bull. 586; (11) Bull. 576; and (12) Bull. 584.

For each industry, the studies were usually made every other year and for limited payroll periods within the year, and it was therefore necessary to make interpolations or extrapolations for years not covered and to make a few minor adjustments for trends within years covered. A few other adjustments were made, for example, to take account of the inadequate regional coverage of the men's clothing industry. For these various purposes, use was made of a variety of information, notably the manufacturing censuses, the BLS monthly employment and payroll series, production indexes, and the series published by the National Industrial Conference Board.

With the available industry data for 1923 to 1932 thus brought together, the 12-industry averages of hourly earnings were combined by man-hour weights (BLS-Census payrolls divided by average hourly earnings). Tests were then made as to the representativeness of these averages for all manufacturing. After minor adjustments, the averages appeared to be satisfactorily representative of all manufacturing, as to both levels and trend. The procedure followed is indicated by table 3.

It should also be noted that in 1929 the Bureau of the Census adopted the count of workers employed during the week ending nearest the middle of the month, and in 1939, the number on payrolls during the payroll period ending nearest the

TABLE 3.—*Adjustment of average hourly earnings in 12 manufacturing industries to represent all manufacturing, 1923-32*

Item	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932
1. Average hourly earnings in 12 manufacturing industries ¹ (dollars).....	0.527	0.549	0.552	0.551	0.550	0.567	0.572	0.560	0.524	0.456
2. Average weekly earnings, same industries (payrolls÷employment) (dollars).....	24.23	24.17	24.76	24.98	24.92	25.36	25.47	23.30	20.72	16.38
3. Average weekly hours, same industries (item 2÷item 1).....	45.98	44.03	44.86	45.34	45.31	44.73	44.53	41.61	39.54	35.92
4. Prevailing hours, same industries (from Census of Manufactures) ²	51.29						50.98			
5. Prevailing hours, all manufacturing (from Census of Manufactures) ²	50.91						50.62			
6. Ratio of item 5 to item 4.....	.99259						.99294			
7. Estimated average weekly hours, all manufacturing ³	45.64	43.71	44.53	45.01	44.98	44.41	44.22			
<i>Final estimates for all manufacturing</i>										
8. Average weekly earnings ⁴ (dollars).....	23.82	23.93	24.37	24.65	24.74	24.97	25.03	23.25	20.87	17.05
9. Average hourly earnings ⁵ (dollars).....	.522	.547	.547	.548	.550	.562	.566	.552	.515	.446
10. Average weekly hours ⁶	45.6	43.7	44.5	45.0	45.0	44.4	44.2	42.1	40.5	38.3

¹ The 12-industry averages are weighted by man-hours (payrolls divided by average hourly earnings).

² Computed from Census frequency distributions of wage earners by prevailing weekly hours (full-time or scheduled hours).

³ For 1923 and 1929, item 3 times item 6; for 1924 to 1928, interpolations on basis of trend of average weekly hours in the 12 industries.

⁴ For 1923 to 1931, weekly payrolls divided by employment; or 1932, revised BLS series.

⁵ For 1923 to 1929, item 8 divided by item 7; for 1932, revised BLS series; for 1930 and 1931, interpolations based on trend of average hourly earnings in the 12 industries.

⁶ For 1923 to 1929, item 7; for 1930 and 1931, item 8 divided by item 9; for 1932, revised BLS series.

middle of the month.¹⁶ These methods, beginning in 1929, naturally gave a count of employees somewhat larger than the mid-month count would have shown and therefore lowered somewhat the derived averages of weekly earnings and weekly hours as compared with the averages for the period from 1909 up to the Census of 1929.

Index of Nonfarm Wages Per Hour

The Bureau of Labor Statistics published, soon after World War I, an index of nonfarm wages per hour, extending back to 1840.¹⁷ Many inquiries had been addressed to the Bureau, asking for a general wage index, the inquiries in some instances requesting long-term historical data. Although the Bureau had hesitated to attempt the preparation of such a wage index because of the incomplete and disconnected material available for its construction, the index was constructed and successively extended.¹⁸ The latest year covered by the index was 1934.

From 1840 to 1890 the index made use of the unweighted index of daily wages (derived from occupational wage data) and figures of daily hours of work given in the Aldrich Committee Report.¹⁹

For the period from 1890 to 1907, the index was one published in a Bureau of Labor bulletin in the year 1908. That index had been computed for a large number of Census industries, including "hand and neighborhood" industries. The industry averages, computed from unweighted occupational relatives, were combined by constant weights, namely, the industry payroll figures of the 1899 Census of Manufactures. The Bureau used the principle of changes from year to year in identical establishments.²⁰

In the absence of extensive and continuous series of data after the discontinuance of the 1890-1907 series, use was made from 1907 to 1913 of the Bureau's composite index of union wage scales and indexes of hourly earnings in the several industries for which wage data were collected in special wage surveys. These series of indexes of union wage rates and industry hourly earnings appear to have been combined by the use of union member-

ship data and Census employment figures for the industries covered in the wage surveys.

From 1913 to 1920 the index comprised the composite index of union wage scales, the indexes of average hourly earnings in a group of industries somewhat different from those surveyed by the Bureau from 1907 to 1913, and an index of average hourly earnings for Class I steam railroads (Interstate Commerce Commission data). These were weighted by union membership and industry employment figures.

From 1920 to 1932, a similar method was used, but with slight variations in the industry coverage (for 1920-26, 1926-29, and 1929-32) depending upon the availability of data.

For the years 1932 to 1934, the Bureau's extensive monthly series of industry average hourly earnings (annual averages) were combined with the composite index of union wage scales and the index of average hourly earnings for Class I steam railroads, the various series again being combined by use of union membership and industry employment figures. The separate indexes for the several periods were then linked for a continuous index.

After its publication as extended to 1934, the index was discontinued. Reasons for discontinuance included: The increasing impairment of comparability of wage data available for the successive periods; the lack of comparable price data; the increased relative importance of money wages in a progressively commercialized market economy; the extensive changes in the wage structure; and the development of new concepts and new methods in wage analysis.

¹⁶ Fifteenth Census, Manufactures, 1929, Vol. I (p. 5); Sixteenth Census, Manufactures, 1939, Vol. I (p. 4).

¹⁷ See Monthly Labor Review, February 1921 (p. 73).

¹⁸ See Monthly Labor Review, February 1928, February 1931, September 1933, August 1935, and March 1936. The texts accompanying the tabulations in the several issues of the Review containing the index say little about the sources and methods used. These are apparent, however, from information supplied by Robert S. Billups, formerly chief of the Bureau's Division of Wage Statistics.

¹⁹ Wholesale Prices, Wages, and Transportation, Senate Report No. 1394, Finance Committee, 52d Cong., 2d sess., Washington, 1893. Pt. I (pp. 174 and 179).

That report also contained an index of daily wages which, for years up to 1879, was derived by weighting the industry indexes by employment figures derived from the various decennial censuses (pt. I, pp. 175-176); but the Bureau made use of the unweighted index (pt. I, p. 174).

²⁰ All the data used in these computations appear in Bureau of Labor Bull. 77 (pp. 7, 15, 22-23).

Significant Decisions in Labor Cases¹

Labor-Management Relations

Strict Compliance With Strike Notice Required. The United States Court of Appeals for the Eighth Circuit held² that strikers lost their protected status under the Labor Management Relations Act by engaging in a strike after the union had given notice of contract modifications but without giving notice of desire to terminate the contract, as required by section 8 (d) of the act and their contract with the employer.

The 1-year contract provided that if either party wished to amend any of its terms, he should give 60 days' notice before the end of the year. In the event of failure to agree on amendments, the contract was to continue in effect unless a formal 60-day notice of termination was given.

The union, 60 days before the end of the year, gave notice to the employer of its desire to amend the contract. This notice, copies of which were also sent to the Federal Mediation and Conciliation Service and the appropriate State agency under the terms of section 8 (d) (3) of the act, made no specific mention of the union's intention to terminate at the end of that 60 days.

Negotiations on amendments continued for over 8 months. At that time the employees went on strike without further written notice. The employer, taking the position that these strikers were unprotected, refused the union's offer to return them to work unconditionally and reinstated only those employees who gave assurances that they would work continuously throughout the remainder of the strike. The union filed unfair labor practice charges with the National Labor Relations Board, which ruled³ that the notice of intention to amend given by the union was "tantamount to 'expiration' as that term is used in section 8 (d)," and held that the strike was lawful.

The court did not agree with that interpretation of the act. It held that the terms of section 8 (d) necessarily showed a plain distinction between "amendment" and "termination," and in this case, the union's notice was for amendment only. Moreover, according to the contract's provisions, if the union wanted to terminate the contract, it should have given another 60-day notice. The parties would not have had to so contract, said the court; "the point is that they did." Thus the contract continued in force. Proper notice was not given, and the strike was unlawful.

Secondary Boycott—Picketing Construction Site. The Board held⁴ that activities of pickets at the site of a new building adjoining the employer's premises were in violation of the secondary boycott provisions of the act.

The employer's premises consisted of a large store building covering an entire city block and, separated by a public street from the main store, an annex covering half a block. During the construction of a building covering the remainder of that block, the street between these two blocks had been closed to the public and was being used only for purposes of construction. It was not used by employees of the employer.

The union picketed the entire two-block area, including the closed-off street. Although the pickets carried signs identifying the store owner as the object of the strike and not containing the construction company's name, the conduct of the pickets and the president of the union indicated that they wanted the construction to stop. The presence of the pickets in the closed-off street caused all work on the project to stop for nearly 3 months and coercion by pickets interfered with deliveries to the construction job.

The Board held that the picketing itself was lawful, but not insofar as the union's conduct on the picket line indicated that the dispute extended

¹ Prepared in the U. S. Department of Labor, Office of the Solicitor. The cases covered in this article represent a selection of the significant decisions believed to be of special interest. No attempt has been made to reflect all recent judicial and administrative developments in the field of labor law or to indicate the effect or 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.

² *Lion Oil Co. v. NLRB* (C. A. 8, Apr. 22, 1955).

³ *Lion Oil Co.* (109 NLRB 106, Aug. 5, 1954). See *Monthly Labor Review*, October 1954 (p. 1133).

⁴ *In re Teamsters, AFL and Crump, Inc.* (112 NLRB 49, Apr. 21, 1955).

beyond the primary employer. According to the Board, the evidence in this case established that the union's intent was to enlist the support of and participation in the strike of employees of neutral employers. The Board further held that the conduct was intentional and not an unavoidable accident of otherwise lawful picketing.

The Board issued an order to the union to cease the unlawful secondary boycott, but did not otherwise interfere with the picketing.

Organizational Activity on Company Property, No. 1. The United States Court of Appeals for the Tenth Circuit held⁵ that enforcement of a nondiscriminatory no-trespass rule by an employer against nonemployee union organizers was not a violation of the employees' right to self-organization.

The employer's plant was located on the outskirts of a small town. He maintained a parking lot on plant property for the convenience of his employees, who traveled to and from work in private automobiles. Most of the employees lived in the town where the plant was located, the remainder within a 30-mile radius.

These employees had been entirely unorganized when union representatives who were not employees attempted to organize them, talking with them and distributing literature in the parking lot and private driveways leading to and from the plant. The employer posted "no trespassing" signs and warned the organizers to keep off his property.

After the union filed unfair labor practice charges, the NLRB, following the *LeTourneau* case,⁶ found that the employer's no-trespass rule was unnecessary to maintenance of production and plant discipline. Because the location of the plant made other types of organizational activities impractical, the Board said, the enforcement of the employer's rule deprived the employees of rights guaranteed under section 8 (a) (1) of the act.

The court of appeals disagreed with these conclusions. The court held that the facts did not justify the Board's conclusion that the inaccessibility of the employer's plant made it necessary for nonemployee organizers to violate the no-trespass rule in order to guarantee to the employees their rights of self-organization. The violation of the employer's nondiscriminatory rule was not necessary in this case, the court said, since such

a violation by nonemployees would be justified only insofar as it bore a "cogent relationship" to the exercise of employees' rights.

Organizational Activity on Company Property, No. 2. In a similar fact situation, the United States Court of Appeals for the Fifth Circuit reached the same result⁷ as the Tenth Circuit had done in the *Seamprufe* case.⁸ In the case before the Fifth Circuit, the court held that the Board had not even considered what the court felt was a most important issue, that is, whether the Board had authority to require the employer to cease applying to nonemployee union organizers its rule against distribution of literature on plant property.

In answering this question, the court cited the *Marshall Field* case,⁹ and found itself in full agreement with conclusions reached in that case. The court took the Board to task for its order in the instant case, saying that it was at a loss to understand how, "on this record, which contains neither findings, nor evidence furnishing a basis for findings," the Board could have reached conclusions which would compel the employer to discriminate in favor of a particular labor union, in the enforcement of its nondistribution rule. The order of the Board itself, said the court, violated the act and the Board's duty to enforce it impartially.

Payment of Delinquent Dues Before Discharge. On a motion for reconsideration filed by the union, the Board held¹⁰ that an employee who was discharged at the request of the union for nonpayment of dues had the right to tender payment at any time before actual discharge.

The union had repeatedly requested this employee to pay back dues and a reinstatement fee. She had refused to pay the reinstatement fee, although offering to pay the back dues. The union would not accept one without the other. After the union had finally requested her discharge, the employee sent the union a money order for the whole amount, which was refused. The employee was not discharged until almost 2 weeks later.

⁵ *NLRB v. Seamprufe, Inc.* (C. A. 10, May 4, 1955).

⁶ *NLRB v. LeTourneau Co.* (324 U. S. 793).

⁷ *NLRB v. Babcock & Wilcox Co.* (C. A. 5, May 10, 1955).

⁸ See preceding case.

⁹ *Marshall Field & Co. v. NLRB* (200 F. 2d 375).

¹⁰ *In re Aluminum Workers, AFL, and Leona H. Boness* (112 NLRB 80, May 6, 1955).

The Board ruled that a full and unqualified tender, as in this case, made at any time prior to actual discharge and without regard to when the request for discharge may have been made is proper and a subsequent discharge, based on the prior request, is unlawful.

Refusal to Bargain—Affirmative Duty of Employer. The Board held ¹¹ that the employer had unlawfully refused to bargain with the union on a contract to take effect after the existing contract expired 3 months before the end of the certification year.

Within 2 months of its certification, the union negotiated a 7-month contract with the employer. Sixty days before the expiration of the contract, the union requested the employer to negotiate for a new agreement. The union later offered to extend the existing contract for 6 months. The employer rejected this offer and refused to bargain because, in the meantime, he had received a petition signed by a majority of his employees stating that they did not want to be represented by the union after the expiration of the present contract.

The Board rejected the employer's contention that he was not obliged to bargain concerning a contract that ran beyond the certification year. "The term of a contract is a bargainable matter," said the Board, citing prior cases.¹² There was nothing in the certification-year rule which would make it incumbent on the union to request a contract expiring within the year. Further, the Board held that even if the employer had reasonable grounds to doubt that the union's majority would continue, he was affirmatively required, "in fulfillment of his statutory obligation to bargain and in the very nature of the bargaining process," to express his willingness to make a contract to terminate with the certification year. The employer could use the information he possessed to support such a bargaining position, but he was in no way relieved of any duty to bargain.

Interference and Domination by Employer. The Board ordered¹³ an employer to disestablish a "shop committee" and to bargain with the union.

The employer had in the past bargained with a so-called "shop committee" representing the employees, but his contract with it had run out and, although the committee was still in existence, he no longer bargained with it.

The union, meanwhile, had signed up a majority of the employees in the bargaining unit and requested recognition. The employer refused to bargain, alleging that the shop committee was the appropriate bargaining representative. He made speeches to the employees urging them not to join the union and pointing out the advantages of rejecting it. A new shop committee was organized, and a new contract between this committee and the employer was drawn up and signed, all within 1 day of the union's request for recognition. The employer then asked the employees to vote on whether to accept this new contract or go along with the "outside" union. Further antiunion activity was carried on by a supervisor who questioned employees and attended a union meeting.

The Board held that, on these facts, the employer had committed more than mere "technical violation" of the act. He has an obligation to honor the request of the union to bargain unless he in good faith doubts its majority, and he had given no evidence of doing so.

Domination of Labor Union. The Board ordered¹⁴ the employer to cease recognizing and dominating a so-called "advisory council" which was a labor organization within the meaning of the act.

The employer had set up a new plant and wanted some sort of contact with the employees, in the absence of a union. He organized a so-called advisory council, composed of elected representatives from the various departments in the plant, which met with employer representatives at least once a month. Although the council was never termed a "bargaining unit," various subjects of a bargaining nature, such as vacations, seniority, wages, and overtime, were discussed.

The Board found that this council was in fact a labor organization within the meaning of the act. The employer initiated this organization and conducted elections of employee representatives, the Board held, and coupled with his other actions, clearly dominated and supported it in violation of the act.

¹¹ *American Steel Foundries* (112 NLRB 66, Apr. 29, 1955).

¹² See, for example, *Hinde & Dauch Paper Co.* (104 NLRB 847).

¹³ *Ben Corson Manufacturing Co.* (112 NLRB 461, Apr. 21, 1955).

¹⁴ *Texas City Chemicals, Inc.* (112 NLRB 40, Apr. 18, 1955).

Chronology of Recent Labor Events

May 2, 1955

THE AFL-CIO Joint Unity Committee agreed on a constitution for the federation to be formed by merger of the two organizations—the second step in the previously adopted merger procedure (see Chron. item for Feb. 9, 1955, MLR, Apr. 1955). The AFL Executive Council approved the charter on May 4, as did the CIO Executive Board on May 7. (See also p. 788 of this issue.)

THE Petroleum Committee of the International Labor Organization suspended its session in Caracas, which is to be reconvened elsewhere, protesting the Venezuelan Government's expulsion of the workers' member of the Governing Body delegation to the conference for publicly criticizing the continued suppression of trade union rights in Venezuela. (In 1950, an investigation by ILO disclosed interference with freedom of association.) Thereupon, the Venezuelan Government notified the ILO that it intended to withdraw from the organization.

May 3

J. SCOTT MILNE, president of the International Brotherhood of Electrical Workers, was elected a vice president of the American Federation of Labor, filling the vacancy created by the death of Daniel W. Tracy (see Chron. item for Mar. 22, 1955, MLR, May 1955).

May 4

THE AFL Executive Council refused to give the Teamsters' union jurisdiction over longshore work, requested as a means of absorbing the independent International Longshoremen's Association, because the AFL International Brotherhood of Longshoremen had jurisdiction over longshoring. The council also pointed out that a merger of the Teamsters with the ILA, expelled by the AFL (see Chron. item for Sept. 22, 1953, MLR, Nov. 1953), would violate the AFL constitution.

THE Federal court of appeals at Denver denied enforcement of a National Labor Relations Board order; it held, in *NLRB v. Seamprufe, Inc.*, Holdenville, Okla., that an

employer with a nondiscriminatory no-trespass rule could legally forbid solicitation of employees by nonemployee union organizers during nonworking hours on his private parking lot. The court found that the employees, who lived in or near a small city, were readily accessible to union organizers. (See also p. 808 of this issue.)

May 5

THE Governor of Rhode Island signed an act requiring State courts to stay proceedings in labor disputes on issues that are referable to arbitration under written agreement, empowering the State Superior Court to enforce arbitration agreements, and stipulating conditions for court enforcement of arbitration awards.

May 8

THE CIO Rubber Workers reached an agreement with the Goodyear Tire & Rubber Co., increasing pensions and sickness and accident benefits for 28,000 workers in 10 of the company's plants. The contract raises monthly pensions by 30 cents for each year of service up to 30 years and the weekly sickness and accident benefits by \$5, and requires the workers to retire at age 65 after February 1, 1957.

May 9

THE Louisville and Nashville Railroad system and railroad workers' unions agreed to submit their dispute to arbitration, signaling the end of a sometimes violent strike which began March 14 and idled about 25,000 workers, affecting rail service in 13 States. The principal issue was the carriers' rejection of demands by the 10 nonoperating unions for a contributory health and welfare plan recommended by a Presidential factfinding board and already accepted by virtually all other railroads (see Chron. item for Aug. 10, 1954, MLR, Oct. 1954).

On May 20, following the arbitrator's award, the nonoperating unions signed an agreement with the L&N and its subsidiaries providing for a health and welfare plan paid for by the employers and for other benefits similar to those agreed to by other carriers.

THE Acting Federal Wage and Hour Administrator announced higher minimum wage rates under the Fair Labor Standards Act, ranging from 21 to 57½ cents an hour, for 15 of the 20 divisions of the needlecraft and fabricated textile products industry in Puerto Rico, effective June 6, 1955. Minimum rates in the other 5 divisions of the industry, ranging from 21 to 35 cents, were not changed.

On May 31, the order was amended, effective July 25, 1955, to include the cordé embroidery and cordé handbag division of the industry, for which a minimum of 51 cents an hour was set.

May 11

THE Brotherhood of Railroad Trainmen (Ind.) reached an agreement with the major railroads providing graduated pay increases for freight conductors, brakemen, and flagmen on trains with 81 or more cars, effective June 16, 1955. The contract also provided a 25-cent daily raise for switch foremen and increased to \$1.10 a day the rate differential for yard conductors over yard brakemen.

On May 26, the Order of Railway Conductors and Brakemen (Ind.), following the recommendations of a Presidential factfinding board (see Chron. item for Mar. 25, 1955, MLR, May 1955), negotiated an agreement with the carriers, and the Trainmen amended their earlier agreement. The contracts provided larger increments for freight conductors and brakemen on longer trains than those agreed to initially by the Trainmen and, in addition increases of 20 cents a day for men working on trains with fewer than 81 cars and for passenger conductors and brakemen. (See also p. 815 of this issue.)

THE Switchmen's Union of North America (AFL) reached agreement with the Western railroads on a 25-cent-a-day increase in the differential for switch foremen, effective June 1, 1955.

May 15

THE CIO Glass Workers negotiated a new 1-year contract, effective May 15, 1955, with Pittsburgh Plate Glass Co. and Libbey-Owens-Ford Glass Co., providing a package increase of 14 cents an hour for wages and improvements in health and welfare benefits. The agreement, which covered about 22,000 employees in 7 States, also established a joint committee to explore problems connected with a guaranteed annual wage plan.

May 20

THE Governor of Wisconsin signed an act prohibiting contributions for political purposes by labor unions, corporations, and certain other associations and specifying fines or imprisonment, or both, for violation. (See also p. 789 of this issue.)

THE Fourth World Congress of the International Confederation of Free Trade Unions opened in Vienna, Austria. (For discussion, see p. 785 of this issue.)

THE NLRB held, in *Local 595, International Association of Bridge, Structural and Ornamental Iron Workers (AFL), et al.*, Joppa, Ill., and *Bechtel Corp.*, that the union, to prove compliance with a Board determination of a jurisdictional dispute, must not only discontinue its illegal conduct but also manifest a "good-faith intent" to accept and abide by the determination. Although the union had ceased attempting to force the employer to assign the

disputed work to its members following a court order (see Chron. item for Oct. 12, 1953, MLR, Dec. 1953), the Board equated the union's failure to comply with the formal requirement of notice to the NLRB regional director with refusal to comply.

May 21

MEMBERS of the CIO Electrical Workers voted (2,400 to 900) to accept a 2-year contract with the Sperry Gyroscope Co., Lake Success, N. Y., thus ending a 5-week strike which idled about 9,500 employees. The new agreement provides wage increases of 8 and 5.3 cents an hour for the 1st and 2d year, respectively, and the assumption by the employer of the workers' 2½ percent contribution to the pension fund.

May 23

THE SUPREME COURT of the United States ruled, in *Maneja et al. v. Waiialua Agricultural Co.*, that employees of a large Hawaiian company who work in a mill in which sugarcane grown on the company's plantation is processed are subject to the minimum wage provisions of the Fair Labor Standards Act. The court also held that the mill maintenance and repair workers were covered by the act's overtime provision during the 3-month season when no processing was done in the mill.

May 24

THE CIO COMMUNICATIONS WORKERS announced ratification of a new 1-year agreement with Southern Bell Telephone and Telegraph Co., thus ending a 72-day strike affecting about 50,000 company employees in 9 South-eastern States. With respect to the main issues, the new contract provides for general wage increases (\$1 to \$4 a week) for all nonsupervisory employees; strengthens the clause on the arbitration of disputes over discharges, promotions, and suspensions; and permits workers to respect authorized picket lines in lawful strikes at premises where the strikers work. (See also p. 813 of this issue.)

May 25

THE Federal court of appeals in Boston ruled, in *Eastern Sugar Associates v. Pena*, that, although the employer was subject to the Fair Labor Standards Act, an employee who sued for unpaid overtime compensation had based his claim on a Puerto Rican law with more favorable provisions regarding the method of computing overtime and therefore the Federal 2-year statute of limitations did not apply. Moreover, the court pointed out, the Federal act expressly provides that none of its provisions "shall excuse noncompliance with any Federal or State law" establishing higher wage and hour standards.

THE Acting Federal Wage and Hour Administrator announced increases in minimum wage rates, under the Fair Labor Standards Act, to 65 cents an hour for the fabricated wire products, steel spring, and slide fastener division and to 75 cents an hour for the other components of the metal, machinery, transportation equipment, and allied industries in Puerto Rico, effective June 27, 1955.

May 26

THE Federal court of appeals at Washington, D. C., in *United Electrical, Radio & Machine Workers of America (Ind.), Local 1113 v. NLRB*, upheld the Board's ruling that the Marathon Electric Manufacturing Corp., of Wausau, Wis., had not violated the Taft-Hartley Act by discharging all employees who were members of the union and who had

failed to disassociate themselves from an illegal strike called by the union (see Chron. item for Sept. 29, 1953, MLR, Nov. 1953).

May 27

THE NLRB regional director in Boston certified Local 21 of the CIO Leather Workers Organizing Committee as the bargaining representative of the workers of about 60 leather manufacturing firms in the Peabody-Salem-Danvers, Mass., area. The victor received 1,658 votes to 448 for the Fur and Leather Division of the AFL Meatcutters. Earlier this year, the workers had voted to secede from the Fur and Leather Workers (Ind.), prior to its merging with the Meatcutters (see Chron. item for Feb. 22, 1955, MLR, Apr. 1955).

Individual employees filed more than one-third of the 5,965 unfair labor practice charges received by the National Labor Relations Board in fiscal year 1953-54. Unions filed a little over half of the charges; employers, a tenth.

The cases (2,147) filed by individual employees were more numerous than at any time in the Board's 19-year history. About three-fifths of the employees' actions were directed against employers and the remainder against unions, the number of cases being 17 and 54 percent, respectively, higher than in 1953.

Of the complaints against employers, unions originated 71 percent and individual employees, 29 percent; the most common charge was discrimination against employees because of their union activities or because they were not union members. Charges against unions came from employees in 54 percent of such cases, from employers in 37 percent, and from other unions in 9 percent. Most frequently, the charge cited illegal restraint or coercion of employees in the exercise of their right to engage in, or refrain from, union activity.

In the 4,813 representation elections conducted by the Board (22.4 percent fewer than in fiscal 1953), nearly 88 percent of the eligible voters cast valid ballots and approximately 70 percent of these voted in favor of representation. Bargaining agents won the right to represent nearly 350,000 employees, or two-thirds of all who participated in the elections, compared with 79 percent in 1953-54 and 75 percent in 1952-53. AFL unions won bargaining rights in 57 percent of the 3,406 elections in which they took part; CIO unions, in 52 percent of 1,521 elections; unaffiliated unions, in 63 percent of 573 elections.

—Data are from the Nineteenth Annual Report of the National Labor Relations Board for the Fiscal Year Ended June 30, 1954.

Developments in Industrial Relations¹

THE LARGE STRIKES against the Southern Bell Telephone Co., the Louisville and Nashville Railroad, and the Sperry Gyroscope Co. ended during May. The New England textile strike, however, continued throughout the month at all but one company, and along the West Coast a trucking industry stoppage assumed larger proportions at the month's end. A number of important settlements were recorded in the railroad, rubber, glass, paper, and radio and television manufacturing industries, as well as in a scattering of other industries. The CIO Auto Workers reached agreement with Ford early in June, following postponement of a strike deadline, but bargaining continued with General Motors. Preliminary arrangements for wage negotiations in basic steel were announced. The AFL and CIO executive bodies approved comprehensive programs designed to safeguard union health and welfare funds and announced changes in their convention plans to implement formal merger of the two organizations later in the year.

Work Stoppages

The 58-day strike involving about 25,000 employees of the Louisville and Nashville Railroad Co. and several subsidiary railroads in 13 States ended May 10, after the railroads and 10 AFL unions representing nonoperating employees agreed to submit their dispute to binding arbitration.² After several days of hearings, the arbitrator ruled that the railroads should pay the full cost of a health and welfare plan, and an agreement was signed on May 20. The arbitrator's decision relating to other issues such as vacations, holidays, and other working rules conformed substantially to contracts signed by other Class I railroads and the nonoperating unions in August 1954.³

The costs of health and welfare plans in effect on most of the Class I railroads are shared equally by the carriers and the nonoperating employees. However, early in April the nonoperating unions

notified these railroads that they wanted them to pay the full costs of the plan. The decision that the L & N should pay the full costs of a health and welfare plan was reached by the arbitrator, Francis J. Robertson, on the basis of an improved earnings outlook for railroads; the trend toward employer-paid plans; and the opposition of the L & N to compelling any employee to contribute to such a plan.

The 72-day strike of employees of the Southern Bell Telephone and Telegraph Co. ended May 24, when the CIO Communications Workers voted to accept a new 1-year contract.⁴ The agreement contains a no-strike, no-lockout clause sought by the company and provides for arbitration of some types of disputes arising under the contract. Although the union wanted a broad arbitration clause, the company insisted upon making the final decision in disputes over company benefit plans, leaves of absence, compliance with health and safety measures, and demotions and discharges during trial periods. The contract for the first time gives workers the right to respect legitimate picket lines. The agreement also provides for general wage increases (\$1 to \$4 a week) for all nonsupervisory employees, the upgrading of 25 towns to higher pay schedules, and a seventh paid holiday. At the request of the union, discharges of about 160 workers on charges of misconduct during the work stoppage will be subject to binding arbitration on an individual basis.

In late May the company filed a \$5 million suit against the union for damage to company property. Union officials immediately denied allegations in the suit and accused the company of bad faith in filing the court action after the strike settlement.

The first break in the Fall River-New Bedford textile strike⁵ came on May 26 when approximately 1,300 workers at the Wamsutta Mills returned to work following ratification of a new 2-year agreement between the company and the CIO Textile Workers. The agreement left wages unchanged and provided for a wage reopening after 1 year. The number of unpaid holidays, on which workers are not paid if they do not work but receive time and a half if they work, was reduced

¹ Prepared in the Bureau's Division of Wages and Industrial Relations.

² See Monthly Labor Review, June 1955 (p. 686).

³ See Monthly Labor Review, October 1954 (p. 1139).

⁴ See Monthly Labor Review, June 1955 (p. 686).

⁵ See Monthly Labor Review, June 1955 (p. 685).

from 4 to 1 but the provision for 6 paid holidays remained unchanged. The clause that previously required mutual advance consent to introduction of new methods was revised to permit the company unilaterally to change manufacturing processes, with unresolved issues becoming arbitrable after 4 weeks.

The strike of production employees of Sperry Gyroscope Co. on Long Island, N. Y., ended May 21 when members of the CIO Electrical Workers voted to accept a 2-year contract, with an immediate 8-cent hourly package increase and an increase of 5.3 cents an hour a year later. The stoppage began April 19, and in its early stages was marked by some clashes on the picket lines.⁶

Late in May, a trucking stoppage was spreading in California and 10 other Western States in a dispute between for-hire trucking companies and the AFL Teamsters' union. Teamsters employed by three large trucking companies stopped work on May 19 when negotiations on new contracts became deadlocked. Several hundred other trucking companies subsequently stopped operations to support the struck companies, daily increasing the number of workers idle. The union stated it wanted a 3-year contract with wage increases of 10 cents an hour the first year and 8 cents in each of the 2 succeeding years, plus pensions and increased health and welfare benefits. It also has asked for a ¼-cent increase in the mileage rate to 7½ cents a mile. The companies offered a 5-cent hourly wage increase in each of the 3 years. At the month's end, the union was considering a revised offer submitted by spokesmen for a substantial group of trucking companies.

Settlements

Automobiles. Bargaining by the UAW-CIO with General Motors and with Ford continued throughout May and a settlement was reached at Ford early in June.⁷ Late in May, the June 2 strike deadline at Ford was postponed until June 6. On that day stoppages began at a number of Ford plants but by noon agreement was announced on a new 3-year contract.

The new contract provides for supplements to unemployment benefits for laid-off workers and an increased annual improvement factor, extra increases in pay for skilled workers, a revised cost-

of-living escalator formula, and liberalized pension, insurance, vacation, and holiday pay provisions.

The annual improvement factor was increased so that base rates will be raised on June 1 of each year of the contract (1955, 1956, and 1957) by 6 cents an hour or 2½ percent of base pay, whichever is greater. Pay of certain skilled workers was increased, effective June 1, 1955, by 5 to 10 cents an hour. Under the liberalized escalator clause, the cost-of-living allowance will change 1 cent for each 0.5-point (instead of 0.6-point as formerly) change in the BLS Consumer Price Index. Any reduction in the existing 6-cent cost-of-living allowance will be made according to the old formula used in building it up; the revised formula applies only to changes in wage rates above their present level.

Pension benefits, including maximum retirement benefits and disability provisions, were liberalized and vesting rights were established in the pension plan. The contract improved the insurance, medical, and hospitalization program and for the first time employees' dependents were included in in-hospital medical benefits. Half holidays were added on Christmas and New Year's Eves. Other changes included triple pay for holiday work for most employees and an extra half-week vacation for workers with 10 but less than 15 years' service.

Supplemental unemployment benefits provided in the agreement cover all hourly rated employees having at least 1 year's seniority. Longer service employees are accorded preferred rights in the accumulation of credit units for weeks worked during the first 2 years and the disbursement of benefits under certain circumstances. Under the plan, laid-off employees would receive cash benefits ranging up to \$25 a week for a maximum of 26 weeks. These benefits when combined with unemployment compensation would give an employee an amount equal to a maximum of 65 percent of his weekly basic pay (after taxes) for a 40-hour week for 4 weeks and thereafter, up to 22 additional weeks, a maximum of 60 percent. Benefits will become payable on specific application by the employee after a waiting period of 1 week. Payments will not begin until June 1, 1956.

⁶ Ibid.

⁷ See Monthly Labor Review, June 1955 (p. 637).

Integration with State unemployment-benefit programs is an important feature of the plan. It cannot become effective until the authorities in States where two-thirds of the employees work have ruled that simultaneous payment of benefits shall not reduce or eliminate State unemployment benefits.

Railroads. Two agreements, for the first time providing pay differentials based on the number of cars in a freight train, were negotiated during the month.⁸ The Brotherhood of Railroad Trainmen (Ind.) and the Nation's railroads agreed May 11 on a series of increases to be added to the basic rate of pay for road freight conductors and brakemen, depending upon the maximum number of cars in the train. This agreement was revised later in the month to provide somewhat higher increments in the basic rate of pay, similar to those agreed upon by the Order of Railway Conductors and Brakemen (Ind.). The agreements provide for the following increases in basic daily road freight rates beginning June 16: Less than 81 cars, 20 cents; 81 to 105 cars, 55 cents; 106 to 125 cars, 95 cents; 126 to 145 cars, \$1.20; 146 to 165 cars, \$1.30; and 20 cents for each additional block of 20 cars or less. Basic daily rates of passenger conductors and trainmen were increased 20 cents a day. The agreement with the Brotherhood of Railroad Trainmen also provided for a \$5-a-month increase for dining-car stewards. In addition, the pay differential of yard conductors over yard brakemen was increased 25 cents a day, effective June 1. Another agreement between the western railroads and the Switchmen's Union (AFL) also included a 25-cent-a-day increase for switch foremen.

Airlines. The Air Line Pilots Association (AFL) announced that a pension program, designed to hedge against a rising cost of living, is to be incorporated in new agreements with Pan-American World Airlines and Northeast Airlines. The plan established a two-part pension fund: one part will finance a fixed monthly benefit; the second will be invested in common stock and will be used to pay a variable benefit. The funds, to be built up through joint contributions, provide for retirement benefits at age 60, with optional

retirement on reduced benefits after 50, and deferred pensions for pilots leaving after age 45 with at least 10 years' service. The plan, now in effect on Pan-American Grace Airlines, is modeled after that adopted some years ago by the Carnegie-endowed Teachers Insurance and Annuity Association.

Rubber. A new 5-year pension and insurance agreement was signed by the Goodyear Tire & Rubber Co. and the CIO Rubber Workers, affecting approximately 28,000 hourly paid employees at 10 plants. Provisions scheduled to take effect June 1 include: Guaranteed minimum monthly pensions (exclusive of social security benefits) increased to \$1.80 a month from the present \$1.50 for each year of service up to 30; a further increase in pensions as a result of a revised formula for computing normal retirement benefits; weekly sickness and accident benefits increased from \$35 to \$40 for men and from \$25 to \$30 for women. Retirement will become compulsory for employees 65 years of age or older after February 1, 1957.

Glass and Pottery. New 1-year contracts between the CIO Glass Workers and the Pittsburgh Plate Glass Co. and Libbey-Owens-Ford Glass Co., provided a general wage increase of 8 cents an hour for all workers; additional increases of 8 cents for maintenance, and 6 cents for other employees when working on nonincentive jobs; and changes in health and welfare benefits. The "package" was valued at about 14 cents a man-hour by a spokesman for one of the companies. The agreements, effective May 15, cover approximately 22,000 workers in major flat glass plants in seven States. The union's initial demand for a guaranteed annual wage program resulted in setting up a joint union-management commission to examine various existing plans. The commission is scheduled to report its findings—which are not binding—prior to wage negotiations in May 1956.

A 5-cent hourly increase for workers in minimum pay brackets in the pottery industry, effective the first full pay period after May 1, was provided in a new contract between the Operative Potters (AFL) and the United States Potters Association. The increases, the first since 1952 for unskilled workers, affect approximately one-third of the

⁸ See Monthly Labor Review, June 1955 (p. 688).

15,000 to 18,000 pottery employees. Wages of other workers were not changed.

Radio and Television. Radio Corporation of America and the CIO Electrical Workers reached agreement on a 4- to 7-cent hourly wage increase, effective May 23, plus improved pension and other fringe benefits for about 14,000 employees at plants in New Jersey, Ohio, and California. The wage increase and other contract changes were valued by the union at a total of 10 cents hourly. The agreements were extended to June 1957, providing for wage reopening in the spring of 1956.

A 5-cent hourly wage increase, effective May 1, and improvements in fringe benefits were agreed to by the same union and Philco Corp., under a new contract covering about 6,500 employees in Sandusky, Ohio, and Philadelphia and Croydon, Pa. In addition, the company agreed that beginning January 1, 1956, it will contribute 7 instead of 5 cents an hour to a severance-pay fund.

Paper and Pulp. An agreement between the Pacific Coast Association of Pulp and Paper Manufacturers and two AFL unions, the Paper Makers and the Pulp, Sulphite and Paper Mill Workers, was ratified early in May by union members in 45 locals in Washington, Oregon, and California. The agreement, covering approximately 18,000 workers at 38 pulp and paper plants in the three States, provided for a general 4½-cent hourly increase, other adjustments in all individual job rates, and a 1-cent increase in the night shift differential.

The same unions negotiated a 5-percent increase, ranging from 7 to 14 cents an hour, in the Southern Kraft Division of the International Paper Co. In addition, the agreement provided a new company-paid hospitalization plan for employees, with similar benefits available for dependents if employees pay the premiums. The agreement also included a paid sick leave plan. The settlement, subject to local ratification, affects 12,000 employees at 9 mills of the company in various Southern States.

Shipbuilding. The Pacific Coast District of the AFL Metal Trades Council and West Coast shipyard operators on May 22 concluded a new 1-year contract covering approximately 14,000 workers. The agreement provides for a 7-cent

hourly increase effective July 1, and a reduction from 1,200 to 1,000 a year in the number of work-hours required for vacation eligibility.

Retail Trade. Representatives of A & P Supermarkets in New York and New Jersey and the AFL Meat Cutters agreed on a new contract, subject to ratification of the union membership, averting a strike scheduled for May 25. The agreement, covering approximately 13,500 employees in 600 stores, raises weekly pay of full-time employees by \$7.50, effective the first week in June. Part of the increase (\$5 weekly for meat department and \$4 for other employees) is retroactive to August 28, 1954, the expiration date of the previous contract; part-time employees will receive an increase of 15 cents an hour, bringing their rate to \$1.25. Other terms of the settlement provide for company-paid group hospital insurance for employees and dependents; a reduction of the workweek from 45 to 40 hours in May 1957, and a wage reopening at the same time.

Construction. Wage increases up to 22½ cents an hour for approximately 55,000 carpenters in 11 southern California counties in the Los Angeles area were announced in mid-May by the AFL Carpenters and a negotiating committee representing four major contractor associations. The 2-year contract provides for an 8½-cent an hour increase, June 15, 1955; an additional 4 cents effective September 15, 1955, in all counties except Kern, where the increase will be 1 cent; and, effective May 1, 1956, a further increase of 10 cents an hour in all counties but Kern, where the raise will be 7 cents. Wage rates before the settlement were \$2.77½ an hour in all counties except Kern, where it was \$2.85½.

AFL Painters in Los Angeles County (approximately 11,000) received an increase of 17 cents an hour effective June 1, 1955, and an additional 11 cents an hour effective June 1, 1956, under a new 2-year agreement. Provision was also made for an increase of ½-cent hourly in employer contributions to a health and welfare program, and the beginning apprenticeship scale was increased from 50 to 60 percent of the journeyman rate.

Approximately 5,500 AFL Carpenters in Washington, D. C., received increases of 12½ cents, effective May 9, with provision for an additional increase of 10 cents an hour in May 1956.

Negotiations

Steel. The CIO Steelworkers served formal wage reopening notices on the steel industry at the end of April and convened its Wage Policy Committee, May 11 and 12, to approve plans to open bargaining "for a substantial wage increase" with the United States Steel Corp. The union announced a departure from past bargaining practices in that negotiations with five other major steel producers—Bethlehem, Republic, Jones & Laughlin, Inland Steel, and Youngstown Sheet and Tube—would be held concurrently in Pittsburgh. Under this arrangement, a general Union Negotiating Committee, headed by David J. McDonald, the union's president, would hold separate sessions with the companies until settlements were reached. In the past, the union opened talks first with United States Steel and then started negotiations with other companies a few days later. The change in the bargaining procedure, the union said, was decided upon in agreement with the six companies. Some 175 Steelworkers' contracts, covering 600,000 workers, are subject to renegotiation on wages. The basic contracts are effective until June 1956.

The CIO Electrical Workers' Economic Policy Committee, meeting in mid-May, endorsed a resolution declaring "every working member of the international [union] shall pay to the IUE-CIO Defense Fund 1 day's pay, or \$15, for each month or part of a month" during a strike—if called by an IUE-CIO Conference Board. The resolution, adopted by more than 350 delegates with 5 dissenting votes, is subject to membership referendum. Negotiations with General Motors were in progress during May, with the current agreement scheduled to expire June 7. The union's agreement with General Electric expires September 15, and the contract with Westinghouse provides for a wage reopening between September 15 and November 15, 1955.

Maritime. Negotiations between the National Maritime Union (CIO) and the Committee for Companies and Agents, Atlantic and Gulf Coasts, covering passenger and freighter unlicensed personnel, began May 16. The union president stated that a proposed "unemployment security plan"⁹

was the principal issue in the negotiations. He also indicated that the 40-hour week was a basic principle on which a "life and death struggle" could take place. This was a reference to the controversial *Tonsina* contract¹⁰ announced by the AFL Seafarer's Union last March, which increased basic scales but permitted a 56-hour straight-time workweek while at sea.

Union Developments

Welfare Funds. Early in May, the AFL Executive Council and the CIO Executive Board unanimously approved programs to safeguard union welfare funds. The AFL proposal, first presented to the council in February,¹¹ was adopted on the recommendation of a subcommittee, after an extensive study. It included a comprehensive code, recommended for adoption by affiliated unions, which spelled out the duties of union officials in dealing with employers and insurance companies on fund operations. The program also called for national and State legislation that would provide for the disclosure of detailed information on all welfare fund operations. AFL affiliates were urged to amend their constitutions or change their administrative procedures in order to put provisions of the code into effect "at the earliest practicable time."

In order that the funds may qualify for tax deductions, the AFL recommended that those responsible for administering welfare funds "file with the Internal Revenue Service an annual financial report disclosing in detail the operations, transactions, expenses, and investments of the funds," and also make the report readily available to all groups directly concerned. State laws, under the suggested code, would be amended to eliminate "unnecessary" agents' fees currently required by law in some States. The federation has also recommended that measures be taken to make regulatory bodies governing insurance operations "more representative of the public and consumer interest."

A code of ethics for establishing and administering health and welfare funds based on the recommendations of the AFL Executive Council was adopted by the Machinists.

The CIO recommendations, prepared by the CIO Ethical Practices Committee, called for enactment of Federal legislation requiring full dis-

⁹ See Monthly Labor Review, April 1955 (p. 460).

¹⁰ See Monthly Labor Review, June 1955 (p. 689).

¹¹ See Monthly Labor Review, April 1955 (p. 460).

closure of all phases of operation of union health and welfare and pension plans. A program of self-regulation was approved at the 1954 national CIO convention.¹² Under the CIO legislative proposal, termed an "Employee Welfare Plan Disclosure Act," administrators of every employee welfare plan would file annually with the Secretary of Labor complete information on the funds. The CIO held the view that disclosure should be enforced "through Federal legislation which will be uniformly applicable throughout the entire country," and that the statute "should stand separate and apart from other kinds of legislation."

Unity. The AFL Executive Council and the CIO Executive Board, early in May, following approval of a new constitution to govern the proposed combined organization drafted by the Joint Unity Committee,¹³ announced plans for concurrent conventions, to be held December 1 and 2 in New York City. Final approval of the constitution and the actual amalgamation of the two federations is scheduled for the week of December 5, 1955. The AFL announced the scheduling of a special convention in Chicago on August 11, to consider formally the proposed postponement of the September 15 convention and its transfer to New York. This will be followed by a conference of AFL unions, scheduled for August 12 in Chicago, to go over the proposed constitution.

While top officials of the AFL and CIO were working out the details of the new constitution, delegates from three CIO affiliates—Auto Workers, Steelworkers, and Electrical Workers—and the AFL Machinists, representing 40,000 employees of the Bendix Aircraft Corp. at 21 plants, met in

Washington to discuss common bargaining objectives and lay the groundwork for future cooperation. The conference approved reports prepared by its study committee covering health, welfare, and pensions; wage incentives and fringe benefits; general contract provisions; and apprenticeship. An interim committee of representatives from the four unions was set up to coordinate bargaining objectives.

Meanwhile, presidents of the CIO Packinghouse Workers and the AFL Meat Cutters, which are discussing merger plans, each addressed policy-making bodies of the other's union. A joint announcement was issued stating that wage reopening notices were served early in May on the Nation's 4 largest meatpackers—Swift, Armour, Wilson, and Cudahy—and that both unions would "follow a policy of close cooperation" in contract talks based on the "mutual aid" pact signed in 1953.¹⁴

Elsewhere, the CIO Shoe Workers' convention authorized union officers to continue "exploring" a proposed merger with the AFL Boot and Shoe Workers Union and to formulate plans for a coordinated organizing program throughout the United States and Canada.

A resolution calling for immediate steps toward merging the Pennsylvania State Federation of Labor and the State Industrial Union Council was adopted in convention by the State federation. In an address to the convention, the President of the State CIO outlined plans for amalgamation.

¹² See Monthly Labor Review, February 1955 (p. 184).

¹³ See Monthly Labor Review, April 1955 (p. 459).

¹⁴ See Monthly Labor Review, September 1953 (p. 982).

Book Reviews and Notes

Special Reviews

Inter-Industry Labor Mobility: The Case of the Displaced Textile Worker. By William H. Miernyk. Boston, Northeastern University, Bureau of Business and Economic Research, 1955. 158 pp., charts. \$2.75.

New England and its textile industry hold the dubious distinction of being the most analyzed of all regions and businesses. Too frequently, however, the problem of the displaced worker has been brushed aside or solved by the wrong assumption that he has in some routine fashion transferred to the new growth industries.

The author of this volume was dissatisfied with earlier and inadequate analyses based on the supposition that expansion in aggregate employment in new industries would take up the job slack in old industries. Accordingly, he has explored the plight of the individual textile workers who lost their jobs in five cotton or woolen cities—Lowell, Lawrence, Fall River, New Bedford, and Providence. One nontextile area was also surveyed. In all, the work and no-work experience of 1,700 laid-off employees was traced, the majority through personal interviews. The findings, it is hoped, will serve to shock New England leaders out of whatever complacency remains in regard to the impact of the decline in textiles.

The unwarranted assumption of ease of movement from job to job and to new industries and areas should be laid permanently to rest by the series of case studies presented in the book. The main results of the survey are:

Fewer than half of the displaced textile workers found jobs.

Of those who found jobs, two-thirds earned less than on their previous textile jobs.

More of the job seekers found textile jobs than any other occupations.

The average worker in the survey was older than the general average in the Massachusetts labor force.

Ninety percent of the successful job hunters found work through relatives or friends, or by applying at the gate.

Very few of the unemployed in the sample were on relief; 12 percent were dependent upon relatives other than spouses; 13 percent received some kind of retirement income, including social-security payments.

The displaced workers were poorly informed about local labor-market conditions.

The author concludes that aggregate comparisons which show more jobs added than lost in a region may describe overall employment trends but conceal short-run problems created by changes in the industrial structure of the region's economy. His case-study approach is the most satisfactory route to the heart of the matter—what job, if any, does the laid-off worker find?

Attention is directed to the fact that the electronics, apparel, and costume-jewelry industries, which have enjoyed rapid growth where the textile mills have closed, do not as a rule hire the former weaver or loom-fixer. On the contrary, work opportunities in these new industries are largely for women and younger workers. Serious social problems are present in the New England textile towns where frequently only the wife is employable in the new plant, while the husband, unwanted in the new industry, takes on the duties of house-keeping and care of the children. This is a situation that warrants further study, perhaps by the sociologist rather than the economist.

To William Miernyk belongs the credit for exploding the myth, perpetuated by several learned documents on the New England economy, that the region would be better off without textiles and should seek its future only in the growth industries. The textile industry, incidentally, is still the largest single employer in New England. Mr. Miernyk urges more positive programs of aptitude testing, retraining, and job placement, but wisely suggests that they can be effective only if there is a high level of employment in the country as a whole.

The findings in this volume are not limited to one region in their application. Other labor-market areas are haunted by the specter of the displaced and unemployable older worker with special skills related to a single industry. The coal miner, it is suspected, could report an experi-

ence similar to the weaver's. New England is fortunate to be the subject of such a careful study. Is it not a wise man who submits to a full physical examination by a reliable doctor? Miernyk is one of the more skillful of New England's diagnosticians.

—WENDELL D. MACDONALD
Bureau of Labor Statistics

Research on Labor Mobility—An Appraisal of Research Findings in the United States. By Herbert S. Parnes. New York, Social Science Research Council, 1954. 205 pp. (Bull 65.) \$1.75.

Professor Parnes' thorough and comprehensive survey of labor mobility is a most significant contribution to the field. In a few pages he has enumerated, classified, and assessed virtually the entire literature. He points out those areas where agreement has been reached, those where future work would be most fruitful, and pitfalls in past studies which ought to be avoided. Of particular value are his chapters on "Some Conceptual and Methodological Problems" and "Some Determinants of Labor Mobility." The book is fair and objective throughout, besides being well written and easy to read. Its value as a reference work is considerably enhanced by very complete subject-matter and author indexes, as well as by systematic and thorough cross-referencing. However, a subject-matter bibliography would have been helpful. This book should be on the desk of any research worker undertaking studies of labor mobility.

Despite the general excellence of the contribution, some minor criticisms might be made. For example, the author's explicit exclusion from examination of what he calls "long-run" mobility—rates of entry into different occupations and industries by those newly entering the labor force—makes for an incomplete approach to the subject of occupational movement. This may, in part, account for his failure to handle in a unified manner the various concepts and approaches in the area of occupational mobility. For example, in his discussion of age as a determinant of mobility he treats briefly two essentially similar theories of occupational choice: Reynolds' "shopping" by trial and error and "period of adjustment," and Ginzberg's "developmental process" and "exploration." But he does not relate them to the con-

tention by Palmer that job changing when considered over time is purposeful; to the speculation by Lipset and Bendix on the relation of class structure to occupational status; or to the theory of noncompeting groups. Nor does he relate these various concepts to data on the direction of interoccupational movement, the "porousness" of occupational barriers, or the extent of entry into occupations through informal training.

In the chapter on "Mobility and Labor Allocation," as well as elsewhere, Parnes succeeds in demonstrating that available data do not bear out the premises of traditional allocation theory that wage differentials are a significant factor in worker mobility. It also would have been helpful if he had indicated some approaches for empirical testing of such modern theories as Dunlop's economic models of the trade union, Kerr's "balkanization" of labor markets, and Reynolds' analogous contention that there is a virtually separate labor market in each plant.

—ABRAHAM BLUESTONE
Bureau of Labor Statistics

Motion and Time Study: An Introduction to Methods, Time Study, and Wage Payment. By Benjamin W. Niebel. Homewood, Ill., Richard D. Irwin, Inc., 1955. 433 pp., bibliography, diagrams, illus. \$8.

This work is a careful bringing together of most of the known techniques of time and motion study. Its clarity of language and simplicity of examples make it a highly readable volume. Conceptually, the author has apparently not contributed any new ideas to the field, but his method of presentation of the conventional "accepted and proved techniques of work measurement" is very good for a college text. He describes the book as one which should be of great interest to management, government, and labor. With that in mind, this reviewer feels that the book should not have so completely avoided the controversial areas which exist in the field.

In a brief section describing the early days of industrial engineering, the shortcomings of untrained practitioners are mentioned, but no cognizance is taken of the current body of criticism leveled at some of the major premises embodied in the conventional techniques. For example, in the area of performance rating many critics challenge the possibility of consistent accuracy in a

rater's subjective judgment. Others state that a proper definition of the theoretical "normal operator" is yet to be written. The author effectively describes various rating systems in use, but without hinting that critical evaluations have been made. There is also no mention of the works of Gomberg or Barkin, who have crystallized much of the thoughtful trade union attitude toward time study, nor are the comments of Abruzzi given more than passing reference. To this extent, the author has not covered the full body of thought on the topic, but has nevertheless produced a well-organized and worthwhile text.

—K. G. VAN AUKEN, JR.
Bureau of Labor Statistics

The Union Member Speaks. By Hjalmar Rosen and R. A. Hudson Rosen. New York, Prentice-Hall, Inc., 1955. 247 pp., charts. \$4.95.

The attitude survey, a relatively recent innovation used by management to find out how employees feel about their jobs, their supervisors, and the company, is introduced in this book as a tool for union administrators seeking an expression of members' attitudes toward union policies and procedures. The "union member" referred to in the title represents the 25,000 members of District 9, International Association of Machinists (AFL), employed in over 900 establishments in the St. Louis area. In 1951, the District 9 leadership enlisted the Institute of Labor and Industrial Relations of the University of Illinois in a survey of membership reactions, as part of a "leadership training program which would insure the strongest collective bargaining agency that it was possible to develop." The survey was conducted by the Institute during 1952. This book summarizes the findings and methodology.

The survey plan was to question relatively large samples of members and shop stewards on major aspects of the union's work—collective bargaining, grievance handling, union meetings, role of the full-time official, and political activity. Each member's evaluation of union activities was to be related to what he expected the union to do ("standards") and what he saw the union doing ("perceptions"). The particular aspects to be covered were worked out in conferences with union leaders.

Considering the union's sponsorship of the survey in relation to the results presented in the book, the reader is likely to question the usefulness of a one-time attitude survey for leadership training purposes, or wonder why members' attitudes could not be made evident in a democratic organization without recourse to a survey. It would seem, however, that if the union's intentions or needs were to plumb members' minds for their desires of the moment and their aspirations for their union, it probably did not reckon with the limitations of a survey. Unfortunately, a large-scale and hence a costly survey impresses its own discipline upon objectives. The questionnaire must be short, the questions must be easily understood, and the answers must be susceptible to routine tabulation. Thus, concerning the statement, for example, that "in collective bargaining, the union ought to emphasize wage increases," the respondent was asked to check one of the following: always, usually, sometimes, seldom, never. The responses to statements relating to standards and perceptions were couched in terms of frequency, as in the example cited; on evaluations, the responses were limited to categories ranging from "strongly agree" to "strongly disagree." That elusive spirit, the will of the membership, was to be caught in such a net!

To compound the limitation of this type of survey, it was seen fit in the presentation of the data to combine "always" with "usually" and "seldom" with "never," along with a "don't know" category where appropriate; and evaluations were expressed as "satisfied," "dissatisfied," or "undecided." What can one make of the differences among "usually," "sometimes," and "seldom" in connection with such relatively infrequent, yet always changing, occurrences in the life of the individual member as collective bargaining (his plant may be involved once a year), getting involved in a grievance case, or observing the union offering support to candidates for public office? How many observations would be required for a respondent to draw a well-considered distinction? (A fourth of the members surveyed were in the union less than 3 years.) Probably through oversight, the book fails to point out that the survey was conducted in a period of wage stabilization.

The Institute's analysis of the returns led it to conclude that, in general, the members of the union felt that it was on the right track, although they seemed to have some reservations about political activity. The improvement of communications between members and officials was advanced as the problem of most urgency.

Attitude surveys of this type become more meaningful in a series of similar studies, whereby change can be observed, or in comparison with similar studies by other unions. Since attitude surveys are undoubtedly here to stay, the Institute's description of the techniques, procedures, and problems of the survey, which occupies half of the book, should be an invaluable guide to other groups contemplating such a venture.

—JOSEPH W. BLOCH
Bureau of Labor Statistics

Cooperatives—The British Achievement. By Paul Greer. New York, Harper & Brothers, 1955. 171 pp., bibliography. \$3.

A popular, enthusiastic account of the wide ramifications of businesses and the large volume of services of British cooperative societies. From humble beginnings, the cooperatives have grown into big integrated business concerns with their own factories and tea plantations. Financed largely out of small savings and reinvestment of patronage refunds by wage earners and low-salaried employees, the present extent and diversity of goods produced and services rendered are remarkable. Furthermore, the cooperatives are influential enough to act as a balance wheel for both private capitalistic enterprise and Britain's growing socialism. The latter role is stressed. The uneasy relationship with the Labor Party is well portrayed. Agricultural cooperatives and copartnership schemes in industry are treated as supplementary to the development of consumers' cooperatives.

The volume suffers from attempts to cover too much ground, from chaotic arrangement, and from a certain lack of objectivity. It suggests notes for an inspirational talk rather than a considered appraisal. It is disappointing not to find a dispassionate analysis of the competitive situation and of the problems now presented to British cooperatives by (1) the growth of chain stores, (2) greater purchasing power in consumers' hands, and (3) the wider range of consumer goods now on

the market. There is just a hint, in statements quoted from officials who showed Mr. Greer around, of the management and marketing problems with which British cooperators themselves are, to judge by their publications, deeply concerned. One wishes for some comparison between the structure and functioning of industry and trade in Britain and the United States, and their relative achievements for the average consumer. This might explain the lag in consumers' cooperation in the United States, which Mr. Greer seems to impute to differences in philosophy and effort.

—JEAN A. FLEXNER
Bureau of Labor Statistics

Cooperative Movement

Consumer Cooperation in New Mexico. By David B. Hamilton. Albuquerque, University of New Mexico, Bureau of Business Research, 1955. 31 pp., bibliographies. (Business Information Series, 26.) 50 cents.

Reviews history of New Mexico legislation on cooperatives, and the development of three types of consumer cooperatives—retail, electrification, and credit—over a 14-year period. Analyzes problems and factors contributing to success and failure.

Brugsforeningerne, 1953—26. Beretning. [Copenhagen?], Fællesforeningen for Danmarks Brugsforeninger, [1954?]. 63 pp., charts, illus.

A "guide" in English, published separately, accompanies this report on the Danish consumers' cooperative societies.

Cooperation in Israel: An Account of Hevrat Ovdim, the General Cooperative Association of Jewish Labor in Israel. By Noah Malkosh. Tel Aviv, Hevrat Ovdim, and Histadrut, General Federation of Jewish Labor in Israel, 1954. 80 pp., illus.

A laudatory account of Hevrat Ovdim, organized by Histadrut in 1924. Agricultural cooperatives and cooperative communities, antedating Hevrat Ovdim, have been fostered by it, as well as cooperative building, transportation, manufacturing, retail and wholesale trade, and credit enterprises. Thirty percent of Israeli wage earners are employed in these undertakings. The important place of Hevrat Ovdim in the economic development of the country is indicated, but without critical evaluation of its many functions.

Employment and Unemployment

Employment in the Pacific Coast States, 1947—53. San Francisco (630 Sansome Street), U. S. Department of Labor, Bureau of Labor Statistics, Western Regional Office, 1955. 29 pp., charts; processed. Free.

A Digest of Proposals for Combatting Unemployment in Hawaii. By Robert M. Kamins. Honolulu, University of Hawaii, Legislative Reference Bureau, 1955. 52 pp., bibliography. (Report 1, 1955.)

Report of Proceedings of 18th Annual Meeting of Interstate Conference of Employment Security Agencies, New Orleans, La., October 11-14, 1954. [Washington, W. R. Curtis, Executive Secretary of the Conference, U. S. Department of Labor Building, 1955.] 136 pp. Free.

Handicapped

The Employable Handicapped and 1955. By Willis C. Gorthy. (In *The Monitor*, Associated Industries of New York State, Inc., Albany, February-March 1955, pp. 13-14, 21-22, illus.)

Small Business Enterprises for the Severely Handicapped. Washington, U. S. Department of Health, Education and Welfare, Office of Vocational Rehabilitation, 1955. 152 pp., bibliography. (Rehabilitation Service Series, 320.) 45 cents, Superintendent of Documents, Washington.

Catalog of small business experiences of the homebound and severely handicapped in the State-Federal vocational rehabilitation program.

Health and Welfare

A Study of Pension and Group Insurance-Hospitalization Plans Negotiated in 1954. Chicago, Charles D. Spencer & Associates, Inc., [1955]. Various pagings. \$5.

Financial Report of the Health, Welfare and Retirement Funds, International Ladies' Garment Workers' Union, 1954. [New York, 1955.] 19 pp.

Prepaid Health Plans [in Canada]—A Survey. (In *Labor Research*, Canadian Congress of Labor, Research Department, Ottawa, October-December 1954, pp. 1-12, charts.)

Industrial Accidents and Accident Prevention

Accidents from Hoisting and Haulage in Bituminous-Coal Mines. Washington, U. S. Department of the Interior, Bureau of Mines, 1955. 88 pp., bibliography, diagrams, illus. (Miners' Circular 49; Coal-Mine Accident-Prevention Course, Section 3—Revised March 1954.) 40 cents, Superintendent of Documents, Washington.

Explosives Accidents in Bituminous-Coal Mines. Washington, U. S. Department of the Interior, Bureau of Mines, 1955. 86 pp., bibliography, diagrams, illus. (Miners' Circular 58; Coal-Mine Accident-Prevention Course, Section 5—Revised March 1954.) 40 cents, Superintendent of Documents, Washington.

Injuries and Injury Rates in Water-Supply Utilities, 1953. By George R. McCormack. Washington, U. S. Department of Labor, Bureau of Labor Statistics, 1955. 33 pp., charts. (BLS Report 83.) Free.

American Standard Safety Code for Controls and Signaling Devices for Graphic Arts Presses. New York, American Standards Association, 1954. 10 pp., diagram. (B65.1-1954.) 50 cents.

American Standard Safety Code for Woodworking Machinery. New York, American Standards Association, Inc., 1954. 23 pp., diagrams. (01.1-1954; revision of 01.1-1944.) \$1.

Fire Hazards of the Plastics Industry. New York, etc., National Board of Fire Underwriters, 1955. 70 pp., bibliography, charts, diagrams. (Research Report 1.)

Industrial Relations

Causes of Industrial Peace Under Collective Bargaining. Edited by Clinton S. Golden and Virginia D. Parker for the National Planning Association's Committee on the Causes of Industrial Peace. New York, Harper & Brothers, 1955. 369 pp. \$4.75.

The first part of the book presents the final report, "Fundamentals of Labor Peace," of the NPA Committee on the Causes of Industrial Peace, issued in December 1953 (summarized in *Monthly Labor Review*, February 1954, p. 170). This is followed by condensations of 13 case studies made in connection with the project, and other related material.

Collective Bargaining Accomplishments in the Paper Industry. By James S. Youtsler. (In *Southern Economic Journal*, Chapel Hill, N. C., April 1955, pp. 441-452. \$1.50.)

Collective Bargaining in the Motion Picture Industry—A Struggle for Stability. By Hugh Lovell and Tasile Carter. Berkeley, University of California, Institute of Industrial Relations, 1955. 54 pp. (West Coast Collective Bargaining Series.) 50 cents.

Inside Industry: A Plan for Industrial Peace. By Ray Smith. Chicago, Creative Enterprises, 1955. 139 pp. \$3.50.

Mediation in Action: Proceedings of Third Annual Conference of Association of State Mediation Agencies, September 13-14, 1954, Madison, Wis. [New York, Association of State Mediation Agencies, 1954?] 64 pp.

Number of Workers Affected by Collective Agreements in Canada, 1953. (In *Labor Gazette*, Department of Labor, Ottawa, April 1955, pp. 439-445. 25 cents.) Comparative data are given by industry for 1946, 1952, and 1953.

Labor and Social Legislation

Annual Digest of State and Federal Labor Legislation, July 1, 1953–September 30, 1954. Washington, U. S. Department of Labor, Bureau of Labor Standards, 1955. 83 pp. (Bull. 178.) 30 cents, Superintendent of Documents, Washington.

Bibliography of the Labor Management Relations Act, Covering Period from July 1, 1953–February 1, 1955. Washington, U. S. National Labor Relations Board, Library, 1955. 35 pp.; processed. (Supplement 6.)

Cases on Labor Law. By Archibald Cox. Brooklyn, N. Y., Foundation Press, Inc., 1954. xxxii, 1102 pp. 3d ed. \$9.50.

A statutory supplement (138 pp., 1954) to this volume is available in a separate pamphlet.

States Rights and the Law of Labor Relations. By Gerard D. Reilly. Washington, American Enterprise Association, Inc., 1955. 35 pp. (National Economic Problems Series, 457.) \$1.

A Statement of the Laws of Brazil in Matters Affecting Business. By Jose T. Nabuco. Washington, Pan American Union, Department of International Law, Division of Law and Treaties, 1955. 158 pp., bibliography. 2d ed. \$5.

Includes summaries of labor, social, and immigration legislation.

Coleção de Leis do Trabalho. By Pedro Luís de Resende. Oporto, Portugal, the Author, 1953. 454 pp.

This compilation of the principal Portuguese labor laws, prepared by an official of the labor inspectorate, replaces a similar volume published in 1944.

Labor Organizations

American Labor Unions—An Outline of Growth and Structure. By Reed C. Richardson. Ithaca, N. Y., Cornell University, New York State School of Industrial and Labor Relations, 1955. 19 pp., bibliography. (Bull. 30.) 20 cents (free to New York State residents).

Rise of the Labor Movement in Los Angeles. By Grace Heilman Stimson. Berkeley, University of California, Institute of Industrial Relations, 1955. 529 pp., bibliography. \$6, University of California Press, Berkeley.

Ever Forward: Forty Years of Progress—A Short History of the Amalgamated Clothing Workers of America. New York, Amalgamated Clothing Workers of America, [1955?]. 46 pp., illus.

Proceedings of the 16th Constitutional Convention of the Congress of Industrial Organizations, December 6–10, 1954, Los Angeles, Calif. Washington, Congress of Industrial Organizations, [1955?]. 672 pp., illus. \$2.

An article on the convention was published in the Monthly Labor Review for February 1955 (p. 183).

Directory of Labor Organizations in the Territory of Hawaii, March 1955. Honolulu, Department of Labor and Industrial Relations, Bureau of Research and Statistics, 1955. 27 pp.; processed. (No. 27.)

The T.U.C. and Communism. London, Trades Union Congress, 1955. 11 pp. 3d.

Manpower

Manpower Resources in the Biological Sciences. By Solomon Shapiro and Joseph Schuster. Washington, U. S. National Science Foundation, 1955. 53 pp., charts. 40 cents, Superintendent of Documents, Washington.

A study conducted jointly by the National Science Foundation and the U. S. Department of Labor's Bureau of Labor Statistics.

Papers of the Fourth Conference on Scientific Manpower, Berkeley, Calif., 1954. Washington, U. S. National Science Foundation, [1955?]. 47 pp., charts.

Pensions and Retirement

Retirement of Employees—Policies, Procedures, Practices. By F. Beatrice Brower. New York, National Industrial Conference Board, Inc., 1955. 48 pp. (Studies in Personnel Policy, 148.)

Retirement Plan Costs of Over 500 Companies Analyzed. [Chicago, Charles D. Spencer & Associates, Inc., 1955.] Various pagings.

Coalminers' Pensions. By Isabel Craig. (*In International Labor Review*, Geneva, March 1955, pp. 255–272. 60 cents. Distributed in United States by Washington Branch of ILO.)

Based on research into pension schemes for miners in 16 countries.

Personnel Management

Cases and Problems in Personnel and Industrial Relations. By Edgar G. Williams and John F. Mee. New York, Ronald Press Co., 1955. 204 pp. \$3.

Personnel Management. By Michael J. Jucius. Homewood, Ill., Richard D. Irwin, Inc., 1955. 722 pp., bibliography, charts, forms, illus. 3d ed. \$8.

The Recruitment and Training of Men Intended for Management Positions. London, British Institute of Management, 1955. 70 pp., forms. 5s.

A Company Guide to the Selection of Salesmen. By Milton M. Mandel. New York, American Management Association, 1955. 161 pp., forms. (Research Report 24.) \$4.75 (\$3.50 to AMA members).

Social Security (General)

Compilation of the Social Security Laws, Including the Social Security Act, as Amended, and Related Enactments Through December 31, 1954. Washington, 1955. 272 pp. 65 cents, Superintendent of Documents, Washington.

Long-Range Cost Estimates for Old-Age and Survivors Insurance, 1954. By Robert J. Myers and Eugene A. Rasor. Washington, U. S. Department of Health, Education and Welfare, Social Security Administration, Division of the Actuary, 1954. 46 pp., chart. (Actuarial Study 39.)

Rapport sur l'Assurance-Vieillesse et Survivants Fédérale Durant l'Année 1953 (Approuvé par le Conseil Fédéral le 7 Janvier 1955). Berne, Office Fédéral des Assurances Sociales, 1955. 89 pp.

Wages, Salaries, and Hours of Labor

Wage Differences and Establishment Practices, 17 Labor Markets, 1953-54. Washington, U. S. Department of Labor, Bureau of Labor Statistics, 1955. 46 pp., charts. (Bull. 1173.) 35 cents, Superintendent of Documents, Washington.

Union Wages and Hours: Motortruck Drivers and Helpers, July 1, 1954. By James P. Corkery and John F. Laiskey. Washington, U. S. Department of Labor, Bureau of Labor Statistics, 1955. 36 pp. (Bull. 1178.) 30 cents, Superintendent of Documents, Washington.

Other bulletins in the Bureau's 1954 union-wage series cover the building trades, the printing industry, and local transit operating employees (Bulletins 1175, 1176, 1177-30, 30, 15 cents, respectively, Superintendent of Documents).

Salaries and Salary Schedules of Urban School Employees, 1954-55. Washington, National Education Association of the United States, Research Division, 1955. 87 pp. (Research Bull., Vol. XXXIII, No. 2.) 50 cents.

Employee Incentive Plans in Industry. By Nelda Griffin. Washington, U. S. Department of Agriculture, Farmer Cooperative Service, 1955. 42 pp., bibliography. (General Report 12.)

Incentive Wage Systems—A Selected Annotated Bibliography. Princeton, N. J., Princeton University, Department of Economics and Sociology, Industrial Relations Section, January 1955. 24 pp. (Bibliographical Series, 83.) 50 cents.

A Guide to the Guaranteed Wage. By Jack Chernick. New Brunswick, N. J., Rutgers University, Institute of Management and Labor Relations, 1955. 50 pp., bibliography. (Bull. 4.) \$1.

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The Guaranteed Annual Wage—Existing Plans, Employer and Union Approaches, Bargaining Strategy. By Arnold W. Frutkin and others. Washington, Bureau of National Affairs, Inc., 1955. 259 pp., bibliography. \$12.50.

The Problem of Coordinating Price and Wage Programs in 1950-1953. By John H. Kaufmann. (In *Indiana Law Journal*, Bloomington, Summer 1954, pp. 499-537; Fall 1954, pp. 18-58; also reprinted.)

National Wage Policy: the Experience of the Netherlands. By Bert Zoetewij. (In *International Labor Review*, Geneva, February 1955, pp. 148-179. 60 cents. Distributed in United States by Washington Branch of ILO.)

Workmen's Compensation

Current Issues in Workmen's Compensation. Princeton, N. J., Princeton University, Department of Economics and Sociology, Industrial Relations Section, May 1955. 4 pp. (Selected References, 63.) 20 cents.

Workmen's Compensation [and Related] Problems, 1954: Proceedings of 40th Annual Convention of International Association of Industrial Accident Boards and Commissions, Quebec, Canada, October 3-7, 1954. Washington, U. S. Department of Labor, Bureau of Labor Standards, 1955. 238 pp. (Bull. 180.) 65 cents, Superintendent of Documents, Washington.

Occupational Impairment of Hearing—A Legal Survey. By Theodore C. Waters. Pittsburgh, Industrial Hygiene Foundation of America, Inc., 1955. 17 pp.

Summarizes Federal and State laws providing compensation for hearing impairment, as of December 31, 1954. References to judicial decisions are included.

Miscellaneous

America's Role in International Social Welfare. By Alva Myrdal, Arthur J. Altmeyer, Dean Rusk. New York, Columbia University Press, 1955. 109 pp. \$2.

Florina Lasker lectures delivered at Columbia University in March and April 1953.

Bibliography on the Communist Problem in the United States. New York, Fund for the Republic, Inc., 1955. 474 pp. \$5.

Includes references to material on Communist activities of labor groups.

Digest of the Public Record of Communism in the United States. New York, Fund for the Republic, Inc., 1955. xxxvi, 753 pp. \$5.

Collection of digests or extracts of public records of the most significant executive action, legislation and legislative committee proceedings, and court proceedings relevant to communism in the United States. Action involving trade unions is included.

Economics—An Introductory Analysis. By Paul A. Samuelson. New York, McGraw-Hill Book Co., Inc., 1955. 753 pp., charts. 3d ed. \$5.75.

Human Relations in Industry. By Burleigh B. Gardner and David G. Moore. Homewood, Ill., Richard D. Irwin, Inc., 1955. 427 pp., bibliography. 3d ed. \$7.35.

A Professional Look at the Engineer in Industry. Washington, National Society of Professional Engineers, [1955]. 124 pp., bibliography, charts. \$3 (\$1.50 to Society members).

Reviews the impact on the engineering profession of the National Labor Relations (Wagner) and Labor Management Relations (Taft-Hartley) Acts, causes of engineers' dissatisfaction with their status in industry, attitude of engineers toward unions, and other matters. A "program of action" for improvement of engineers' professional status, employment conditions, and economic position in industry is submitted.

Labor Laws and Their Administration: Proceedings of the 37th Convention of the International Association of Governmental Labor Officials, held in Cheyenne, Wyo., September 8-10, 1954. Washington, U. S. Department of Labor, Bureau of Labor Standards, 1955. 120 pp. (Bull. 179.) 40 cents, Superintendent of Documents, Washington.

The bulletin presents committee reports and panel discussions on international labor affairs, mediation and con-

ciliation, industrial health and safety, migrant labor, youth employment problems, minimum wages, and other matters.

Proceedings of the Business and Economic Statistics Section, American Statistical Association, September 10-13, 1954, Montreal, Canada. Washington, American Statistical Association, [1955?]. 255 pp., charts. \$3 (\$2 to ASA members).

Major topics of discussion included: Measuring effects of social payments (pensions and unemployment benefits) on the economy, value of consumer survey data in the forecasting of economic fluctuations, reliability and meaning of employment and unemployment statistics, and determinants of productivity levels.

Yearbook on Human Rights for 1952. New York, United Nations, 1954. 490 pp. (Sales No., 1954, XIV, 1.) \$5, Columbia University Press, International Documents Service, New York.

Annual volume recording worldwide developments in the law and usage relating to human rights. Subjects covered include prohibition of discrimination, labor protection, labor relations, trade unions, wages and hours, paid vacations, housing, and social security.

Statistical Abstract, India, 1952-53. Delhi, Central Statistical Organization, 1955. 859 pp. (New Series, 4.)

Includes data on employment, wages and earnings, industrial disputes, industrial accidents, trade unions, and cooperative societies.

Current Labor Statistics

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¹ Beginning with the June 1955 issue, data shown in tables A-2, A-3, A-4, A-5, C-1, C-2, C-3, C-4, and C-5 have been revised because of adjustment to more recent benchmark levels. These data cannot be used with those appearing in previous issues of the Monthly Labor Review. Comparable data for earlier years are available upon request to the Bureau of Labor Statistics.

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A: Employment and Payrolls

TABLE A-1: Estimated total labor force classified by employment status, hours worked, and sex

[In thousands]

Labor force status	Estimated number of persons 14 years of age and over ¹												
	1955					1954 ²							
	May	April	Mar.	Feb.	Jan.	Dec.	Nov. ³	Oct.	Sept. ³	Aug.	July ³	June	May
	Total, both sexes												
Total labor force	68,256	67,784	66,840	66,550	66,700	66,811	67,909	68,190	68,565	68,856	68,824	68,788	67,786
Civilian labor force	65,192	64,647	63,654	63,321	63,497	63,526	64,624	64,882	65,243	65,522	65,494	65,445	64,425
Unemployment	2,489	2,962	3,176	3,383	3,347	2,838	2,893	2,741	3,099	3,245	3,346	3,347	3,305
Unemployed 4 weeks or less	996	958	964	1,138	1,329	1,164	1,274	1,129	1,284	1,260	1,394	1,628	1,157
Unemployed 10-14 weeks	453	538	795	893	881	726	705	635	642	847	833	623	764
Unemployed 15-26 weeks	161	355	356	377	263	241	183	181	341	280	250	236	336
Unemployed over 26 weeks	470	664	615	524	415	331	379	406	451	458	510	566	672
Employment	409	447	447	450	459	376	352	391	383	400	339	293	375
Nonagricultural	62,703	61,685	60,477	59,938	60,150	60,688	61,731	62,141	62,144	62,276	62,143	62,098	61,119
Worked 35 hours or more	55,740	55,470	54,785	54,854	54,853	55,363	55,377	54,902	54,618	55,349	54,661	54,470	54,297
Worked 15-34 hours	45,831	43,721	45,248	44,741	44,074	45,958	40,506	43,666	23,999	42,514	21,936	43,502	43,962
Worked 1-14 hours	5,617	7,478	5,618	5,935	6,606	5,801	11,195	7,144	25,559	5,727	23,005	6,226	6,211
With a job but not at work ⁴	2,440	2,361	2,241	2,265	2,170	2,079	2,322	2,194	1,984	1,753	1,886	1,904	2,133
Agricultural	1,852	1,911	1,678	1,914	2,004	1,435	1,554	1,899	3,076	5,355	7,833	2,838	1,991
Worked 35 hours or more	6,963	6,215	5,692	5,084	5,297	5,325	6,154	7,239	7,527	6,928	7,486	7,628	6,822
Worked 15-34 hours	5,175	4,332	4,273	3,519	3,551	3,788	4,598	5,353	5,684	5,164	5,324	5,932	4,957
Worked 1-14 hours	1,372	1,441	976	1,004	1,167	977	1,126	1,464	1,527	1,214	1,683	1,336	1,436
With a job but not at work ⁴	263	257	249	292	305	302	259	295	219	327	319	234	285
	153	186	194	269	274	259	171	126	97	221	159	126	144
	Males												
Total labor force	47,801	47,590	47,226	46,922	47,044	47,005	47,426	47,586	48,007	48,964	48,948	48,619	47,791
Civilian labor force	44,773	44,493	44,078	43,731	43,879	43,759	44,180	44,317	44,724	45,669	45,658	45,317	44,471
Unemployment	1,624	2,093	2,283	2,431	2,395	1,996	1,875	1,796	1,993	2,152	2,226	2,194	2,197
Employment	43,149	42,400	41,795	41,301	41,485	41,762	42,305	42,522	42,730	43,518	43,432	43,123	42,274
Nonagricultural	37,527	37,113	36,772	36,680	36,732	36,954	37,134	36,792	36,905	37,712	37,426	37,100	36,660
Worked 35 hours or more	32,626	31,211	31,946	31,481	31,041	32,071	28,956	30,780	17,978	30,699	16,675	31,355	31,184
Worked 15-34 hours	2,674	3,688	2,766	3,036	3,454	2,972	6,236	3,782	16,118	3,156	15,089	3,303	3,241
Worked 1-14 hours	1,072	1,049	981	972	972	900	917	864	814	727	835	762	956
With a job but not at work ⁴	1,156	1,165	1,079	1,190	1,265	1,011	1,026	1,366	1,994	3,129	4,827	1,673	1,279
Agricultural	5,622	5,287	5,023	4,621	4,753	4,808	5,171	5,730	5,825	5,806	6,006	6,023	5,614
Worked 35 hours or more	4,492	4,052	4,005	3,338	3,378	3,600	4,155	4,579	4,750	4,578	4,657	5,135	4,502
Worked 15-34 hours	810	862	620	757	864	711	659	822	841	745	978	621	761
Worked 1-14 hours	185	201	212	269	266	256	206	201	144	270	226	145	214
With a job but not at work ⁴	135	172	186	256	245	241	151	128	91	213	145	123	137
	Females												
Total labor force	20,456	20,191	19,614	19,628	19,655	19,806	20,484	20,604	20,559	19,892	19,877	20,170	19,995
Civilian labor force	20,420	20,154	19,576	19,590	19,617	19,767	20,445	20,565	20,520	19,853	19,837	20,129	19,954
Unemployment	865	869	893	952	952	841	1,018	945	1,106	1,093	1,121	1,153	1,108
Employment	19,555	19,284	18,683	18,638	18,666	18,925	19,427	19,619	19,413	18,760	18,716	18,975	18,846
Nonagricultural	18,213	18,357	18,014	18,174	18,122	18,408	18,444	18,110	17,712	17,638	17,235	17,370	17,637
Worked 35 hours or more	13,205	12,510	13,302	13,263	13,034	13,887	11,550	12,885	6,020	11,816	5,263	12,141	12,775
Worked 15-34 hours	2,943	3,790	2,852	2,898	3,151	2,919	4,960	3,362	9,441	2,571	7,916	2,922	2,972
Worked 1-14 hours	1,368	1,311	1,259	1,293	1,198	1,178	1,406	1,330	1,169	1,025	1,051	1,142	1,177
With a job but not at work ⁴	696	745	600	720	739	424	528	533	1,081	2,226	3,006	1,164	712
Agricultural	1,342	927	669	464	544	517	983	1,509	1,701	1,122	1,481	1,605	1,209
Worked 35 hours or more	683	280	269	181	173	188	443	775	933	688	669	797	454
Worked 15-34 hours	563	579	356	247	303	266	467	642	686	470	705	716	675
Worked 1-14 hours	78	55	37	22	39	46	53	94	76	56	92	89	71
With a job but not at work ⁴	18	14	8	14	29	17	20	0	6	7	14	4	10

¹ Estimates are subject to sampling variation which may be large in cases where the quantities shown are relatively small. Therefore, the smaller estimates should be used with caution. All data exclude persons in institutions. Because of rounding, the individual figures do not necessarily add to group totals.

² Data beginning January 1954 are based upon a new Census sample in 230 areas and are not entirely comparable with previously published estimates for earlier months. Revised monthly data for 1953 were published in the Census Bureau's "Monthly Report on the Labor Force: December 1954."

³ Census survey week contained legal holiday.

⁴ Includes persons who had a job or business, but who did not work during the survey week because of illness, bad weather, vacation, labor dispute, or because of temporary layoff with definite instructions to return to work within 30 days of layoff. Also includes persons who had new jobs to which they were scheduled to report within 30 days.

Source: U. S. Department of Commerce, Bureau of the Census.

TABLE A-2: Employees in nonagricultural establishments, by industry¹

[In thousands]

Industry	1955					1954								Annual average	
	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	1954	1953
Total employees.....	48,889	48,641	48,212	47,753	47,741	49,463	48,808	48,580	48,490	48,123	47,866	48,200	47,939	48,285	49,681
Mining	740	739	739	737	741	747	749	743	744	763	760	771	761	770	852
Metal.....	95.9	95.3	94.8	94.3	94.1	92.5	93.7	90.5	90.0	99.1	100.8	100.4	99.6	98.1	106.0
Iron.....		30.8	30.5	30.2	30.3	29.8	31.4	32.9	34.4	35.1	36.0	35.8	36.4	35.2	40.1
Copper.....		28.8	28.7	28.6	28.3	27.6	26.9	24.8	26.2	28.3	28.3	28.4	27.5	27.4	28.6
Lead and zinc.....		16.4	16.3	16.2	16.2	15.9	16.0	14.6	14.8	16.3	16.6	16.5	16.4	16.2	17.8
Anthracite.....		37.4	38.3	39.8	42.6	43.3	43.6	43.4	33.9	34.5	34.3	36.0	36.5	41.1	54.0
Bituminous-coal.....	204.7	205.5	208.4	209.9	210.5	211.7	212.0	211.0	212.5	215.2	209.7	222.4	221.4	226.7	288.9
Crude-petroleum and natural-gas production.....		295.7	295.6	293.2	293.6	295.6	293.9	292.3	300.1	306.3	307.8	305.2	297.5	298.8	297.4
Nonmetallic mining and quarrying.....	104.4	105.2	102.3	99.8	100.1	104.0	105.6	106.2	107.2	107.6	107.6	106.6	105.7	104.7	105.9
Contract construction	2,537	2,396	2,255	2,169	2,237	2,426	2,598	2,652	2,698	2,735	2,686	2,629	2,542	2,527	2,622
Nonbuilding construction.....	463	411	389	398	398	451	524	553	569	584	573	559	530	506	513
Highway and street.....	195.3	161.9	147.4	152.6	186.0	231.2	252.6	262.1	268.4	264.1	255.2	255.2	230.8	217.4	214.9
Other nonbuilding construction.....	267.4	249.0	241.2	244.9	265.2	292.6	300.7	306.9	315.5	308.8	303.7	299.3	288.2	297.8	
Building construction.....	1,933	1,844	1,780	1,839	1,975	2,074	2,099	2,129	2,151	2,113	2,070	2,012	2,021	2,109	
General contractors.....	759.4	723.9	694.6	733.3	801.9	862.6	877.2	897.6	915.2	899.8	877.2	854.2	848.8	934.0	
Special-trade contractors.....	1,173.7	1,119.9	1,085.6	1,106.1	1,173.4	1,211.7	1,221.9	1,231.1	1,236.2	1,213.3	1,192.3	1,158.0	1,172.7	1,175.1	
Plumbing and heating.....	272.0	266.3	264.7	270.6	283.1	288.1	291.1	291.4	293.1	286.3	280.7	276.7	283.4	288.9	
Painting and decorating.....	140.5	129.2	121.7	121.6	135.5	144.2	148.4	157.0	160.2	154.6	150.2	138.9	141.4	148.1	
Electrical work.....	143.4	143.6	144.6	148.5	153.7	155.4	155.5	155.0	158.6	159.9	157.6	154.5	156.5	159.7	
Other special-trade contractors.....	617.8	580.8	554.6	565.4	601.1	624.0	626.9	627.7	624.3	612.5	603.8	587.9	591.5	578.4	
Manufacturing	16,321	16,260	16,201	16,060	15,925	16,050	16,057	16,007	15,972	15,822	15,584	15,835	15,781	15,989	17,238
Durable goods ²	9,495	9,421	9,323	9,220	9,113	9,144	9,121	9,002	8,887	8,820	8,811	9,066	9,095	9,120	10,105
Nondurable goods ³	6,826	6,839	6,878	6,840	6,812	6,906	6,936	7,005	7,085	7,002	6,773	6,769	6,686	6,870	7,133
Ordnance and accessories.....	132.2	134.9	137.0	137.2	139.9	141.2	142.1	143.9	145.8	145.0	147.6	151.7	156.8	160.8	234.3
Food and kindred products.....	1,464.5	1,440.7	1,418.5	1,409.7	1,430.2	1,490.2	1,538.4	1,612.1	1,703.4	1,677.7	1,594.7	1,519.4	1,464.9	1,530.2	1,557.9
Meat products.....	316.1	317.8	318.4	318.4	324.9	333.4	331.8	331.4	326.7	317.4	316.6	317.4	310.0	321.8	321.5
Dairy products.....	117.8	113.8	112.4	111.0	112.6	114.5	116.3	120.8	126.3	129.4	128.6	122.9	118.5	118.2	
Canning and preserving.....	172.0	157.7	154.4	164.0	180.6	208.9	274.1	379.1	351.3	265.8	201.2	179.1	224.2	238.2	
Grain-mill products.....	117.1	117.8	117.7	118.2	119.1	120.0	122.6	125.4	125.3	126.2	125.1	121.6	121.3	119.9	
Bakery products.....	280.5	279.7	280.0	278.6	283.3	285.3	288.7	285.4	286.0	287.3	282.4	280.2	283.7	285.9	
Sugar.....	27.9	27.1	27.6	29.8	43.6	50.0	47.3	32.1	31.4	29.7	29.1	29.1	33.9	34.2	
Confectionery and related products.....	74.6	77.7	78.1	81.5	85.2	88.4	89.7	85.7	70.2	72.6	75.2	74.5	80.9	84.6	
Beverages.....	200.3	194.1	189.6	191.8	200.7	204.9	207.7	211.7	218.6	226.1	219.1	209.6	208.7	214.9	
Miscellaneous food products.....	134.4	132.8	131.8	130.4	131.7	134.6	136.3	136.8	138.4	141.0	141.3	137.9	137.2	140.6	
Tobacco manufactures.....	86.7	87.6	91.0	97.1	99.5	109.4	111.5	121.2	119.5	110.4	91.2	90.4	89.8	102.4	103.6
Cigarettes.....	32.1	32.3	32.1	32.4	32.4	32.9	33.0	32.9	32.4	31.9	31.7	31.6	31.4	32.1	31.4
Cigars.....	37.9	38.7	39.4	35.5	40.3	40.9	40.7	40.7	39.9	38.0	39.9	39.5	39.9	40.6	
Tobacco and snuff.....	7.4	7.5	7.5	7.5	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.8	7.9	8.0	
Tobacco stemming and redrying.....	10.2	12.5	18.1	24.1	28.5	29.9	39.9	38.7	30.9	13.8	11.1	11.0	22.7	23.7	
Textile-mill products.....	1,058.9	1,074.5	1,078.3	1,078.2	1,068.8	1,076.0	1,076.4	1,072.6	1,071.5	1,066.8	1,038.3	1,066.0	1,055.0	1,069.4	1,185.8
Scouring and combing plants.....	6.4	6.9	6.7	6.4	6.4	6.0	6.3	6.9	7.6	7.4	6.4	6.4	6.7	6.5	
Yarn and thread mills.....	131.4	131.4	131.1	130.0	129.2	129.2	127.9	127.3	126.9	123.2	127.1	125.4	127.6	145.8	
Broad-woven fabric mills.....	473.1	473.1	474.3	472.0	470.9	468.3	467.8	468.0	468.2	458.6	473.2	469.3	472.1	530.4	
Narrow fabrics and small wares.....	31.7	31.7	31.2	31.3	31.1	30.8	30.4	30.2	29.9	29.5	30.2	29.9	30.2	31.8	
Knitting mills.....	216.5	218.1	216.9	212.9	221.1	225.8	225.5	225.3	222.4	212.8	217.8	213.2	218.0	236.1	
Dyeing and finishing textiles.....	88.2	89.6	90.3	89.9	90.2	89.5	88.3	87.6	86.5	85.6	86.1	86.5	87.9	93.4	
Carpets, rugs, other floor coverings.....	50.3	50.5	50.8	50.3	50.1	50.7	51.2	51.2	50.2	49.3	50.1	50.1	51.4	57.6	
Hats (except cloth and millinery).....	12.2	12.3	12.5	12.5	13.1	12.9	12.9	13.6	13.6	13.3	13.3	13.3	13.2	13.2	
Miscellaneous textile goods.....	64.7	64.7	64.4	63.5	63.9	63.2	62.3	61.4	61.5	58.6	61.8	61.7	62.6	67.7	
Apparel and other finished textile products.....	1,174.8	1,187.4	1,240.3	1,230.5	1,199.3	1,202.7	1,188.7	1,184.4	1,185.4	1,180.9	1,107.1	1,114.4	1,111.2	1,172.5	1,231.7
Men's and boys' suits and coats.....	116.9	122.4	121.9	120.1	119.7	113.2	118.6	122.8	124.0	115.1	117.5	114.7	121.3	133.0	
Men's and boys' furnishings and work clothing.....	312.1	314.3	309.2	300.1	300.3	304.7	304.2	301.6	296.5	273.9	288.5	287.9	295.3	311.4	
Women's outerwear.....	355.7	385.2	385.0	376.4	374.1	355.1	345.4	352.2	356.9	334.3	321.5	324.1	355.3	363.1	
Women's, children's undergarments.....	118.5	118.3	115.5	112.9	114.6	117.0	116.7	113.9	110.5	103.6	109.1	111.5	112.1	115.5	
Millinery.....	19.8	27.4	27.0	23.7	21.2	19.5	21.6	22.3	21.8	17.4	13.7	15.9	20.9	21.9	
Children's outerwear.....	66.4	73.0	74.1	71.1	69.5	69.9	71.1	71.2	72.1	71.8	72.1	66.2	70.1	71.2	
Fur goods.....	7.5	8.2	8.6	10.3	12.3	13.1	11.6	12.1	11.7	12.2	12.9	10.9	11.3	12.1	
Miscellaneous apparel and accessories.....	61.0	62.1	61.7	59.8	63.1	65.4	65.1	63.9	62.2	57.9	58.8	57.2	60.8	64.3	
Other fabricated textile products.....	129.5	129.4	127.5	124.9	127.9	130.8	130.1	125.4	125.2	120.9	120.3	122.8	125.4	139.1	

See footnotes at end of table.

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

[In thousands]

Industry	1955					1954							Annual average		
	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	1954	1953
Manufacturing—Continued															
Lumber and wood products (except furniture).....	745.2	716.5	700.9	705.8	697.3	727.5	751.3	759.0	738.0	658.2	649.4	741.1	720.5	705.8	767.6
Logging camps and contractors.....		80.6	73.2	84.0	80.0	96.6	109.5	110.0	94.8	81.0	77.7	106.0	98.0	89.6	96.9
Sawmills and planing mills.....		389.4	384.4	381.9	377.7	389.0	398.1	403.1	399.3	353.9	346.7	394.3	383.7	378.7	415.9
Millwork, plywood, and prefabricated structural wood products.....		135.2	132.1	130.6	130.9	132.8	134.7	135.6	134.3	117.3	117.3	128.0	125.9	126.0	130.8
Wooden containers.....		52.6	53.5	53.2	53.7	53.9	53.8	55.0	54.4	52.7	53.6	57.3	57.1	55.8	64.4
Miscellaneous wood products.....		58.7	57.7	56.1	55.0	55.2	55.2	55.3	55.2	53.3	54.1	55.5	55.8	55.6	59.5
Furniture and fixtures.....	351.8	353.1	354.5	352.5	347.8	351.9	356.3	355.7	352.8	344.4	329.1	331.9	333.4	345.2	374.6
Household furniture.....		250.9	252.5	250.8	247.2	251.2	254.5	254.2	251.1	243.4	231.6	231.2	233.6	243.7	267.0
Office, public-building, and professional furniture.....		41.7	41.6	41.3	41.1	41.1	41.1	41.0	41.7	41.5	39.6	40.1	39.7	40.8	42.7
Partitions, shelving, lockers, and fixtures.....		34.6	34.4	34.2	33.5	33.3	34.3	34.3	34.0	33.4	31.6	33.6	33.2	33.8	35.7
Screens, blinds, and miscellaneous furniture and fixtures.....		25.9	26.0	26.2	26.0	26.3	26.4	26.2	26.0	26.1	26.3	27.0	26.9	26.9	29.2
Paper and allied products.....	538.2	536.7	534.6	531.9	531.9	536.3	537.7	536.4	536.6	532.0	524.0	529.3	526.0	530.6	530.4
Pulp, paper, and paperboard mills.....		265.4	264.5	263.9	263.9	264.7	263.6	263.0	264.7	263.3	260.4	262.7	260.2	261.9	258.3
Paperboard containers and boxes.....		145.5	144.7	143.5	144.3	147.7	149.9	149.7	148.6	145.1	140.3	142.5	142.1	145.1	148.2
Other paper and allied products.....		125.8	125.4	124.5	123.7	123.9	124.2	123.7	123.3	123.6	123.3	124.1	123.7	123.6	123.9
Printing, publishing, and allied industries.....	800.9	803.0	802.0	798.8	798.9	808.8	807.8	806.6	802.9	793.8	792.2	797.6	795.3	800.1	791.9
Newspapers.....		295.0	293.4	292.3	291.8	295.5	294.7	294.0	292.9	291.4	291.1	292.9	291.5	292.3	289.1
Periodicals.....		61.1	62.0	62.3	63.0	64.0	64.2	62.9	62.1	60.6	60.9	61.4	61.9	62.6	62.3
Books.....		48.1	48.1	47.6	47.5	48.2	48.7	49.3	49.2	48.6	48.4	48.3	48.7	48.8	49.9
Commercial printing.....		210.6	211.0	209.5	210.3	211.3	209.2	209.7	205.5	205.7	207.0	206.1	208.0	205.1	
Lithographing.....		59.6	59.4	59.2	58.6	60.6	61.1	61.0	60.4	59.6	58.8	59.6	59.9	60.0	57.7
Greeting cards.....		17.8	17.5	17.5	17.7	19.2	20.3	19.8	19.5	19.3	19.0	19.1	18.1	18.8	19.5
Bookbinding and related industries.....		42.9	42.4	42.1	42.1	42.5	42.7	43.1	43.1	43.4	43.0	42.9	42.8	42.9	44.1
Miscellaneous publishing and printing services.....		67.9	68.2	68.3	67.9	67.5	66.9	66.8	66.2	65.4	65.3	66.4	66.3	66.7	64.1
Chemicals and allied products.....	807.9	813.7	808.4	794.7	792.8	793.7	793.6	793.1	788.9	779.9	777.9	780.8	786.8	791.0	807.0
Industrial inorganic chemicals.....		106.4	108.9	102.6	105.0	104.5	103.9	103.3	102.7	102.3	101.6	100.7	99.6	101.2	94.1
Industrial organic chemicals.....		305.8	303.7	301.0	299.0	298.7	297.7	295.5	295.4	295.8	297.1	297.0	299.1	299.1	317.2
Drugs and medicines.....		92.6	92.9	93.0	92.7	92.4	92.8	92.7	92.5	92.0	91.4	90.9	90.8	92.0	91.5
Soap, cleaning and polishing preparations.....		50.3	50.3	50.3	50.4	49.9	50.1	50.4	50.8	50.5	50.0	50.5	50.4	50.5	51.1
Paints, pigments, and fillers.....		71.0	70.2	69.7	69.7	69.8	69.5	70.1	70.5	70.4	70.6	70.3	70.4	70.4	74.2
Gum and wood chemicals.....		7.8	7.8	7.8	7.7	7.7	7.7	7.7	7.7	7.5	7.5	7.7	7.7	7.7	7.9
Fertilizers.....		47.7	46.7	38.2	35.9	34.8	34.0	35.1	33.9	31.7	30.5	33.1	40.4	36.8	37.2
Vegetable and animal oils and fats.....		38.6	40.9	41.4	42.5	44.5	46.2	47.0	43.8	38.5	38.1	38.3	39.1	42.4	43.1
Miscellaneous chemicals.....		93.5	92.0	90.7	89.9	91.4	91.4	91.9	92.0	91.4	91.3	91.5	91.5	91.0	90.6
Products of petroleum and coal.....	251.1	249.9	248.9	247.4	248.3	249.5	251.3	251.9	254.2	255.8	256.8	255.4	252.6	253.0	260.4
Petroleum refining.....		200.2	200.2	199.7	201.6	201.2	202.4	202.9	204.5	206.0	206.8	205.2	202.9	203.6	206.3
Coke, other petroleum and coal products.....		49.7	48.7	47.7	46.7	48.3	48.9	49.0	49.7	49.8	50.0	50.2	49.7	49.5	54.1
Rubber products.....	272.5	268.5	269.3	267.3	265.9	264.5	259.0	257.5	252.4	226.9	223.0	251.6	250.1	250.2	278.0
Tires and inner tubes.....		115.7	114.7	114.1	112.9	112.4	108.5	111.1	110.0	89.2	88.5	109.2	107.9	106.0	119.5
Rubber footwear.....		26.6	26.8	26.8	27.4	27.6	27.5	27.0	26.1	25.8	25.3	25.0	25.0	26.0	29.3
Other rubber products.....		126.2	127.8	126.4	125.6	124.5	123.0	119.4	116.3	111.9	109.2	117.4	117.2	118.2	129.2
Leather and leather products.....	370.9	376.8	386.7	384.4	376.7	374.5	371.7	369.2	370.4	377.5	367.7	364.0	354.0	370.1	386.2
Leather: tanned, curried, and finished.....		43.5	43.4	43.5	43.2	43.3	42.7	42.7	42.5	42.9	43.3	43.6	43.1	43.4	47.1
Industrial leather belting and packing.....		4.8	4.8	4.6	4.7	4.6	4.6	4.6	4.5	4.4	4.4	4.7	4.7	4.7	5.4
Boot and shoe cut stock and findings.....		16.7	17.6	17.6	17.3	16.4	15.9	15.1	14.4	15.8	16.0	16.1	14.9	16.0	17.0
Footwear (except rubber).....		245.9	251.7	252.3	249.7	245.8	240.5	237.6	240.9	248.4	242.9	241.3	234.4	243.4	249.9
Luggage.....		17.3	17.2	16.1	15.4	16.2	17.0	17.9	17.9	17.3	16.5	16.3	15.5	16.2	17.5
Handbags and small leather goods.....		31.5	34.9	34.7	32.4	31.9	33.2	33.0	32.0	31.1	27.8	25.5	25.8	30.2	31.4
Gloves and miscellaneous leather goods.....		17.1	17.1	15.6	14.0	16.3	17.8	18.3	18.2	17.6	16.8	16.5	15.6	16.2	18.0
Stone, clay, and glass products.....	545.5	536.1	527.2	519.0	514.1	520.3	521.9	521.4	520.4	516.6	506.8	509.9	509.6	514.2	543.2
Flat glass.....		31.8	32.0	32.2	32.4	32.2	31.7	30.2	28.9	27.9	28.2	28.1	27.7	29.3	31.6
Glass and glassware, pressed or blown.....		91.0	90.0	88.7	87.5	87.8	88.6	89.1	89.0	89.4	86.6	90.6	91.0	89.7	97.8
Glass products made of purchased glass.....		17.3	17.0	16.9	16.7	16.9	16.7	16.5	16.2	15.9	15.0	15.3	15.5	16.1	18.2
Cement, hydraulic.....		42.7	42.4	42.2	42.4	42.5	42.5	42.9	42.9	42.8	42.7	39.4	40.5	41.7	41.8
Structural clay products.....		78.6	76.6	74.2	74.4	76.1	76.6	77.1	77.5	77.5	77.5	77.4	76.3	76.1	79.1
Pottery and related products.....		54.2	54.2	53.5	52.3	53.0	53.6	52.9	52.6	50.8	47.3	50.4	51.4	51.9	55.8
Concrete, gypsum, and plaster products.....		109.0	105.4	103.3	102.6	104.6	106.2	106.2	107.0	107.4	106.8	105.0	103.5	103.6	105.1
Cut-stone and stone products.....		20.0	19.8	19.6	19.2	20.2	20.1	20.3	20.3	20.1	18.8	19.6	19.7	19.7	18.7
Miscellaneous nonmetallic mineral products.....		91.5	89.8	88.4	86.6	87.0	85.9	86.2	86.0	84.8	83.9	84.1	84.0	86.0	95.0

See footnotes at end of table.

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

[In thousands]

Industry	1955					1954									Annual average	
	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	1954	1953	
Manufacturing—Continued																
Primary metal industries.....	1,295.1	1,273.9	1,251.6	1,224.9	1,202.5	1,191.7	1,177.8	1,161.1	1,156.0	1,160.7	1,161.9	1,178.8	1,171.5	1,185.0	1,332.7	
Blast furnaces, steel works, and rolling mills.....	621.4	608.4	594.1	581.5	577.2	571.3	567.4	570.0	570.9	573.2	579.0	573.9	581.0	581.0	653.3	
Iron and steel foundries.....	233.6	229.1	221.5	216.2	212.0	209.1	207.2	206.9	209.2	208.5	213.2	212.8	213.0	213.0	247.6	
Primary smelting and refining of nonferrous metals.....	65.9	65.4	65.2	65.0	64.6	64.4	61.5	61.3	63.7	63.8	63.3	62.5	62.9	61.0	61.0	
Secondary smelting and refining of nonferrous metals.....	12.6	12.6	12.4	12.3	12.3	12.4	12.2	12.0	12.3	12.3	12.4	12.6	12.4	12.4	13.5	
Rolling, drawing, and alloying of nonferrous metals.....	110.0	109.2	108.3	107.1	106.0	104.8	103.4	98.7	100.7	99.4	100.9	100.3	102.1	112.9	112.9	
Nonferrous foundries.....	85.7	84.2	82.3	80.8	81.1	80.0	77.0	75.1	71.3	72.9	75.0	74.6	77.6	92.2	92.2	
Miscellaneous primary metal industries.....	144.7	142.7	141.1	139.6	138.5	135.8	132.4	132.0	132.6	131.8	135.0	134.8	136.0	152.3	152.3	
Fabricated metal products (except ordnance, machinery, and transportation equipment).....	1,087.5	1,079.4	1,067.5	1,051.5	1,043.0	1,050.3	1,050.8	1,035.7	1,028.7	1,026.6	1,015.9	1,038.1	1,039.5	1,045.2	1,139.3	
Tin cans and other tinware.....	56.7	54.3	54.0	54.4	54.4	54.6	55.2	57.2	62.3	63.2	61.6	60.9	59.1	58.5	55.4	
Cutlery, handtools, and hardware.....	151.4	150.2	148.3	145.8	145.9	143.6	140.4	137.6	137.7	135.2	141.3	143.7	143.5	160.0		
Heating apparatus (except electric) and plumbers' supplies.....	131.7	130.2	128.0	125.4	127.6	130.6	130.3	130.1	126.7	121.3	122.9	120.4	124.7	136.4		
Fabricated structural metal products.....	268.8	264.3	262.2	262.8	268.6	273.2	277.0	280.2	279.7	279.3	277.9	274.1	274.8	273.7		
Metal stamping, coating, and engraving.....	222.1	220.7	215.6	213.4	212.9	212.0	201.7	195.8	196.8	197.6	207.4	213.8	212.0	254.2		
Lighting fixtures.....	48.1	48.4	47.7	46.2	46.4	45.6	43.6	41.8	41.1	40.8	42.5	42.6	43.9	50.0		
Fabricated wire products.....	64.5	64.1	62.9	62.8	62.6	60.6	57.6	55.8	55.5	55.5	57.1	57.6	58.4	65.7		
Miscellaneous fabricated metal products.....	136.1	135.3	132.8	132.2	131.7	130.0	127.9	125.1	125.9	124.6	128.1	128.2	129.5	144.1		
Machinery (except electrical).....	1,575.7	1,568.1	1,544.7	1,523.4	1,506.0	1,502.1	1,487.9	1,489.2	1,498.6	1,497.2	1,514.9	1,557.1	1,574.7	1,551.1	1,707.9	
Engines and turbines.....	79.6	76.7	77.0	76.1	75.3	72.2	74.1	71.8	72.2	74.8	75.9	76.8	76.0	88.5		
Agricultural machinery and tractors.....	164.1	161.8	157.6	151.7	145.3	140.8	138.6	140.5	140.3	147.5	152.1	151.7	145.7	167.9		
Construction and mining machinery.....	125.0	123.0	120.8	119.6	119.3	119.6	121.1	122.4	122.9	123.7	125.1	125.1	123.7	133.9		
Metalworking machinery.....	254.4	251.5	249.8	249.9	251.5	252.1	253.3	257.5	258.6	263.5	270.4	275.2	270.8	306.0		
Special-industry machinery (except metalworking machinery).....	178.1	176.3	174.6	173.2	173.2	172.9	173.8	175.8	175.6	176.1	179.1	180.1	178.5	189.3		
General industrial machinery.....	228.9	224.7	224.2	224.0	225.3	226.4	227.1	229.7	227.5	227.7	231.8	233.1	232.9	245.5		
Office and store machines and devices.....	105.6	106.0	105.0	104.2	105.1	103.9	104.9	103.7	101.9	102.7	103.5	103.3	104.7	109.3		
Service-industry and household machines.....	184.7	180.2	173.4	168.5	169.0	166.5	165.5	166.7	164.0	165.7	178.8	188.4	178.6	202.8		
Miscellaneous machinery parts.....	247.7	244.5	241.0	238.8	238.1	233.5	230.8	230.5	234.2	233.2	240.4	241.0	240.4	264.8		
Electrical machinery.....	1,107.6	1,100.8	1,098.3	1,096.3	1,093.2	1,103.2	1,104.7	1,091.6	1,077.5	1,060.5	1,045.0	1,055.0	1,067.6	1,088.6	1,219.8	
Electrical generating, transmission, distribution, and industrial apparatus.....	369.8	367.8	365.9	364.8	365.3	360.5	360.1	354.7	355.7	357.2	363.8	369.0	367.8	402.8		
Electrical appliances.....	64.1	64.7	63.5	62.6	64.9	65.6	65.2	64.8	61.8	60.8	61.3	63.0	64.6	70.8		
Insulated wire and cable.....	25.8	25.5	25.3	25.5	25.5	25.1	25.2	24.4	23.4	22.6	23.2	23.4	24.1	31.5		
Electrical equipment for vehicles.....	79.2	78.8	78.0	76.4	73.9	71.6	64.9	67.3	64.6	66.5	69.7	70.9	70.8	81.6		
Electric lamps.....	25.7	25.5	25.3	25.2	24.9	24.8	24.6	24.5	24.5	24.5	25.1	25.3	25.4	27.6		
Communication equipment.....	490.5	491.1	494.1	495.0	504.1	511.0	505.3	495.5	483.7	468.1	466.4	470.5	490.1	556.0		
Miscellaneous electrical products.....	45.7	44.9	44.2	43.7	44.6	46.1	46.3	46.3	46.8	45.3	45.5	45.5	45.8	49.5		
Transportation equipment.....	1,886.9	1,886.4	1,868.5	1,844.5	1,815.7	1,788.6	1,744.9	1,657.9	1,590.7	1,649.3	1,693.7	1,737.7	1,751.8	1,744.9	1,952.6	
Automobiles.....	948.0	929.4	905.4	883.6	854.8	815.9	730.1	653.5	713.7	743.5	776.8	781.2	780.6	928.9		
Aircraft and parts.....	750.1	752.0	753.2	752.6	753.5	751.4	748.0	756.7	754.4	764.7	765.6	769.0	768.1	779.1		
Aircraft.....	478.3	477.1	477.0	472.8	470.9	468.2	466.2	471.2	474.9	474.5	470.2	472.9	473.4	472.4		
Aircraft engines and parts.....	147.1	148.8	148.6	149.0	150.0	149.9	151.6	153.3	146.5	154.9	158.4	161.5	158.9	174.7		
Aircraft propellers and parts.....	13.6	13.9	14.1	14.3	15.3	15.7	16.1	16.4	16.5	16.6	16.7	12.5	15.9	17.7		
Other aircraft parts and equipment.....	111.1	112.2	113.5	116.5	117.3	117.6	114.1	115.8	116.5	118.7	120.3	122.1	119.9	114.2		
Ship and boatbuilding and repairing.....	123.4	124.3	122.3	120.3	120.8	118.0	120.3	119.0	119.9	127.4	123.9	134.4	129.3	153.6		
Shipbuilding and repairing.....	99.1	100.3	98.8	98.2	100.4	98.8	102.1	100.0	106.3	107.6	111.1	108.4	131.2			
Boatbuilding and repairing.....	24.3	24.0	23.5	22.1	20.4	19.2	18.2	18.1	19.3	21.1	22.3	23.3	20.9	22.4		
Railroad equipment.....	55.6	54.0	55.1	51.9	51.2	49.9	48.9	50.7	50.8	48.3	55.9	58.2	57.4	79.7		
Other transportation equipment.....	9.3	8.8	8.5	7.3	8.3	9.7	10.6	10.8	10.5	9.8	9.5	9.0	9.3	11.3		
Instruments and related products.....	306.7	310.9	311.0	308.9	308.7	309.6	309.0	308.9	308.8	305.1	305.9	310.9	316.3	315.7	334.8	
Laboratory, scientific, and engineering instruments.....	49.9	49.7	49.3	49.5	49.4	49.2	48.7	48.3	47.9	50.0	50.8	53.0	51.7	55.5		
Mechanical measuring and controlling instruments.....	85.5	84.9	83.9	83.9	83.6	83.2	83.0	82.1	80.6	80.8	79.0	81.2	82.0	82.1		
Optical instruments and lenses.....	12.7	12.7	12.7	12.8	12.9	13.0	13.3	13.5	13.3	13.2	13.6	13.7	13.7	14.9		
Surgical, medical, and dental instruments.....	38.4	39.4	39.4	39.4	39.6	39.5	39.5	39.8	39.6	39.6	39.8	39.7	40.1	43.3		
Ophthalmic goods.....	23.8	23.6	23.5	23.3	23.2	23.2	23.1	22.9	22.7	22.7	24.0	24.3	24.0	26.9		
Photographic apparatus.....	66.6	66.5	66.3	66.4	66.7	66.6	66.7	67.5	66.7	66.7	66.2	66.1	67.0	67.9		
Watches and clocks.....	34.0	34.2	33.8	33.4	34.2	34.3	34.6	34.7	34.3	32.9	37.5	38.3	37.3	44.3		
Miscellaneous manufacturing industries.....	461.0	460.4	462.0	456.3	444.6	457.4	474.5	478.0	470.1	456.3	440.5	453.7	453.3	463.3	498.5	
Jewelry, silverware, and plated ware.....	51.3	53.2	52.9	53.3	54.9	56.2	56.3	54.3	51.7	50.1	51.4	51.9	53.7	53.6		
Musical instruments and parts.....	17.5	17.6	17.7	17.4	17.6	17.6	17.5	17.1	16.6	15.8	15.9	16.2	16.8	17.4		
Toys and sporting goods.....	84.1	79.4	75.9	70.6	74.5	85.5	90.4	88.7	84.9	81.6	82.9	82.1	82.8	94.3		
Pens, pencils, other office supplies.....	29.3	29.0	28.5	28.4	29.6	30.0	29.8	29.7	29.2	28.5	29.2	29.3	29.5	29.5		
Costume jewelry, buttons, notions.....	61.1	65.3	67.1	65.6	65.2	67.2	67.7	66.2	64.6	60.0	62.1	59.6	63.6	67.0		
Fabricated plastics products.....	75.6	75.1	73.1	71.8	72.9	72.9	71.1	69.9	68.0	66.0	69.1	69.6	71.2	77.2		
Other manufacturing industries.....	141.5	142.4	141.1	137.5	142.7	145.1	145.2	144.2	141.3	138.4	142.7	144.3	145.7	159.5		

See footnotes at end of table.

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

[In thousands]

Industry	1955					1954								Annual average	
	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	1954	1953
Transportation and public utilities	3,987	3,941	3,966	3,937	3,927	3,996	3,986	4,005	4,023	4,018	4,029	4,017	3,993	4,008	4,221
Transportation	2,701	2,655	2,648	2,625	2,617	2,683	2,672	2,690	2,701	2,686	2,694	2,694	2,676	2,688	2,899
Interstate railroads	1,158.7	1,156.8	1,156.8	1,152.3	1,152.9	1,186.8	1,185.7	1,202.9	1,212.0	1,220.2	1,227.8	1,224.5	1,211.6	1,215.4	1,376.9
Class I railroads	1,012.4	1,010.6	1,010.6	1,008.7	1,009.4	1,029.2	1,036.7	1,055.1	1,064.0	1,070.7	1,078.2	1,074.7	1,062.4	1,064.6	1,206.5
Local railways and bus lines	119.8	120.5	121.1	121.7	122.6	123.0	124.0	124.0	124.8	125.5	126.5	127.0	128.0	129.9	129.1
Trucking and warehousing	748.9	743.9	732.3	724.3	748.0	741.0	737.0	732.1	715.7	711.1	709.5	703.8	719.7	731.4	731.4
Other transportation and services	628.0	626.3	618.8	617.7	625.9	622.0	625.8	631.8	624.5	628.9	633.0	632.4	626.3	661.3	661.3
Bus lines, except local	43.4	43.2	43.3	44.0	44.1	44.1	44.5	45.4	45.9	46.0	45.7	46.1	45.8	51.4	51.4
Air transportation (common carrier)	110.0	108.4	107.2	106.1	105.5	104.8	104.4	105.1	104.5	104.6	105.9	105.9	105.4	104.9	104.9
Communication	707	709	741	737	735	736	736	736	738	744	747	741	741	741	747
Telephone	666.2	669.7	699.1	696.1	693.4	694.2	694.3	693.9	696.2	702.7	705.1	698.8	698.6	698.8	702.2
Telegraph	41.6	40.8	40.6	41.1	41.5	41.0	41.0	41.0	41.2	40.9	41.2	41.2	41.4	41.2	43.7
Other public utilities	579	577	577	575	575	577	578	579	584	588	588	582	576	579	576
Gas and electric utilities	554.1	554.4	553.3	553.1	554.7	555.2	556.4	560.8	565.1	565.0	559.6	553.4	556.3	556.3	552.4
Electric light and power utilities	248.4	248.3	247.6	247.2	247.2	247.4	247.6	248.0	250.9	252.4	252.5	247.9	247.9	249.0	248.2
Gas utilities	138.0	138.6	138.2	138.5	139.2	139.5	140.1	140.7	142.0	141.9	140.5	138.5	138.5	139.1	138.2
Electric light and gas utilities combined	167.7	167.5	167.5	167.4	168.1	168.1	168.3	169.2	170.7	170.6	168.9	167.0	167.0	168.2	171.1
Local utilities, not elsewhere classified	22.7	22.5	22.0	22.0	22.1	22.2	22.3	22.5	22.8	23.1	23.1	22.5	22.1	22.4	23.2
Wholesale and retail trade	10,519	10,543	10,408	10,309	10,419	11,354	10,745	10,548	10,447	10,321	10,351	10,389	10,351	10,498	10,527
Wholesale trade	2,806	2,803	2,813	2,806	2,817	2,860	2,849	2,819	2,789	2,784	2,784	2,761	2,750	2,796	2,784
Retail trade	7,713	7,740	7,595	7,503	7,602	8,494	7,896	7,729	7,658	7,537	7,567	7,628	7,601	7,702	7,744
General merchandise stores	1,331.2	1,363.4	1,304.8	1,269.2	1,326.6	1,903.0	1,518.1	1,398.4	1,348.9	1,280.3	1,281.4	1,316.3	1,330.9	1,395.8	1,444.5
Food and liquor stores	1,483.0	1,479.1	1,471.4	1,467.4	1,462.3	1,493.6	1,471.8	1,460.2	1,444.0	1,434.4	1,442.2	1,449.0	1,442.5	1,446.2	1,395.3
Automotive and accessories dealers	760.6	762.0	755.4	749.4	749.3	767.1	754.3	749.4	753.1	760.1	763.7	764.8	763.2	764.6	798.8
Apparel and accessories stores	599.7	612.8	578.3	555.3	579.0	723.2	614.4	597.5	580.3	535.4	545.2	583.5	588.3	594.0	598.6
Other retail trade	3,538.2	3,522.8	3,485.2	3,461.6	3,485.1	3,607.4	3,537.4	3,523.2	3,531.8	3,526.5	3,534.3	3,514.4	3,476.5	3,502.8	3,506.1
Finance, insurance, and real estate	2,172	2,161	2,150	2,132	2,124	2,136	2,134	2,136	2,141	2,151	2,150	2,128	2,103	2,114	2,038
Banks and trust companies	539.2	538.2	538.2	535.7	531.8	532.6	530.3	529.5	531.0	538.0	538.4	529.4	525.0	529.3	513.5
Security dealers and exchanges	76.5	75.5	74.2	72.4	72.4	70.8	70.0	69.2	68.8	69.2	68.3	66.8	65.8	67.3	65.7
Insurance carriers and agents	783.0	781.5	778.3	776.2	777.5	776.4	775.8	775.8	779.9	779.6	770.3	765.8	770.6	739.4	739.4
Other finance agencies and real estate	761.9	754.7	744.1	743.3	743.3	754.6	756.9	761.2	764.9	763.6	763.6	761.1	746.8	746.4	719.3
Service and miscellaneous	5,732	5,674	5,571	5,536	5,533	5,588	5,622	5,660	5,719	5,750	5,755	5,715	5,672	5,629	5,538
Hotels and lodging places	479.8	479.8	462.9	461.5	466.3	462.9	465.6	474.4	511.6	578.9	579.8	521.6	496.7	498.0	504.3
Personal services:															
Laundries	328.4	325.4	324.0	326.2	327.1	328.3	329.5	329.1	332.2	337.9	337.6	333.6	331.4	339.2	339.2
Cleaning and dyeing plants	157.1	154.1	150.3	152.7	155.1	158.4	159.8	157.3	155.8	161.7	166.8	166.3	160.7	166.2	166.2
Motion pictures	236.5	228.9	224.4	224.4	225.5	229.9	236.7	239.7	239.7	238.8	238.1	237.6	237.6	231.5	234.0
Government	6,881	6,927	6,922	6,873	6,835	7,166	6,917	6,829	6,746	6,563	6,551	6,716	6,736	6,751	6,645
Federal	2,158	2,153	2,148	2,142	2,139	2,457	2,165	2,147	2,142	2,157	2,161	2,164	2,160	2,188	2,305
State and local ⁴	4,723	4,774	4,774	4,731	4,696	4,709	4,752	4,682	4,604	4,406	4,390	4,552	4,576	4,563	4,340

¹ The Bureau of Labor Statistics series on employment in nonagricultural establishments are based upon reports submitted by cooperating firms. These reports cover all full- and part-time employees in private nonagricultural establishments who worked during, or received pay for, any part of the pay period ending nearest the 15th of the month. Because of this, persons who worked in more than one establishment during the reporting period will be counted more than once. In Federal establishments the data generally refer to persons who worked on, or received pay for, the last day of the month. Proprietors, self-employed persons, unpaid family workers, and domestic servants are excluded. These employment series have been adjusted to first-quarter 1954 benchmark levels indicated by data from government social-insurance programs.

Data for the 2 most recent months are subject to revision without notation; revised figures for earlier months will be identified by asterisks the first month they are published.

These data differ in several respects from the nonagricultural employment data shown in the Monthly Report on the Labor Force (table A-1, civilian labor force), which are obtained by household interviews. This MRLF series relates to the calendar week which contains the 8th day of the month. It includes all persons (14 years and over) with a job whether at work or not, proprietors, self-employed persons, unpaid family workers, and domestic servants.

² Durable goods include: ordnance and accessories; lumber and wood products (except furniture); furniture and fixtures; stone, clay, and glass products; primary metal industries; fabricated metal products (except ordnance, machinery, and transportation equipment); machinery (except electrical); electrical machinery; transportation equipment; instruments and related products; and miscellaneous manufacturing industries.

³ Nondurable goods include: food and kindred products; tobacco manufactures; textile-mill products; apparel and other finished textile products; paper and allied products; printing, publishing, and allied industries; chemicals and allied products; products of petroleum and coal; rubber products; and leather and leather products.

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

See footnote 1, p. 827.

NOTE.—Information on concepts, methodology, etc., is given in a technical note on Measurement of Industrial Employment, which appeared in the September 1953 Monthly Labor Review.

TABLE A-3: Production workers in mining and manufacturing industries ¹

[In thousands]

Industry	1955					1954								Annual average	
	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	1954	1953
Mining:															
Metal.....		81.4	81.1	80.7	80.3	78.6	79.9	76.7	76.0	84.9	86.7	86.0	85.4	83.9	91.6
Iron.....		26.6	26.2	26.0	25.8	25.3	27.0	28.4	29.7	30.4	31.3	31.0	31.8	30.5	35.4
Copper.....		24.5	24.6	24.4	24.2	23.5	22.8	20.7	18.6	24.2	24.3	24.3	23.4	23.3	24.5
Lead and zinc.....		14.0	13.9	13.9	13.8	13.5	13.6	12.2	12.3	13.8	14.1	13.9	13.8	13.7	15.1
Anthracite.....		34.1	34.8	36.2	38.5	39.3	39.5	39.7	29.1	29.4	28.9	29.8	32.5	36.7	50.3
Bituminous-coal.....		187.8	191.1	192.5	192.4	192.9	193.1	192.4	193.8	196.5	189.2	202.6	202.4	207.3	267.5
Crude-petroleum and natural-gas production:															
Petroleum and natural-gas production (except contract services).....		123.3	123.2	123.9	124.9	125.2	126.1	127.4	131.5	135.7	136.5	134.2	129.0	130.0	131.4
Nonmetallic mining and quarrying.....		90.3	87.2	85.0	85.2	88.8	90.1	91.2	92.0	92.1	92.4	91.2	90.8	89.6	91.3
Manufacturing:	12,879	12,828	12,778	12,649	12,523	12,645	12,657	12,612	12,577	12,418	12,179	12,437	12,394	12,588	13,833
Durable goods ²	7,537	7,467	7,375	7,282	7,182	7,218	7,198	7,081	6,965	6,890	6,876	7,130	7,163	7,184	8,148
Nondurable goods ³	5,342	5,361	5,403	5,367	5,341	5,427	5,459	5,531	5,612	5,528	5,303	5,307	5,231	5,404	5,685
Ordnance and accessories.....	89.5	91.0	93.5	93.9	96.0	97.4	98.0	99.9	101.8	100.8	104.0	107.4	111.8	115.5	179.9
Food and kindred products.....	1,029.8	1,011.0	991.1	985.3	1,007.0	1,061.9	1,110.8	1,180.4	1,267.5	1,238.1	1,152.2	1,085.6	1,036.8	1,100.4	1,136.2
Meat products.....		245.9	248.1	249.6	256.0	264.2	263.5	262.2	257.0	250.7	245.9	246.9	238.6	251.9	254.9
Dairy products.....		78.1	74.2	73.2	72.2	72.1	75.3	76.3	79.9	84.7	87.3	87.4	83.1	78.9	80.4
Canning and preserving.....		142.1	128.0	125.2	134.9	151.3	179.3	244.2	347.2	319.6	234.6	171.7	149.4	194.4	207.0
Grain-mill products.....		84.0	84.5	84.5	85.3	86.3	87.1	89.5	92.4	92.2	93.2	92.7	89.3	88.7	87.8
Bakery products.....		169.6	168.9	168.9	168.0	172.6	174.5	175.1	172.9	174.2	175.5	173.5	171.9	173.9	180.1
Sugar.....		22.6	21.9	22.3	24.5	38.0	43.8	41.0	26.7	26.0	24.3	23.8	23.8	28.4	28.6
Confectionery and related products.....		60.4	63.6	63.7	66.8	70.6	74.1	75.3	71.5	65.0	58.1	61.2	60.3	66.6	70.4
Beverages.....		113.6	108.6	105.1	106.8	113.7	117.5	118.6	122.1	126.8	132.5	127.3	121.8	120.0	126.2
Miscellaneous food products.....		94.7	93.3	92.8	92.5	93.1	95.7	98.2	97.8	98.9	100.8	101.1	98.6	97.7	100.9
Tobacco manufactures.....	78.6	79.4	82.8	88.7	91.1	100.1	102.7	111.6	110.3	102.0	82.9	82.4	81.5	93.9	95.1
Cigarettes.....		29.0	29.2	29.2	29.5	29.6	30.0	29.7	29.4	29.2	28.8	28.7	28.3	29.1	28.4
Cigars.....		36.1	36.9	37.5	33.7	38.4	38.9	38.7	38.7	37.9	36.1	37.9	37.5	37.9	38.5
Tobacco and snuff.....		6.3	6.4	6.5	6.4	6.5	6.6	6.6	6.7	6.7	6.6	6.7	6.7	6.7	6.8
Tobacco stemming and redrying.....		8.0	10.3	15.5	21.5	25.6	27.2	36.6	35.5	28.2	11.4	9.1	9.0	20.2	21.4
Textile-mill products.....	966.3	982.1	985.4	984.5	976.6	983.4	982.6	979.4	978.4	973.6	945.5	973.3	960.8	975.7	1,090.2
Scouring and combing plants.....		5.8	6.3	6.1	5.8	5.8	5.4	5.7	6.3	7.0	6.8	5.9	6.1	5.9	6.2
Yarn and thread mills.....		121.6	121.8	121.4	120.6	119.8	119.6	118.4	117.9	117.4	113.8	117.6	115.7	118.0	135.8
Broad-woven fabric mills.....		445.6	445.1	446.1	444.3	443.1	440.3	439.8	439.8	439.7	430.4	445.1	440.4	443.6	500.6
Narrow fabrics and smallwares.....		27.6	27.7	27.3	27.3	27.1	26.8	26.5	26.4	26.1	25.7	26.4	26.1	26.3	28.1
Knitting mills.....		195.4	197.0	195.8	192.3	200.1	204.0	204.2	204.4	201.7	192.0	197.0	192.2	197.0	215.2
Dyeing and finishing textiles.....		77.6	78.6	79.2	78.7	79.2	78.5	77.5	76.9	75.6	75.1	75.6	76.0	77.2	82.5
Carpets, rugs, other floor coverings.....		42.4	42.6	42.6	42.3	42.2	42.7	42.9	42.8	41.7	40.6	41.1	41.0	42.8	48.6
Hats (except cloth and millinery).....		10.8	10.8	11.1	11.1	11.7	11.5	11.4	12.1	12.1	11.7	12.0	10.9	11.8	14.8
Miscellaneous textile goods.....		55.3	55.5	54.9	54.2	54.4	53.8	53.0	51.8	52.3	49.4	52.6	52.4	53.2	58.4
Apparel and other finished textile products.....	1,044.1	1,057.7	1,110.2	1,100.7	1,068.9	1,073.0	1,060.4	1,056.6	1,058.7	1,054.2	983.5	990.2	988.3	1,046.2	1,102.9
Men's and boys' suits and coats.....		104.6	110.2	110.1	108.0	107.6	100.7	106.4	110.6	111.5	103.1	104.7	101.9	108.7	119.8
Men's and boys' furnishings and work clothing.....		287.6	289.8	284.8	275.7	276.9	281.7	281.4	277.9	273.4	251.9	266.7	265.4	272.5	288.5
Women's outerwear.....		314.1	343.2	343.1	334.5	332.2	314.7	305.1	312.1	317.0	295.9	286.6	286.8	315.7	322.7
Women's, children's undergarments.....		105.8	105.5	103.0	100.3	101.7	104.3	103.5	101.3	97.5	90.9	96.5	98.7	99.4	102.9
Millinery.....		17.3	24.7	24.3	21.1	18.9	17.2	19.2	19.9	19.4	15.1	11.5	13.8	18.6	19.4
Children's outerwear.....		59.6	66.5	67.2	64.3	62.7	63.4	64.6	64.9	65.8	65.3	65.6	60.0	63.8	64.7
Fur goods.....		5.2	6.1	6.3	7.5	9.3	10.0	8.7	9.0	8.9	9.2	9.8	8.2	8.4	9.3
Miscellaneous apparel and accessories.....		54.6	55.5	54.9	53.0	56.4	58.5	58.3	57.2	55.8	51.4	52.1	50.6	54.1	57.1
Other fabricated textile products.....		108.9	108.7	107.0	104.5	107.3	109.9	109.4	105.8	104.9	100.7	99.7	102.9	105.1	118.6
Lumber and wood products (except furniture).....	677.2	649.0	633.8	639.3	631.3	661.4	684.6	691.6	671.7	591.5	583.0	674.0	653.7	639.3	698.0
Logging camps and contractors.....		74.3	66.6	77.6	73.2	90.0	103.0	103.6	88.3	74.7	71.4	99.4	91.5	83.3	90.0
Sawmills and planing mills.....		359.6	355.3	353.1	349.5	360.4	369.0	374.2	371.1	325.4	318.2	365.5	350.0	350.1	385.0
Millwork, plywood, and prefabricated structural wood products.....		114.5	111.5	110.0	110.5	112.6	114.4	114.5	113.5	96.3	96.4	107.4	105.5	105.5	110.5
Wooden containers.....		48.5	49.3	49.2	49.7	49.7	49.7	50.8	50.2	48.4	49.3	52.8	52.6	51.5	59.7
Miscellaneous wood products.....		52.1	51.1	49.4	48.4	48.7	48.5	48.5	48.6	46.7	47.7	48.9	49.1	48.9	52.8
Furniture and fixtures.....	295.4	296.7	298.4	296.4	292.6	296.9	301.4	301.3	298.4	290.1	274.6	277.2	279.0	290.5	319.9
Household furniture.....		217.1	218.9	217.0	214.1	218.4	221.7	221.8	218.8	211.3	199.4	198.6	201.0	211.0	233.9
Office, public-building, and professional furniture.....		33.6	33.6	33.3	33.1	33.1	33.1	32.9	33.5	33.4	31.7	32.1	31.9	32.9	35.0
Partitions, shelving, lockers, and fixtures.....		26.4	26.2	26.2	25.6	25.3	26.1	26.2	25.9	25.3	23.3	25.4	25.1	25.7	27.8
Screens, blinds, and miscellaneous furniture and fixtures.....		19.6	19.7	19.9	19.8	20.1	20.5	20.4	20.2	20.1	20.2	21.1	21.0	21.0	23.3

See footnotes at end of table.

TABLE A-3: Production workers in mining and manufacturing industries¹—Continued

[In thousands]

Industry	1955					1954							Annual average		
	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	1954	1953
Manufacturing—Continued															
Paper and allied products.....	441.6	440.4	439.4	437.2	437.1	441.8	444.0	443.9	444.6	439.3	433.1	438.6	435.2	439.3	441.8
Pulp, paper, and paperboard mills.....	222.7	221.9	221.6	221.2	222.6	221.6	221.5	223.7	222.2	220.3	222.5	220.6	221.4	219.6	
Paperboard containers and boxes.....	118.5	118.2	117.3	118.1	121.7	121.7	124.1	124.0	122.9	119.1	114.9	117.2	116.3	119.5	122.2
Other paper and allied products.....	99.2	99.3	98.3	97.8	97.8	97.5	98.3	98.4	98.0	98.0	97.9	98.9	98.3	98.5	99.9
Printing, publishing, and allied industries.....	515.5	516.7	515.6	512.0	512.1	519.4	518.1	519.5	518.3	509.1	508.4	514.4	510.7	514.0	512.5
Newspapers.....	147.2	145.8	145.3	145.6	147.7	147.7	146.8	147.3	146.1	144.0	146.7	145.5	145.3	145.1	
Periodicals.....	25.9	26.2	26.0	25.9	25.5	26.0	26.1	25.8	25.0	24.8	25.5	25.6	25.8	26.6	
Books.....	29.2	28.9	28.7	28.5	29.4	29.7	30.1	30.2	29.5	29.2	29.1	29.2	29.4	29.3	
Commercial printing.....	170.2	171.2	169.5	170.4	171.6	169.2	169.6	170.4	166.7	167.3	167.9	166.5	168.7	167.5	
Lithography.....	45.4	45.2	44.7	43.9	46.1	46.7	46.7	46.3	45.6	45.0	46.0	46.1	46.0	44.6	
Greeting cards.....	13.0	12.7	12.6	12.7	14.1	15.1	14.7	14.7	14.3	14.2	14.2	13.2	13.9	14.8	
Bookbinding and related industries.....	34.1	33.5	33.1	33.2	33.5	33.7	34.1	34.2	34.4	34.1	33.9	33.6	33.8	34.8	
Miscellaneous publishing and printing services.....	51.7	52.1	52.1	51.9	51.5	50.9	50.9	50.6	49.6	49.7	51.1	51.0	51.2	50.1	
Chemicals and allied products.....	547.1	553.0	548.2	535.3	534.4	534.2	533.3	533.9	529.4	520.0	517.3	521.2	529.1	531.7	552.5
Industrial inorganic chemicals.....	74.9	72.7	72.1	74.3	73.8	73.3	73.2	72.2	72.1	71.7	71.8	71.3	71.8	71.8	67.2
Industrial organic chemicals.....	213.8	211.9	209.2	207.0	206.3	204.6	202.0	200.9	201.1	201.2	201.3	201.0	203.8	222.0	
Drugs and medicines.....	56.9	57.6	57.4	56.9	56.8	57.6	57.8	57.5	56.5	56.0	56.0	56.2	57.0	56.9	
Soap, cleaning and polishing preparations.....	30.5	30.4	30.5	30.8	30.2	30.4	30.8	31.2	30.7	30.4	30.9	31.0	31.0	31.9	
Paints, pigments, and fillers.....	44.6	44.1	43.7	44.1	44.2	44.4	43.9	44.3	44.4	44.3	44.3	44.2	44.3	46.9	
Gum and wood chemicals.....	6.6	6.6	6.6	6.6	6.5	6.5	6.5	6.5	6.1	6.4	6.4	6.6	6.5	6.8	
Fertilizers.....	38.8	37.6	29.3	27.1	25.9	25.0	26.3	25.5	23.2	22.0	24.6	31.8	28.3	29.0	
Vegetable and animal oils and fats.....	26.5	28.3	28.6	29.9	31.7	33.0	34.0	31.5	26.8	26.3	26.8	27.6	30.3	31.6	
Miscellaneous chemicals.....	60.4	59.0	57.9	57.7	58.8	58.8	59.4	59.8	59.0	59.0	59.1	59.4	58.8	60.3	
Products of petroleum and coal.....	173.5	172.6	171.7	169.7	168.6	171.5	173.3	174.5	177.1	179.3	181.2	181.1	178.6	177.1	186.5
Petroleum refining.....	132.4	132.5	131.6	131.8	132.8	134.0	135.1	137.2	139.1	140.6	140.3	138.4	137.3	142.4	
Coke, other petroleum and coal products.....	40.2	39.2	38.1	36.8	38.7	39.3	39.4	39.9	40.2	40.6	40.8	40.2	39.8	44.1	
Rubber products.....	214.4	210.7	211.6	209.4	208.5	206.8	202.1	201.6	196.3	174.9	171.0	195.6	194.2	194.7	220.5
Tires and inner tubes.....	88.4	87.4	86.5	85.3	84.5	81.2	83.9	82.6	65.9	65.2	82.2	81.1	79.7	92.8	
Rubber footwear.....	21.2	21.5	21.5	22.1	22.3	22.3	21.9	21.0	20.5	20.1	19.8	19.8	20.7	23.7	
Other rubber products.....	101.1	102.7	101.4	101.1	100.0	98.6	95.8	92.7	88.5	85.7	93.6	93.3	94.3	104.1	
Leather and leather products.....	331.4	337.5	346.7	344.5	336.3	334.9	332.1	329.6	330.9	337.9	327.8	324.3	315.5	330.6	346.8
Leather: tanned, curried, and finished.....	39.0	38.9	39.1	38.8	39.0	38.4	38.4	38.1	38.5	38.9	39.1	38.6	39.0	42.4	
Industrial leather belting and packing.....	3.7	3.7	3.6	3.6	3.5	3.5	3.5	3.5	3.4	3.4	3.6	3.6	3.6	4.4	
Boot and shoe cut stock and findings.....	14.9	15.8	15.8	15.4	14.7	14.2	13.3	12.8	14.1	14.2	14.3	13.2	14.2	15.1	
Footwear (except rubber).....	222.3	227.3	227.8	224.9	221.5	216.2	213.1	216.6	223.8	218.1	216.7	210.8	219.0	225.8	
Luggage.....	14.8	14.7	13.6	12.8	13.6	14.5	15.5	15.4	14.9	14.1	13.9	13.1	13.8	15.3	
Handbags and small leather goods.....	28.1	31.5	31.2	29.0	28.6	29.9	28.8	27.9	28.8	27.9	24.6	22.3	22.7	28.1	
Gloves and miscellaneous leather goods.....	14.7	14.8	13.4	11.8	14.0	15.4	15.9	15.7	15.3	14.5	14.4	13.5	13.9	15.6	
Stone, clay, and glass products.....	458.9	450.2	442.2	434.2	430.1	436.6	438.3	437.6	437.1	433.5	423.7	427.0	426.6	431.0	460.1
Flat glass.....	28.6	28.8	29.0	29.2	28.9	28.6	27.1	25.7	24.7	25.0	24.9	24.7	26.1	28.2	
Glass and glassware, pressed or blown.....	77.4	76.4	75.2	74.1	74.7	75.6	75.9	75.7	76.2	73.6	77.6	77.9	76.6	84.8	
Glass products made of purchased glass.....	14.7	14.6	14.6	14.5	14.6	14.5	14.2	13.9	13.7	12.9	13.2	13.3	13.9	15.8	
Cement, hydraulic.....	35.7	35.5	35.3	35.5	35.6	35.7	36.0	36.1	36.0	35.9	32.7	33.7	34.9	35.2	
Structural clay products.....	70.0	68.3	66.1	66.1	67.7	68.4	68.6	69.1	68.8	68.8	69.1	67.8	67.6	70.8	
Pottery and related products.....	48.2	48.2	47.3	46.3	47.1	47.5	46.9	46.7	45.0	41.5	44.5	45.3	45.8	49.5	
Concrete, gypsum, and plaster products.....	88.9	85.8	83.6	83.1	85.4	86.7	86.8	87.7	88.2	87.7	85.7	84.7	84.6	86.4	
Cut-stone and stone products.....	17.5	17.3	17.2	16.7	17.8	17.6	17.8	17.9	17.8	16.4	17.1	17.2	17.3	16.5	
Miscellaneous nonmetallic mineral products.....	69.2	67.3	65.9	64.6	64.8	63.8	64.3	64.3	63.1	61.9	62.2	62.0	64.2	72.9	
Primary metal industries.....	1,098.8	1,079.5	1,056.6	1,031.7	1,012.7	1,002.2	988.0	969.4	965.3	967.3	968.5	982.1	974.4	990.6	1,131.0
Blast furnaces, steel works, and rolling mills.....	534.6	520.3	508.0	497.8	493.0	486.7	481.2	485.0	483.5	485.4	488.1	483.3	492.7	559.6	
Iron and steel foundries.....	205.4	200.7	193.8	188.4	184.5	181.4	179.2	178.6	181.3	181.0	185.5	184.9	185.0	217.9	
Primary smelting and refining of non-ferrous metals.....	53.7	53.4	53.0	52.9	52.8	52.5	49.4	49.6	52.3	52.1	51.5	50.9	51.4	50.5	
Secondary smelting and refining of nonferrous metals.....	9.5	9.4	9.2	9.2	9.2	9.2	9.0	8.8	9.1	9.1	9.2	9.3	9.1	10.0	
Rolling, drawing, and alloying of non-ferrous metals.....	88.2	87.6	86.5	85.7	84.6	83.6	82.5	77.7	79.7	78.6	79.9	79.4	81.1	91.7	
Nonferrous foundries.....	71.3	70.4	68.0	66.6	66.8	65.7	62.7	60.6	56.3	57.9	60.0	59.3	62.7	77.0	
Miscellaneous primary metal industries.....	116.8	114.8	113.2	112.1	111.3	108.9	105.4	105.0	105.1	104.4	107.9	107.3	108.7	124.3	
Fabricated metal products (except ordnance, machinery, and transportation equipment).....	875.9	870.5	860.1	843.9	834.4	842.7	844.1	829.4	821.0	820.0	809.2	830.7	832.3	837.5	930.4
Tin cans and other tinware.....	49.6	47.2	46.8	47.2	47.5	48.0	50.0	54.8	55.8	54.2	53.7	52.2	51.3	48.6	
Cutlery, handtools, and hardware.....	124.5	123.4	122.2	119.3	119.2	116.9	113.5	111.0	111.0	108.6	114.5	116.7	116.6	132.1	
Heating apparatus (except electric) and plumbers' supplies.....	103.6	102.6	100.3	97.4	99.9	103.1	102.8	102.3	99.5	94.0	95.8	93.2	92.7	108.9	
Fabricated structural metal products.....	201.6	197.6	194.8	195.2	200.9	206.1	210.1	212.5	212.4	213.1	211.9	208.7	208.5	211.1	
Metal stamping, coating, and engraving.....	187.0	186.1	180.7	178.4	178.2	177.3	167.2	161.1	162.2	162.4	171.5	177.3	176.3	214.5	
Lighting fixtures.....	39.1	39.3	38.7	37.2	37.4	36.4	34.5	32.8	32.3	32.0	33.6	33.7	34.9	40.9	
Fabricated wire products.....	54.1	53.8	52.5	52.3	52.4	50.4	47.6	45.7	45.5	45.2	46.7	47.4	48.2	55.3	
Miscellaneous fabricated metal products.....	111.0	110.1	107.9	107.4	107.2	105.9	103.7	100.8	101.3	99.7	103.0	103.1	104.7	119.1	

See footnotes at end of table.

TABLE A-3: Production workers in mining and manufacturing industries ¹—Continued

[In thousands]

Industry	1955					1954							Annual average		
	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	1954	1953
Manufacturing—Continued															
Machinery (except electrical).....	1,170.9	1,164.8	1,144.2	1,125.0	1,109.3	1,105.9	1,092.0	1,092.5	1,097.0	1,094.5	1,110.7	1,154.0	1,169.7	1,147.8	1,303.1
Engines and turbines.....	57.2	54.5	54.8	54.2	53.6	53.6	50.5	52.3	50.2	50.4	52.7	53.7	54.4	53.6	64.7
Agricultural machinery and tractors.....	123.1	121.4	117.6	112.1	106.0	101.6	99.6	100.2	99.8	106.6	111.8	111.6	105.8	105.8	126.2
Construction and mining machinery.....	90.3	88.5	86.5	85.6	85.0	85.2	86.7	88.0	88.4	89.5	90.8	90.8	89.4	89.6	99.6
Metalworking machinery.....	194.2	192.0	190.1	189.6	191.5	192.5	193.3	196.4	197.0	201.8	208.4	212.2	208.5	242.6	
Special-industry machinery (except metalworking machinery).....	126.9	125.1	123.5	122.4	123.2	122.7	123.5	124.7	124.8	124.7	128.2	129.3	127.8	138.9	
General industrial machinery.....	154.6	150.7	150.7	150.4	151.1	152.4	152.7	154.7	152.2	152.7	157.6	159.3	158.3	173.1	
Office and store machines and devices.....	82.7	83.3	82.6	82.3	83.2	82.1	83.0	82.1	80.4	80.8	81.7	81.3	82.8	88.5	
Service-industry and household machines.....	142.6	138.6	131.9	126.8	127.1	124.6	123.5	123.8	120.3	121.8	134.2	143.3	134.5	157.8	
Miscellaneous machinery parts.....	193.2	190.1	187.3	185.9	185.2	180.4	177.9	176.9	181.2	180.1	187.6	187.5	187.1	211.9	
Electrical machinery.....	811.5	806.1	803.2	803.4	799.5	809.1	810.7	799.9	785.4	766.3	750.5	760.9	776.3	794.6	925.1
Electrical generating, transmission, distribution, and industrial apparatus.....	261.5	259.0	256.4	255.0	256.0	250.9	250.6	244.6	244.5	245.2	253.0	259.2	257.1	290.7	
Electrical appliances.....	51.3	51.7	50.5	49.5	51.9	52.8	52.7	52.3	49.3	48.1	48.7	50.7	52.2	59.0	
Insulated wire and cable.....	20.6	20.4	20.3	20.6	20.7	20.4	20.4	19.6	18.5	18.0	18.6	18.8	19.4	26.1	
Electrical equipment for vehicles.....	64.5	64.5	63.7	62.2	59.7	57.4	50.6	53.3	50.3	52.3	55.7	56.8	56.6	67.1	
Electric lamps.....	22.4	22.1	22.0	21.9	21.6	21.4	21.3	21.2	21.2	21.2	21.8	22.1	22.1	24.2	
Communication equipment.....	351.7	352.3	358.1	358.3	366.6	373.5	370.1	359.9	347.7	351.9	329.3	334.7	353.1	419.9	
Miscellaneous electrical products.....	34.1	33.2	32.4	32.0	32.6	34.3	34.2	34.5	34.8	33.8	33.8	34.0	34.1	38.1	
Transportation equipment.....	1,466.3	1,465.9	1,446.8	1,426.4	1,399.8	1,374.7	1,333.8	1,249.0	1,182.9	1,238.4	1,279.4	1,327.8	1,346.0	1,334.9	1,542.9
Automobiles.....	790.8	772.7	750.1	729.5	701.8	665.1	579.6	504.2	562.0	589.8	623.5	630.3	628.4	767.1	
Aircraft and parts.....	518.9	519.7	523.2	523.1	525.1	523.6	522.1	530.6	528.1	537.3	542.7	548.1	544.3	568.7	
Aircraft.....	330.0	328.2	329.6	325.8	325.9	324.0	323.5	328.4	332.9	332.1	331.9	336.7	333.8	343.0	
Aircraft engines and parts.....	97.4	99.0	99.7	99.8	100.2	100.3	102.0	103.5	96.4	104.1	108.0	110.8	108.8	124.7	
Aircraft propellers and parts.....	9.3	9.7	9.8	10.0	10.8	11.1	11.3	11.5	11.7	11.9	12.0	8.7	11.3	13.1	
Other aircraft parts and equipment.....	82.2	82.8	84.1	87.5	88.2	88.2	85.3	87.2	87.1	89.2	90.8	91.9	90.5	88.0	
Ship and boatbuilding and repairing.....	107.3	107.6	105.6	103.7	104.2	101.4	103.8	102.7	103.3	110.8	113.1	117.4	112.3	135.1	
Shipbuilding and repairing.....	86.0	86.5	85.1	84.3	86.6	85.0	88.4	87.2	86.8	92.4	93.5	96.8	94.1	115.1	
Boatbuilding and repairing.....	21.3	21.1	20.5	19.4	17.6	16.4	15.4	15.5	16.5	18.4	19.6	20.6	18.3	20.0	
Railroad equipment.....	41.3	39.7	40.8	37.8	37.0	35.7	34.7	36.4	36.2	33.4	40.7	43.0	42.3	62.4	
Other transportation equipment.....	7.6	7.1	6.7	5.7	6.6	8.0	8.8	9.0	8.8	8.1	7.8	7.2	7.6	9.6	
Instruments and related products.....	216.2	218.2	218.9	216.4	216.5	217.7	217.6	217.5	217.7	213.8	214.0	218.7	223.5	223.3	243.7
Laboratory, scientific, and engineering instruments.....	30.1	30.1	29.7	29.8	29.7	29.7	29.0	28.7	27.9	29.3	30.0	31.5	31.0	34.8	
Mechanical measuring and controlling instruments.....	61.0	60.5	59.6	59.8	59.4	59.1	58.7	58.2	56.6	56.6	54.6	57.0	57.8	59.1	
Optical instruments and lenses.....	9.8	9.8	9.8	9.9	10.0	10.1	10.4	10.6	10.6	10.5	10.7	10.7	10.7	11.7	
Surgical, medical, and dental instruments.....	26.4	27.2	27.2	27.2	27.3	27.1	27.2	27.5	27.3	27.4	27.7	27.7	27.9	31.0	
Ophthalmic goods.....	18.8	18.7	18.5	18.4	18.3	18.3	18.3	18.1	18.0	17.8	19.0	19.3	19.0	21.6	
Photographic apparatus.....	44.3	44.4	43.9	44.1	45.0	45.1	45.4	46.0	45.0	45.2	45.4	45.2	45.7	47.4	
Watches and clocks.....	27.8	28.2	27.7	27.3	28.0	28.2	28.5	28.6	28.4	27.2	31.3	31.3	31.1	38.2	
Miscellaneous manufacturing industries.....	376.2	375.5	377.1	370.9	360.0	373.0	389.8	393.0	386.4	373.3	358.2	370.6	369.7	379.0	413.4
Jewelry, silverware, and plated ware.....	40.9	42.5	42.3	43.2	44.6	46.0	45.7	44.4	41.8	40.2	41.4	41.8	43.6	43.8	
Musical instruments and parts.....	14.9	15.0	15.0	14.9	15.1	15.1	15.1	14.6	14.2	13.4	13.4	13.7	14.4	15.1	
Toys and sporting goods.....	70.1	65.7	62.2	57.1	61.0	71.9	76.3	74.8	71.2	68.1	69.4	68.7	69.2	81.1	
Pens, pencils, other office supplies.....	22.0	21.5	21.1	20.9	22.1	22.6	22.4	22.4	21.9	21.3	22.0	22.1	22.2	22.3	
Costume jewelry, buttons, notions.....	51.1	55.0	56.5	55.0	54.6	56.3	56.9	55.7	54.2	49.7	51.8	49.1	53.2	56.2	
Fabricated plastics products.....	62.0	61.6	59.6	58.3	59.3	59.2	58.0	56.8	55.0	53.6	56.7	57.2	58.2	64.6	
Other manufacturing industries.....	114.5	115.8	114.2	110.6	116.3	118.7	118.6	117.7	115.0	111.9	115.9	117.1	118.4	130.4	

¹ See footnote 1, table A-2. Production and related workers include working foremen and all nonsupervisory workers (including leadmen and trainees) engaged in fabricating, processing, assembling, inspection, receiving, storage, handling, packing, warehousing, shipping, maintenance, janitorial, watchman services, products development, auxiliary production for plant's own

use (e. g., powerplant), and recordkeeping and other services closely associated with the above production operations.

² See footnote 2, table A-2.

³ See footnote 3, table A-2.

See footnote 1 on p. 827.

TABLE A-4: Indexes of production-worker employment and weekly payrolls in manufacturing industries¹

[1947-49=100]

Period	Employment	Weekly payrolls	Period	Employment	Weekly payrolls	Period	Employment	Weekly payrolls
1939: Average	66.2	29.9	1949: Average	93.8	97.2	1954: August	100.4	134.8
1940: Average	71.2	34.0	1950: Average	99.6	111.7	September	101.7	138.0
1941: Average	87.9	49.3	1951: Average	106.4	129.8	October	102.0	139.1
1942: Average	103.9	72.2	1952: Average	106.3	136.6	November	102.3	142.2
1943: Average	121.4	99.0	1953: Average	111.8	151.4	December	102.2	143.1
1944: Average	118.1	102.8	1954: Average	101.8	137.7			
1945: Average	104.0	87.8				1955: January	101.2	141.5
1946: Average	97.9	81.2	1954: May	100.2	134.6	February	102.3	144.4
1947: Average	103.4	97.7	June	100.5	135.8	March	103.3	146.6
1948: Average	102.8	105.1	July	98.5	131.9	April	103.7	146.5
						May	104.1	146.5

¹ See footnote 1, tables A-2 and A-3. See footnote 1 on p. 827.

TABLE A-5: Federal personnel, civilian and military

[In thousands]

Branch and agency	1955				1954									Annual average	
	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	1954	1953
Total Federal civilian employment ¹	2,153	2,148	2,142	2,139	2,457	2,165	2,147	2,142	2,157	2,161	2,164	2,160	2,167	2,188	2,305
Executive ²	2,127.4	2,122.1	2,116.4	2,113.2	2,431.1	2,138.7	2,121.3	2,115.9	2,130.9	2,135.4	2,137.6	2,134.0	2,141.4	2,161.6	2,278.8
Department of Defense	1,020.9	1,019.9	1,016.8	1,014.6	1,011.9	1,011.7	1,011.1	1,012.6	1,020.6	1,022.1	1,025.2	1,029.0	1,036.0	1,027.3	1,130.6
Post Office Department	504.6	502.1	503.7	504.8	808.4	506.2	501.8	503.3	505.7	507.4	504.8	502.4	502.6	529.2	526.5
Other agencies	602.0	600.1	595.8	593.7	610.8	620.9	608.3	599.9	604.6	606.0	607.6	602.6	602.8	605.1	621.7
Legislative	21.7	21.8	21.8	21.7	22.0	22.1	22.1	22.0	22.0	22.0	21.9	21.8	21.8	21.9	22.2
Judicial	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.9	4.0	3.9	3.9	4.0	3.9
District of Columbia ³	227.9	228.2	227.6	226.7	230.7	226.9	226.4	225.7	227.3	228.3	228.5	226.4	227.5	227.5	240.9
Executive ²	207.3	207.5	207.0	206.1	209.8	206.0	205.5	204.7	206.4	207.4	207.7	205.7	206.7	206.7	219.8
Department of Defense	88.0	88.0	87.7	87.4	87.0	87.0	86.8	86.5	87.0	87.2	87.2	86.4	87.1	87.1	90.4
Post Office Department	8.7	8.7	8.8	8.8	13.0	8.7	8.7	8.7	8.8	8.9	8.9	9.0	9.2	9.3	9.5
Other agencies	110.6	110.9	110.5	109.9	109.8	110.2	110.0	109.5	110.6	111.3	111.6	110.3	110.5	110.4	119.8
Legislative	19.9	20.0	19.9	19.9	20.1	20.2	20.2	20.2	20.2	20.2	20.1	20.0	20.0	20.1	20.3
Judicial	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7
Total military personnel ⁴	3,064	3,133	3,188	3,231	3,209	3,261	3,286	3,309	3,318	3,331	3,331	3,341	3,356	3,326	3,545
Army	1,201.8	1,263.0	1,300.3	1,334.0	1,326.1	1,351.9	1,368.3	1,385.0	1,394.9	1,405.2	1,404.6	1,416.8	1,425.1	1,402.0	1,508.9
Air Force	959.6	957.0	955.9	952.9	947.2	966.4	965.1	961.7	958.3	953.3	947.9	939.8	936.8	946.0	957.9
Navy	667.0	674.9	689.4	698.5	686.5	692.7	702.0	711.1	714.1	719.2	725.7	736.4	744.9	725.1	732.7
Marine Corps	207.8	210.4	214.2	217.6	220.7	221.8	221.5	221.8	222.0	224.0	223.9	218.5	219.2	223.8	250.6
Coast Guard	28.0	27.9	27.7	28.0	28.0	28.5	28.8	28.9	28.9	28.9	29.2	29.5	29.9	29.5	34.7

¹ Data refer to Continental United States only.² Includes all executive agencies (except the Central Intelligence Agency) and Government corporations. Civilian employment in navy yards, arsenals, hospitals, and on force-account construction is also included.³ Includes all Federal civilian employment in Washington Standard Metropolitan Area (District of Columbia and adjacent Maryland and Virginia counties).⁴ Data refer to Continental United States and elsewhere.

See footnote 1 on p. 827.

TABLE A-8: Insured unemployment under State unemployment insurance programs,¹ by geographic division and State

[In thousands]

Geographic division and State	1955				1954								1953	
	April	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	April
Continental United States.....	1,471.4	1,657.0	1,879.8	1,962.3	1,666.2	1,463.3	1,465.8	1,580.4	1,691.7	1,861.9	1,924.0	2,070.4	2,181.6	960.6
New England.....	122.9	124.0	140.4	150.4	128.9	116.1	117.5	128.9	130.6	143.5	147.7	168.3	172.8	79.6
Maine.....	16.7	11.2	12.8	14.0	12.4	11.0	8.2	8.3	9.2	9.9	11.1	16.6	18.1	11.6
New Hampshire.....	8.6	7.6	7.5	8.2	8.0	8.2	9.8	10.8	9.2	9.5	10.6	13.7	12.3	7.2
Vermont.....	3.5	5.4	5.8	5.0	4.0	3.4	3.1	2.9	2.9	2.9	3.6	4.3	3.5	1.4
Massachusetts.....	56.0	60.3	70.1	75.2	64.5	56.9	56.7	60.8	58.5	64.7	68.6	75.2	78.4	39.4
Rhode Island.....	15.5	15.3	16.8	17.2	13.6	12.0	13.5	19.0	18.7	21.2	22.1	26.7	28.3	11.7
Connecticut.....	22.6	24.2	27.4	30.8	26.4	24.6	26.2	27.1	32.1	35.3	31.7	31.8	32.2	8.3
Middle Atlantic.....	468.5	507.4	557.3	587.0	501.5	445.4	445.8	459.1	494.5	575.9	609.7	623.2	622.0	313.5
New York.....	226.9	251.8	266.3	230.2	194.1	184.5	184.5	184.5	196.2	254.7	279.3	275.8	277.3	164.3
New Jersey.....	76.5	84.0	91.7	94.6	78.7	71.3	70.8	69.7	76.3	86.6	89.1	94.9	91.9	48.6
Pennsylvania.....	171.0	196.5	213.8	226.1	192.6	180.0	190.5	204.9	222.0	234.6	241.3	252.5	252.8	100.6
East North Central.....	243.6	279.2	337.9	365.8	329.8	311.4	360.9	424.1	428.9	431.9	426.4	465.7	486.7	121.2
Ohio.....	55.6	72.7	89.0	96.2	87.2	77.7	79.2	87.2	91.7	95.0	97.3	105.3	113.5	24.5
Indiana.....	23.5	28.7	36.7	41.8	36.0	32.6	34.6	40.9	50.0	48.4	51.0	56.8	64.1	11.5
Illinois.....	102.7	91.7	110.2	116.4	101.6	95.0	101.9	113.0	133.9	148.1	161.4	168.0	153.3	55.8
Michigan.....	43.7	59.8	69.0	75.8	72.1	80.3	121.6	159.1	131.0	115.6	89.2	103.9	118.9	19.9
Wisconsin.....	18.1	26.3	33.0	35.6	32.9	25.8	23.6	23.9	22.3	24.8	27.5	31.7	36.9	9.5
West North Central.....	93.3	120.3	137.7	128.8	98.4	78.2	70.8	69.1	71.9	77.5	84.2	103.0	123.1	53.6
Minnesota.....	33.8	40.7	43.4	40.2	29.6	20.2	16.0	15.4	18.0	20.0	23.0	31.6	40.4	19.8
Iowa.....	7.4	11.3	14.0	12.5	8.4	5.7	5.3	5.3	6.5	7.3	8.1	9.6	12.1	5.8
Missouri.....	32.6	38.2	44.4	45.0	39.7	39.4	39.5	38.6	36.5	38.9	41.2	46.6	47.6	17.2
North Dakota.....	4.0	6.4	6.7	5.9	3.7	1.5	.4	.3	.3	.4	.6	1.3	3.6	2.3
South Dakota.....	1.6	3.3	3.8	3.1	1.8	.8	.4	.4	.5	.5	.9	.9	1.9	.9
Nebraska.....	4.3	7.5	9.0	8.0	4.7	2.6	2.0	2.0	2.6	2.8	2.9	3.8	5.6	2.6
Kansas.....	9.6	12.9	16.4	14.1	10.5	8.0	7.2	7.1	7.5	7.6	7.9	9.2	11.9	6.0
South Atlantic.....	150.3	160.9	184.1	198.1	168.2	147.4	154.4	176.0	205.2	236.1	237.7	241.6	237.9	101.0
Delaware.....	2.8	3.8	4.4	4.3	3.3	2.9	2.9	3.0	3.4	3.0	2.8	3.3	4.0	1.0
Maryland.....	20.6	19.0	25.1	27.0	23.1	20.1	20.5	24.5	28.6	31.8	32.3	33.6	32.0	12.5
District of Columbia.....	4.9	6.5	7.5	6.6	5.0	4.4	4.2	4.3	4.9	5.1	5.2	5.6	6.6	3.0
Virginia.....	12.9	15.5	17.9	18.0	14.3	12.0	12.9	15.4	20.1	26.5	30.5	23.8	21.6	7.5
West Virginia.....	22.0	26.1	29.8	32.8	28.9	27.4	29.4	33.2	36.7	40.1	43.3	46.6	47.2	16.6
North Carolina.....	39.3	40.8	43.3	44.4	36.2	29.3	28.6	32.1	38.3	51.5	52.3	58.8	59.1	28.2
South Carolina.....	11.7	13.1	15.1	16.8	15.5	14.4	14.1	14.9	17.1	19.7	18.9	20.7	21.0	10.3
Georgia.....	24.0	23.1	26.5	31.9	27.0	22.0	22.1	24.8	30.1	34.0	34.2	33.8	32.8	13.5
Florida.....	12.1	13.0	14.5	16.3	14.9	14.9	19.7	23.8	26.0	24.4	18.2	15.4	13.6	8.4
East South Central.....	119.5	118.7	128.2	134.4	118.3	108.1	105.1	110.3	127.7	141.9	150.5	156.9	159.8	69.3
Kentucky.....	45.0	41.1	41.2	39.3	36.3	34.4	34.9	37.2	42.9	44.6	49.2	53.9	52.8	20.2
Tennessee.....	41.7	42.3	46.4	49.8	43.3	39.1	37.4	37.7	42.1	48.7	52.1	54.9	57.0	23.0
Alabama.....	19.3	20.4	23.4	26.6	23.9	23.1	22.6	24.6	29.0	31.3	31.7	30.3	31.6	16.0
Mississippi.....	13.5	14.9	17.2	18.7	14.8	11.5	10.2	10.8	13.7	17.3	17.5	17.8	18.4	10.1
West South Central.....	75.7	87.5	101.0	97.6	77.6	64.4	60.0	62.1	71.8	79.0	83.8	93.5	101.9	51.0
Arkansas.....	14.1	16.8	20.0	20.1	15.4	12.1	10.4	10.7	13.3	15.1	15.3	18.3	20.4	10.8
Louisiana.....	20.5	24.0	27.8	25.4	19.8	16.7	15.5	16.2	19.2	22.0	22.4	23.1	24.4	13.2
Oklahoma.....	12.1	14.3	17.3	17.8	13.9	11.5	10.5	10.9	12.2	12.4	13.1	14.9	16.2	10.2
Texas.....	29.0	32.4	35.9	34.3	28.5	24.1	23.6	24.3	27.1	29.5	33.0	37.2	40.9	16.8
Mountain.....	33.5	45.8	52.5	48.4	32.9	23.1	18.3	20.0	21.5	23.7	25.7	33.3	47.4	21.1
Montana.....	6.4	8.0	8.1	6.5	3.8	2.2	2.2	2.2	1.3	1.4	2.0	3.3	5.9	3.9
Idaho.....	5.9	8.8	9.9	9.4	6.7	3.7	1.9	1.9	2.1	2.2	2.5	3.8	6.7	4.0
Wyoming.....	2.5	3.6	3.9	3.2	1.8	1.0	.7	.6	.8	1.3	1.2	2.1	3.1	.7
Colorado.....	4.0	5.7	6.9	6.3	4.5	3.4	2.5	2.6	3.1	3.8	3.8	5.5	8.0	2.8
New Mexico.....	4.0	4.9	5.7	5.4	3.9	2.8	2.4	2.8	3.5	3.9	4.1	4.8	5.9	2.2
Arizona.....	4.3	5.3	6.3	6.1	4.6	4.2	4.3	5.1	5.1	5.2	5.5	5.9	6.7	3.3
Utah.....	4.3	6.6	8.4	8.0	4.9	3.5	2.7	3.3	4.1	4.4	4.9	6.0	7.8	3.1
Nevada.....	2.1	2.9	3.3	3.5	2.7	2.3	1.6	1.5	1.5	1.5	1.7	1.9	3.3	1.1
Pacific.....	164.1	213.6	240.7	251.8	210.5	169.3	132.6	130.6	139.6	152.1	158.0	185.2	229.9	150.4
Washington.....	31.6	45.7	51.6	56.3	46.2	36.1	26.5	24.9	25.9	23.0	18.2	23.7	33.9	26.0
Oregon.....	21.1	27.2	30.2	32.8	27.3	20.6	14.4	13.1	14.4	15.8	11.8	15.0	22.9	16.6
California.....	111.4	140.7	158.9	162.7	137.0	112.6	91.7	92.6	99.3	113.3	128.0	146.5	173.1	107.8

¹ Average of weekly data adjusted for split weeks in the month. For a technical description of this series, see the April 1950 Monthly Labor Review (p. 382). Figures may not add to exact column totals because of rounding.

SOURCE: U. S. Department of Labor, Bureau of Employment Security.

B: Labor Turnover

TABLE B-1: Monthly labor turnover rates in manufacturing, by class of turnover ¹

[Per 100 employees]

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
Total accession													
1948.....	4.6	3.9	4.0	4.0	4.1	5.7	4.7	5.0	5.1	4.5	3.9	2.7	4.4
1949.....	3.2	2.9	3.0	2.9	3.5	4.4	3.5	4.4	4.1	3.7	3.3	3.2	3.5
1950.....	3.6	3.2	3.6	3.5	4.4	4.8	4.7	6.6	5.7	5.2	4.0	3.0	4.4
1951.....	5.2	4.5	4.6	4.5	4.5	4.9	4.2	4.5	4.3	4.4	3.9	3.0	4.4
1952.....	4.4	3.9	3.9	3.7	3.9	4.9	4.4	5.9	5.6	5.2	4.0	3.3	4.4
1953.....	4.4	4.2	4.4	4.3	4.1	5.1	4.1	4.3	4.0	3.3	2.7	2.1	3.9
1954.....	2.8	2.5	2.8	2.4	2.7	3.5	2.9	3.3	3.4	3.6	3.3	2.5	3.0
1955.....	3.3	3.2	3.6	3.4									
Total separation													
1948.....	4.3	4.7	4.5	4.7	4.3	4.5	4.4	5.1	5.4	4.5	4.1	4.3	4.6
1949.....	4.6	4.1	4.8	4.8	5.2	4.3	3.8	4.0	4.2	4.1	4.0	3.2	4.3
1950.....	3.1	3.0	2.9	2.8	3.1	3.0	2.9	4.2	4.9	4.3	3.8	3.6	3.5
1951.....	4.1	3.8	4.1	4.6	4.8	4.3	4.4	5.3	5.1	4.7	4.3	3.5	4.4
1952.....	4.0	3.9	3.7	4.1	3.9	3.9	5.0	4.6	4.9	4.2	3.5	3.4	4.1
1953.....	3.8	3.6	4.1	4.3	4.4	4.2	4.3	4.8	5.2	4.5	4.2	4.0	4.3
1954.....	4.3	3.5	3.7	3.8	3.3	3.1	3.1	3.5	3.9	3.3	3.0	3.0	3.5
1955.....	2.9	2.5	3.0	3.2									
Quit													
1948.....	2.6	2.5	2.8	3.0	2.8	2.9	2.9	3.4	3.9	2.8	2.2	1.7	2.8
1949.....	1.7	1.4	1.6	1.7	1.6	1.5	1.4	1.8	2.1	1.5	1.2	.9	1.5
1950.....	1.1	1.0	1.2	1.3	1.6	1.7	1.8	2.9	3.4	2.7	2.1	1.7	1.9
1951.....	2.1	2.1	2.5	2.7	2.8	2.5	2.4	3.1	3.1	2.5	1.9	1.4	2.4
1952.....	1.9	1.9	2.0	2.2	2.2	2.2	2.2	3.0	3.5	2.8	2.1	1.7	2.3
1953.....	2.1	2.2	2.0	2.7	2.7	2.6	2.5	2.9	3.1	2.1	1.5	1.1	2.3
1954.....	1.1	1.0	1.0	1.1	1.0	1.1	1.1	1.4	1.8	1.2	1.0	.9	1.1
1955.....	1.0	1.0	1.3	1.4									
Discharge													
1948.....	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4
1949.....	.3	.3	.3	.2	.2	.2	.2	.3	.2	.2	.2	.2	.2
1950.....	.2	.2	.2	.2	.3	.3	.3	.4	.4	.4	.3	.3	.3
1951.....	.3	.3	.3	.4	.4	.4	.3	.4	.3	.4	.3	.3	.3
1952.....	.3	.3	.3	.3	.3	.3	.3	.3	.4	.4	.4	.3	.3
1953.....	.3	.4	.4	.4	.4	.4	.4	.4	.4	.4	.3	.2	.4
1954.....	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2
1955.....	.2	.2	.2	.3									
Layoff													
1948.....	1.2	1.7	1.2	1.2	1.1	1.1	1.0	1.2	1.0	1.2	1.4	2.2	1.3
1949.....	2.5	2.3	2.8	2.8	3.3	2.5	2.1	1.8	1.8	2.3	2.5	2.0	2.4
1950.....	1.7	1.7	1.4	1.2	1.1	.9	.6	.6	.7	.8	1.1	1.3	1.1
1951.....	1.0	.8	.8	1.0	1.2	1.0	1.3	1.4	1.3	1.4	1.7	1.5	1.2
1952.....	1.4	1.3	1.1	1.3	1.1	1.1	2.2	1.0	.7	.7	.7	1.0	1.1
1953.....	.9	.8	.8	.9	1.0	.9	1.1	1.3	1.5	1.8	2.3	2.5	1.3
1954.....	2.8	2.2	2.3	2.4	1.9	1.7	1.6	1.7	1.7	1.6	1.6	1.7	1.9
1955.....	1.5	1.1	1.3	1.3									
Miscellaneous, including military													
1948.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
1949.....	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
1950.....	.1	.1	.1	.1	.1	.1	.2	.3	.4	.4	.3	.3	.2
1951.....	.7	.6	.5	.5	.4	.4	.4	.4	.4	.4	.4	.3	.3
1952.....	.4	.4	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3
1953.....	.4	.4	.3	.3	.3	.3	.3	.3	.3	.3	.3	.2	.3
1954.....	.3	.2	.2	.2	.2	.2	.2	.3	.3	.2	.1	.2	.2
1955.....	.3	.2	.2	.2									

¹ Data for the current month are preliminary.

NOTE.—Month-to-month changes in total employment in manufacturing industries as indicated by labor turnover rates are not comparable with the changes shown by the Bureau's employment series for the following reasons:

(1) Accessions and separations are reported for the entire calendar month; the employment and payroll reports, for the most part, refer to a 1-week pay period ending nearest the 15th of the month.

(2) The turnover sample is not so large as that of the employment sample and includes proportionately fewer small plants; certain industries are not covered. The major industries excluded are: printing, publishing, and allied industries; canning and preserving fruits, vegetables, and seafoods; women's, misses', and children's outerwear; and fertilizers.

(3) Plants are not included in the turnover computations in months when work stoppages are in progress; the influence of such stoppages is reflected, however, in the employment figures.

Beginning with data for October 1952, components may not add to total separation rate because of rounding.

Information on concepts, methodology, etc., is given in a technical note on Measurement of Labor Turnover, which appeared in the May 1953 Monthly Labor Review.

TABLE B-2: Monthly labor turnover rates in selected industries

[Per 100 employees]

Industry	Total accession rate		Separation rate									
			Total		Quit		Discharge		Layoff		Misc. incl. military	
	Apr. 1955	Mar. 1955	Apr. 1955	Mar. 1955	Apr. 1955	Mar. 1955	Apr. 1955	Mar. 1955	Apr. 1955	Mar. 1955	Apr. 1955	Mar. 1955
<i>Manufacturing</i>												
All manufacturing.....	3.4	3.6	3.2	3.0	1.4	1.3	0.3	0.2	1.3	1.3	0.2	0.2
Durable goods.....	3.8	3.9	3.3	3.1	1.5	1.3	.3	.3	1.3	1.4	.2	.2
Nondurable goods.....	2.8	3.0	3.0	2.8	1.4	1.3	.2	.2	1.2	1.1	.1	.1
Ordnance and accessories.....	(1)	3.1	(1)	3.0	(1)	1.1	(1)	.2	(1)	1.6	(1)	.1
Food and kindred products.....	4.1	3.6	3.0	3.8	1.0	1.1	.2	.2	1.7	2.4	.1	.1
Meat products.....	4.2	3.8	3.8	4.5	.8	.8	.2	.2	2.7	3.3	.1	.1
Grain-mill products.....	2.7	1.9	2.8	3.0	1.1	1.2	.2	.3	1.4	1.5	.1	.1
Bakery products.....	3.5	2.4	2.3	2.4	1.4	1.6	.3	.3	.5	.5	.1	.1
Beverages:												
Malt liquors.....	5.7	5.8	1.7	3.5	.3	.4	.1	.2	1.2	2.8	.1	.2
Tobacco manufactures.....	1.7	1.6	2.2	2.7	1.4	1.3	.2	.2	.6	1.1	.1	.1
Cigarettes.....	1.3	1.8	1.6	1.4	1.0	1.1	.2	.1	.2	.1	.1	.1
Cigars.....	2.2	1.7	3.0	3.9	1.8	1.7	.2	.2	.9	2.0	(2)	(2)
Tobacco and snuff.....	1.5	.7	1.4	1.7	1.1	.6	.1	.2	.1	.6	.2	.3
Textile-mill products.....	2.7	3.1	3.4	3.2	1.6	1.5	.3	.2	1.5	1.3	.1	.2
Yarn and thread mills.....	3.6	3.5	3.5	3.6	1.7	1.8	.3	.3	1.5	1.3	.1	.2
Broad-woven fabric mills.....	2.7	3.1	2.9	3.1	1.6	1.6	.3	.3	.8	1.0	.2	.1
Cotton, silk, synthetic fiber.....	2.4	2.9	2.8	2.9	1.6	1.7	.3	.3	.7	.8	.1	.1
Woolen and worsted.....	4.5	4.7	3.3	4.2	1.5	1.3	.2	.1	1.3	2.6	.2	.2
Knitting mills.....	2.7	3.7	4.2	3.6	1.7	1.6	.1	.2	2.3	1.7	.1	.1
Full-fashioned hosiery.....	1.4	2.1	2.6	2.0	1.4	1.6	.1	.1	1.1	.2	(2)	.1
Seamless hosiery.....	2.1	4.0	5.8	5.8	1.9	1.6	.1	.2	3.6	3.8	.2	.2
Knit underwear.....	4.4	4.1	4.9	2.3	1.3	1.6	.1	.2	3.4	.6	(2)	(2)
Dyeing and finishing textiles.....	1.8	2.0	3.9	2.7	1.0	.9	.7	.2	2.1	1.4	.1	.2
Carpets, rugs, other floor coverings.....	1.9	2.0	3.4	2.2	1.0	.9	.2	.2	2.0	.9	.2	.2
Apparel and other finished textile products.....	3.2	4.1	4.7	3.5	2.5	2.3	.2	.2	1.9	.9	.1	.1
Men's and boys' suits and coats.....	2.4	3.1	4.1	2.7	1.4	1.5	.2	.2	2.3	1.0	.1	.1
Men's and boys' furnishings and work clothing.....	3.4	4.4	4.8	3.4	2.8	2.6	.3	.2	1.6	.4	.1	.1
Lumber and wood products (except furniture).....	(1)	5.0	(1)	4.7	(1)	1.8	(1)	.3	(1)	2.5	(1)	.1
Logging camps and contractors.....	(1)	10.1	(1)	10.3	(1)	1.8	(1)	.1	(1)	8.3	(1)	.1
Sawmills and planing mills.....	4.5	3.6	3.3	3.8	1.9	1.8	.5	.3	.7	1.5	.2	.2
Millwork, plywood, and prefabricated structural wood products.....	4.3	4.3	3.3	3.0	2.1	1.6	.4	.3	.6	1.0	.1	.1
Furniture and fixtures.....	3.5	3.8	4.0	4.1	1.9	1.7	.4	.4	1.6	1.9	.1	.1
Household furniture.....	3.7	3.8	3.9	4.3	1.9	1.9	.4	.4	1.5	1.9	.1	.1
Other furniture and fixtures.....	3.1	3.6	4.1	3.7	1.8	1.4	.4	.4	1.7	1.7	.2	.2
Paper and allied products.....	2.4	2.4	2.0	2.0	1.2	1.1	.2	.2	.5	.5	.1	.1
Pulp, paper, and paperboard mills.....	1.2	1.4	1.3	1.2	.6	.6	.1	.1	.3	.4	.2	.2
Paperboard containers and boxes.....	3.4	3.2	2.8	2.6	1.8	1.6	.3	.3	.6	.6	(2)	.2
Chemicals and allied products.....	1.8	1.8	1.6	1.3	.8	.6	.2	.1	.5	.4	.1	.1
Industrial inorganic chemicals.....	1.6	1.4	1.4	1.2	.9	.7	.1	.2	.3	.2	.1	.1
Industrial organic chemicals.....	1.4	1.6	1.1	1.1	.5	.4	.1	.1	.4	.4	.1	.1
Synthetic fibers.....	1.6	1.5	1.0	1.0	.3	.4	(2)	(2)	.4	.4	.2	.1
Drugs and medicines.....	1.0	.9	1.3	1.1	.8	.6	.1	.1	.4	.3	.1	.1
Paints, pigments, and fillers.....	2.2	1.6	1.7	1.3	1.1	.7	.3	.2	.1	.2	(2)	.2
Products of petroleum and coal.....	1.2	1.3	.8	.8	.4	.3	.1	.1	.1	.2	.1	.2
Petroleum refining.....	.7	.6	.6	.6	.2	.2	(2)	(2)	.1	.1	.2	.2
Rubber products.....	2.4	2.5	2.3	2.1	1.2	1.1	.1	.1	.8	.7	.2	.2
Tires and inner tubes.....	1.8	1.8	1.5	1.4	.6	.8	.1	.1	.6	.3	.2	.2
Rubber footwear.....	1.5	2.0	2.3	2.5	1.2	1.5	.1	.1	.9	.8	.1	.2
Other rubber products.....	3.1	3.3	3.1	2.8	1.6	1.4	.2	.2	1.0	1.0	.2	.2
Leather and leather products.....	2.6	3.2	4.2	3.3	2.1	1.8	.2	.2	1.7	1.1	.2	.1
Leather: tanned, curried, and finished.....	1.9	2.8	3.6	3.3	.9	.6	.1	.2	2.4	2.3	.2	.2
Footwear (except rubber).....	2.7	3.3	4.3	3.3	2.3	2.0	.3	.2	1.6	.9	.1	.1
Stone, clay, and glass products.....	2.6	3.1	2.3	2.1	.9	.9	.2	.2	1.1	.8	.1	.2
Glass and glass products.....	2.5	2.6	2.5	2.1	.7	.6	.1	.1	1.5	1.1	.1	.2
Cement, hydraulic.....	1.4	2.1	1.6	1.7	.5	.8	.1	.6	.7	(2)	.2	.2
Structural clay products.....	3.4	4.5	1.8	1.9	1.1	1.0	.2	.3	.3	.4	.2	.2
Pottery and related products.....	2.4	3.1	2.4	2.5	1.2	1.2	.1	.2	.9	1.0	.1	.1
Primary metal industries.....	3.7	3.8	2.3	1.9	1.2	.9	.3	.2	.6	.5	.2	.2
Blast furnaces, steel works, and rolling mills.....	3.6	3.4	1.6	1.2	.8	.7	.2	.1	.4	.2	.2	.2
Iron and steel foundries.....	5.4	5.4	3.7	3.0	2.3	1.7	.6	.5	.6	.6	.1	.1
Gray-iron foundries.....	5.1	5.0	4.2	3.1	2.9	2.0	.6	.6	.6	.4	.1	.1
Malleable-iron foundries.....	5.6	7.5	3.8	3.7	2.4	2.6	.8	.9	.3	.1	.2	.1
Steel foundries.....	5.8	4.9	2.8	2.6	1.5	.9	.4	.3	.9	1.2	.2	.2
Primary smelting and refining of non-ferrous metals:												
Primary smelting and refining of copper, lead, and zinc.....	3.5	2.3	2.0	1.4	1.3	.9	.4	.1	.1	.2	.2	.2
Rolling, drawing, and alloying of non-ferrous metals:												
Rolling, drawing, and alloying of copper.....	1.7	1.7	1.3	1.0	.7	.5	.2	.2	.1	.2	.3	.2
Nonferrous foundries.....	4.0	5.0	3.9	3.1	1.8	1.6	.4	.3	1.5	1.0	.1	.2
Other primary metal industries:												
Iron and steel forgings.....	2.3	3.3	3.8	2.8	1.1	1.0	.2	.2	2.2	1.3	.3	.2

See footnotes at end of table.

TABLE B-2: Monthly labor turnover rates in selected industries—Continued

[Per 100 employees]

Industry	Total accession rate		Separation rate									
			Total		Quit		Discharge		Layoff		Misc., incl. military	
	Apr. 1955	Mar. 1955	Apr. 1955	Mar. 1955	Apr. 1955	Mar. 1955	Apr. 1955	Mar. 1955	Apr. 1955	Mar. 1955	Apr. 1955	Mar. 1955
<i>Manufacturing—Continued</i>												
Fabricated metal products (except ordnance, machinery, and transportation equipment).....	4.1	4.3	3.2	3.1	1.6	1.3	0.4	0.3	1.0	1.2	0.2	0.2
Cutlery, hand tools, and hardware.....	3.4	3.4	2.9	3.0	1.9	1.4	.3	.3	.5	.9	.1	.2
Cutlery and edge tools.....	2.8	4.0	2.2	2.5	1.1	1.0	.1	.1	.9	1.2	.1	.1
Handtools.....	3.2	3.4	2.2	2.0	1.4	1.0	.2	.2	.4	.6	.2	.2
Hardware.....	3.8	3.3	3.7	3.6	2.7	1.8	.5	.4	.5	1.0	.1	.3
Heating apparatus (except electric) and plumbers' supplies.....	4.2	4.7	3.4	2.9	1.9	1.4	.5	.5	.8	.8	.1	.1
Sanitary ware and plumbers' supplies.....	4.3	4.4	3.4	3.3	2.1	1.7	.8	.6	.5	.8	.1	.1
Oil burners, nonelectric heating and cooking apparatus, not elsewhere classified.....	4.1	4.8	3.3	2.6	1.7	1.3	.4	.4	1.0	.9	.1	.1
Fabricated structural metal products.....	4.1	3.6	3.3	2.9	1.4	1.0	.3	.3	1.4	1.4	.2	.1
Metal stamping, coating, and engraving.....	4.4	5.6	3.6	3.7	1.8	1.5	.4	.4	1.2	1.4	.2	.4
Machinery (except electrical).....	3.2	3.4	2.4	2.1	1.2	1.0	.2	.2	.7	.7	.2	.2
Engines and turbines.....	4.7	3.6	3.9	2.2	1.5	1.0	.3	.1	2.0	1.0	.1	.2
Agricultural machinery and tractors.....	3.7	4.5	2.8	2.2	1.8	1.4	.3	.2	.6	.3	.1	.3
Construction and mining machinery.....	3.5	4.0	2.4	1.8	1.5	1.0	.4	.3	.4	.3	.1	.1
Metalworking machinery.....	2.7	2.9	2.1	2.0	1.0	.9	.2	.2	.7	.7	.2	.2
Machine tools.....	2.1	2.4	1.9	1.9	.9	.8	.1	.1	.7	.7	.2	.2
Metalworking machinery (except machine tools).....	2.0	2.1	1.6	1.4	.9	.6	.1	.2	.4	.4	.1	.2
Machine-tool accessories.....	4.4	4.5	2.7	2.6	1.4	1.3	.4	.3	.8	.9	.2	.1
Special-industry machinery (except metalworking machinery).....	2.4	3.0	1.9	2.0	1.0	.9	.2	.2	.5	.7	.2	.1
General industrial machinery.....	2.8	3.2	2.2	2.4	1.0	1.0	.2	.2	.7	.8	.2	.2
Office and store machines and devices.....	2.5	2.4	2.6	2.0	1.2	1.0	.2	.1	1.0	.7	.1	.1
Service-industry and household machines.....	4.7	5.1	2.9	2.6	1.6	1.1	.2	.2	.9	.9	.2	.3
Miscellaneous machinery parts.....	2.7	2.9	2.2	2.0	1.0	.8	.2	.2	.7	.8	.3	.2
Electrical machinery.....	3.1	3.3	3.5	3.1	1.5	1.3	.3	.2	1.6	1.3	.2	.2
Electrical generating, transmission, distribution, and industrial apparatus.....	2.7	2.6	2.3	2.3	1.1	1.0	.2	.2	.8	.9	.2	.2
Communication equipment.....	(1)	3.6	(1)	3.4	(1)	1.5	(1)	.2	(1)	1.4	(1)	.2
Radios, phonographs, television sets, and equipment.....	3.3	3.6	4.4	4.0	1.7	1.5	.4	.3	2.2	1.9	.2	.3
Telephone, telegraph, and related equipment.....	(1)	3.1	(1)	1.4	(1)	1.0	(1)	.1	(1)	.2	(1)	.2
Electrical appliances, lamps, and miscellaneous products.....	3.1	3.6	3.2	3.1	1.2	1.3	.2	.2	1.6	1.5	.1	.2
Transportation equipment.....	4.7	4.5	4.8	4.0	1.7	1.5	.3	.3	2.4	1.8	.4	.3
Automobiles.....	4.9	4.9	4.4	3.5	2.1	1.7	.4	.4	1.2	.9	.7	.5
Aircraft and parts.....	2.3	2.4	3.4	2.5	1.1	1.2	.1	.2	2.1	1.0	.1	.1
Aircraft.....	2.2	2.5	2.5	2.2	1.1	1.2	.1	.1	1.2	.7	.1	.1
Aircraft engines and parts.....	(1)	1.7	(1)	2.8	(1)	.9	(1)	.1	(1)	1.6	(1)	.1
Aircraft propellers and parts.....	(1)	.8	(1)	4.0	(1)	.7	(1)	.1	(1)	2.8	(1)	.4
Other aircraft parts and equipment.....	3.4	3.7	6.0	3.8	1.6	1.4	.3	.3	4.1	2.0	(2)	.1
Ship and boat building and repairing.....	16.6	13.4	14.5	14.6	1.9	2.3	.8	.7	11.6	11.5	.1	.1
Railroad equipment ³	8.0	7.9	8.1	7.9	.8	.6	.2	.2	6.4	6.4	.6	.7
Locomotives and parts ⁴	6.5	8.2	2.4	2.7	.4	.3	.2	.1	.7	1.3	1.1	1.0
Railroad and street cars.....	8.5	7.7	10.0	9.9	1.0	.7	.2	.2	8.3	8.4	.5	.6
Other transportation equipment.....	3.6	5.1	2.3	2.4	1.8	1.4	.2	.2	.2	.7	.1	.1
Instruments and related products.....	2.5	2.0	2.0	1.8	1.2	.9	.2	.1	.5	.7	.1	.1
Photographic apparatus.....	(1)	1.2	(1)	1.0	(1)	.6	(1)	.1	(1)	.2	(1)	.1
Watches and clocks.....	2.5	2.6	1.9	1.6	1.0	.7	.1	.2	.6	.5	.1	.2
Professional and scientific instruments.....	2.5	2.1	2.0	2.1	1.1	.8	.2	.2	.5	.9	.1	.1
Miscellaneous manufacturing industries.....	3.9	4.7	4.1	5.3	1.8	2.0	.4	.4	1.7	2.6	.1	.2
Jewelry, silverware, and plated ware.....	1.6	3.0	2.2	2.2	1.4	1.3	.1	.2	.5	.5	.2	.1
<i>Nonmanufacturing</i>												
Metal mining.....	8.6	4.2	6.0	4.1	4.8	2.9	.2	.4	.8	.5	.2	.2
Iron mining.....	10.8	1.4	1.5	1.3	.2	.2	.1	(2)	1.0	.8	.2	.3
Copper mining.....	4.5	3.9	5.0	4.1	4.1	3.3	.3	.4	.3	.2	.2	.3
Lead and zinc mining.....	2.1	2.9	2.4	2.2	2.1	1.4	.1	.2	.2	.5	.1	.1
Anthracite mining.....	.8	1.8	3.3	8.3	.7	.7	(2)	(2)	2.3	7.5	.3	.1
Bituminous-coal mining.....	1.9	1.5	2.3	1.7	.6	.4	(2)	.1	1.6	1.1	.1	.1
Communication:												
Telephone.....	(1)	1.7	(1)	1.2	(1)	1.0	(1)	.1	(1)	.1	(1)	.1
Telegraph ⁵	(1)	1.7	(1)	1.3	(1)	.9	(1)	(2)	(1)	.2	(1)	.2

¹ Not available.² Less than 0.05.³ February 1955 rates revised as follows: Total separation 3.8; Quit 0.7; and Layoff 2.0.⁴ February 1955 rates are: 5.7, 2.1, 0.2, 0.1, 1.0, and 0.8, respectively.⁵ Data relate to domestic employees except messengers and those compensated entirely on a commission basis.

NOTE.—See footnote 1 and note on table B-1, p.714. For industries included in the durable- and nondurable-goods categories, see table A-2, footnotes 2 and 3 (exceptions are contained in the note to table B-1).

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees¹—Continued

Year and month	Manufacturing—Continued																	
	Food and kindred products—Continued																	
	Meat products ⁴			Meatpacking, whole-sale			Sausages and casings			Dairy products ⁴			Condensed and evaporated milk			Ice cream and ices		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1953: Average.....	\$74.57	41.2	\$1.81	\$77.64	41.3	\$1.88	\$73.39	41.7	\$1.76	\$68.05	43.9	\$1.55	\$69.77	45.9	\$1.52	\$68.37	43.0	\$1.59
1954: Average.....	76.86	41.1	1.87	79.71	41.3	1.93	76.22	41.2	1.85	70.04	43.5	1.61	71.73	45.4	1.58	71.57	42.6	1.68
April.....	72.68	39.5	1.84	74.86	39.4	1.90	73.93	40.4	1.83	68.85	43.3	1.59	70.51	45.2	1.56	70.38	42.4	1.66
May.....	74.74	40.4	1.85	76.97	40.3	1.91	76.36	41.5	1.84	69.01	43.4	1.59	71.75	45.7	1.57	69.63	42.2	1.65
June.....	75.85	41.0	1.85	78.50	41.1	1.91	76.41	41.3	1.85	71.36	44.6	1.60	75.05	47.2	1.59	72.14	43.2	1.67
July.....	77.98	41.7	1.87	81.09	41.8	1.94	77.83	42.3	1.84	71.81	44.6	1.61	74.08	46.3	1.60	74.26	44.2	1.68
August.....	76.07	40.9	1.86	78.91	41.1	1.92	76.96	41.6	1.85	69.98	43.2	1.62	71.42	45.2	1.58	70.81	42.4	1.67
September.....	77.87	41.2	1.89	81.14	41.4	1.96	76.78	41.5	1.85	71.07	43.6	1.63	74.54	46.3	1.61	72.84	43.1	1.69
October.....	78.02	41.5	1.88	81.71	41.9	1.95	76.30	40.8	1.87	70.47	43.5	1.62	70.31	44.5	1.58	71.74	42.7	1.68
November.....	83.03	42.8	1.94	86.83	43.2	2.01	79.80	42.0	1.90	68.26	42.4	1.61	70.44	44.3	1.59	70.47	41.7	1.69
December.....	81.75	42.8	1.91	85.10	43.2	1.97	79.00	41.8	1.89	69.34	42.8	1.62	70.44	44.3	1.59	71.40	42.0	1.70
1955: January.....	79.65	41.7	1.91	83.10	42.4	1.96	78.09	41.1	1.90	70.58	43.3	1.63	72.45	45.0	1.61	71.23	41.9	1.70
February.....	76.00	40.0	1.90	78.78	40.4	1.95	76.00	40.0	1.90	71.45	43.3	1.65	71.81	44.6	1.61	73.70	42.6	1.73
March.....	77.76	40.5	1.92	81.16	41.2	1.97	75.41	39.9	1.89	71.28	43.2	1.65	72.13	44.8	1.61	71.40	42.0	1.70
April.....	76.59	40.1	1.91	79.38	40.5	1.96	76.40	40.0	1.91	71.21	42.9	1.66	73.68	45.2	1.63	72.24	42.0	1.72
	Canning and preserving ⁴			Seafood, canned and cured			Canned fruits, vegetables, and soups			Grain-mill products ⁴			Flour and other grain-mill products			Prepared feeds		
1953: Average.....	\$53.18	39.1	\$1.36	\$45.00	29.8	\$1.51	\$55.76	40.7	\$1.37	\$71.44	44.1	\$1.62	\$75.65	44.5	\$1.70	\$69.30	45.0	\$1.54
1954: Average.....	54.57	38.7	1.41	46.82	30.4	1.54	56.82	40.3	1.41	74.42	44.3	1.68	79.74	44.8	1.78	71.87	45.2	1.59
April.....	53.00	36.3	1.46	42.63	27.5	1.55	55.63	38.1	1.46	71.94	43.6	1.65	74.70	44.2	1.69	70.47	44.6	1.58
May.....	54.86	38.1	1.44	46.63	29.7	1.57	57.31	39.8	1.44	73.37	44.2	1.66	76.39	43.9	1.74	70.53	45.5	1.55
June.....	53.27	38.6	1.38	44.87	31.6	1.42	56.70	40.5	1.40	76.32	45.7	1.67	78.23	44.7	1.75	74.10	47.5	1.56
July.....	54.77	39.4	1.39	56.36	36.6	1.54	54.94	40.1	1.37	76.73	45.4	1.69	81.35	45.7	1.78	72.85	46.4	1.57
August.....	56.03	40.6	1.38	45.60	30.4	1.50	57.82	41.7	1.39	74.59	44.4	1.68	79.57	44.7	1.78	72.05	45.6	1.58
September.....	56.30	40.8	1.38	46.66	30.7	1.52	58.38	42.0	1.39	77.46	45.3	1.71	84.64	46.0	1.84	73.92	46.2	1.60
October.....	53.13	38.5	1.38	38.09	27.4	1.39	55.60	40.0	1.39	75.31	44.3	1.70	82.45	45.3	1.82	72.19	45.4	1.59
November.....	51.75	36.7	1.41	48.64	29.3	1.66	53.27	38.6	1.38	75.60	43.7	1.73	84.73	45.8	1.85	71.44	44.1	1.62
December.....	55.39	38.2	1.45	54.28	32.7	1.66	56.91	39.8	1.43	74.48	43.3	1.72	80.55	44.5	1.81	71.72	44.0	1.63
1955: January.....	56.15	37.7	1.45	44.95	29.0	1.55	58.15	40.1	1.45	75.26	43.5	1.73	82.08	45.1	1.82	70.79	43.7	1.62
February.....	56.24	38.0	1.47	48.47	32.1	1.51	58.90	39.8	1.48	74.74	43.2	1.73	79.74	44.3	1.80	71.34	43.5	1.64
March.....	56.24	38.0	1.48	49.38	32.7	1.51	59.40	39.6	1.50	73.79	42.9	1.72	77.69	43.4	1.79	72.00	43.9	1.64
April.....	57.38	37.5	1.53	55.44	33.6	1.65	59.75	38.8	1.54	75.60	43.7	1.73	78.12	43.4	1.80	74.70	45.0	1.66
	Bakery products ⁴			Bread and other bakery products			Biscuits, crackers, and pretzels			Sugar ⁴			Cane-sugar refining			Beet sugar		
1953: Average.....	\$64.84	41.3	\$1.57	\$66.24	41.4	\$1.60	\$58.92	41.2	\$1.43	\$71.18	43.4	\$1.64	\$74.94	42.1	\$1.78	\$69.80	42.3	\$1.65
1954: Average.....	67.89	40.9	1.66	69.22	41.2	1.68	61.45	39.9	1.54	73.01	43.2	1.69	76.26	41.0	1.86	73.08	43.5	1.68
April.....	67.08	40.9	1.64	68.39	41.2	1.66	60.83	39.5	1.54	68.99	39.2	1.76	72.31	39.3	1.84	66.97	37.0	1.81
May.....	67.65	41.0	1.65	69.14	41.4	1.67	60.68	39.4	1.54	72.92	41.2	1.77	77.33	41.8	1.85	71.88	40.1	1.78
June.....	68.31	41.4	1.65	69.72	41.5	1.68	63.24	40.8	1.55	72.63	41.5	1.75	76.86	42.0	1.83	70.88	40.5	1.75
July.....	68.64	41.1	1.67	70.21	41.3	1.70	61.75	40.1	1.54	72.57	41.0	1.77	77.15	41.7	1.85	70.80	40.0	1.77
August.....	68.14	40.8	1.67	70.04	41.2	1.70	60.76	39.2	1.55	71.75	41.0	1.75	75.62	41.1	1.84	72.16	41.0	1.76
September.....	68.88	41.0	1.68	70.62	41.3	1.71	62.40	40.0	1.56	72.75	41.1	1.77	77.00	41.4	1.86	71.28	40.5	1.76
October.....	68.38	40.7	1.68	70.11	41.0	1.71	61.93	39.7	1.56	68.06	41.5	1.64	74.03	39.8	1.86	67.78	42.9	1.58
November.....	68.21	40.6	1.68	70.11	41.0	1.71	61.00	39.1	1.56	78.16	50.1	1.56	79.84	41.8	1.81	80.02	49.7	1.61
December.....	69.12	40.9	1.69	70.62	41.3	1.71	61.39	39.1	1.57	73.78	47.6	1.55	74.96	40.3	1.86	75.14	46.1	1.63
1955: January.....	68.28	40.4	1.69	70.62	41.3	1.72	61.54	39.2	1.57	74.45	42.3	1.76	73.66	39.6	1.86	81.09	44.8	1.81
February.....	68.85	40.5	1.70	70.41	40.7	1.73	62.33	39.7	1.57	73.51	41.3	1.78	77.14	40.6	1.90	72.71	39.3	1.85
March.....	68.28	40.4	1.69	70.00	40.7	1.72	61.54	39.2	1.57	73.71	40.5	1.82	77.76	40.5	1.92	71.61	38.3	1.86
April.....	68.11	40.3	1.69	70.00	40.7	1.72	60.22	38.6	1.56	73.16	40.2	1.82	75.85	39.3	1.93	75.44	41.0	1.84
	Confectionery and related products ⁴			Confectionery			Beverages ⁴			Bottled soft drinks			Malt liquors			Distilled, rectified, and blended liquors		
1953: Average.....	\$53.45	39.3	\$1.36	\$51.74	39.2	\$1.32	\$76.04	41.1	\$1.85	\$60.49	42.6	\$1.42	\$89.79	41.0	\$2.19	\$71.42	38.4	\$1.86
1954: Average.....	55.81	39.3	1.42	53.70	39.2	1.37	78.59	40.3	1.95	61.57	41.6	1.48	92.80	40.0	2.32	74.88	38.6	1.94
April.....	55.34	38.7	1.43	53.93	38.8	1.39	78.57	40.5	1.94	61.30	41.7	1.47	92.46	40.2	2.30	75.26	39.2	1.92
May.....	55.34	38.7	1.43	53.13	38.5	1.38	78.18	40.3	1.94	60.42	41.1	1.47	92.92	40.4	2.30	73.53	38.7	1.90
June.....	57.17	39.7	1.44	55.04	39.6	1.39	80.56	41.1	1.96	63.62	42.7	1.49	95.30	40.9	2.33	74.31	38.5	1.93
July.....	54.91	38.4	1.43	51.79	37.8	1.37	82.17	41.5	1.98	63.94	43.2	1.48	97.00	41.1	2.36	75.66	39.2	1.93
August.....	55.95	39.4	1.42	53.70	39.2	1.37	78.76	40.6	1.94	62.03	42.2	1.47	93.03	40.1	2.32	73.73	38.4	1.92
September.....	57.08	40.2	1.42	54.94	40.1	1.37	79.17	40.6	1.95	61.63	42.5	1.45	93.60	40.0	2.34	74.11	38.2	1.94
October.....	55.55	39.4	1.41	53.84	39.3	1.37	78.78	40.4	1.95	61.59	41.9	1.47	91.80	39.4	2.33	76.25	39.1	1.95
November.....	55.44	39.6	1.40	53.46	39.6	1.35	79.00	39.9	1.98	59.94	40.5	1.48	92.20	39.4	2.34	80.60	40.1	2.01
December.....	56.26	39.9	1.41	54.26	39.9	1.36	78.21	39.5	1.98	60.75	40.5	1.50	93.53	39.8	2.35	72.64	36.5	1.99
1955: January.....	56.77	39.7	1.43	54.65	39.6	1.38	77.62	39.4	1.97	59.24	40.3	1.47	91.96	39.3				

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees¹—Continued

Year and month		Manufacturing—Continued																				
		Food and kindred products—Continued									Tobacco manufactures											
		Miscellaneous food products ⁴			Corn sirup, sugar, oil, and starch			Manufactured ice			Total: Tobacco manufactures			Cigarettes			Cigars					
		Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings			
1953: Average	\$63.12	41.8	\$1.51	\$80.94	42.6	\$1.90	\$63.34	45.9	\$1.38	\$47.37	38.2	\$1.24	\$58.59	38.8	\$1.51	\$42.71	37.8	\$1.13				
1954: Average	66.36	42.0	1.58	83.69	42.7	1.96	65.64	45.9	1.43	49.01	37.7	1.30	63.27	39.3	1.61	42.32	36.8	1.15				
April	65.16	41.5	1.57	79.49	41.4	1.92	65.42	46.4	1.41	49.01	36.3	1.35	60.96	38.1	1.60	40.25	34.7	1.16				
May	65.78	41.9	1.57	82.84	42.7	1.94	65.71	46.6	1.41	49.98	37.3	1.34	61.60	38.5	1.60	42.09	36.6	1.15				
June	65.31	41.6	1.57	80.90	41.7	1.94	64.18	45.2	1.42	51.71	38.3	1.35	65.53	40.7	1.61	42.21	36.7	1.15				
July	66.10	42.1	1.57	84.74	42.8	1.98	67.45	47.5	1.42	51.54	37.9	1.29	68.30	41.9	1.63	42.90	37.3	1.15				
August	66.99	42.4	1.58	90.29	45.6	1.98	66.46	46.8	1.42	49.67	38.5	1.24	66.91	41.3	1.62	43.73	37.7	1.16				
September	66.94	42.1	1.59	84.97	42.7	1.99	65.27	45.7	1.45	48.86	38.4	1.24	66.99	41.1	1.63	44.66	38.5	1.16				
October	67.68	42.3	1.60	86.96	43.7	1.99	65.85	44.8	1.47	47.60	36.9	1.29	61.88	38.2	1.62	44.96	38.1	1.18				
November	68.26	42.4	1.61	85.73	43.3	1.99	66.28	45.1	1.46	49.92	38.4	1.30	67.73	41.3	1.64	42.57	36.7	1.16				
December	66.98	41.6	1.61	82.05	42.3	1.94	66.28	45.4	1.46	49.92	38.4	1.30	67.73	41.3	1.64	42.57	36.7	1.16				
1955: January	66.82	41.5	1.61	81.09	41.8	1.94	65.56	44.6	1.47	50.14	37.7	1.33	66.33	40.2	1.65	41.88	36.1	1.16				
February	66.65	41.4	1.61	82.10	42.1	1.95	65.83	45.4	1.45	49.68	37.0	1.34	63.63	38.8	1.64	42.35	36.2	1.17				
March	65.19	41.0	1.59	80.48	41.7	1.93	64.92	45.4	1.43	51.61	37.6	1.37	65.76	40.1	1.64	42.12	36.0	1.17				
April	65.19	41.0	1.59	79.71	41.3	1.93	64.49	45.1	1.43	51.57	37.1	1.39	64.52	39.1	1.65	41.42	35.4	1.17				
Year and month		Tobacco manufactures—Continued									Textile-mill products											
		Tobacco and snuff			Tobacco stemming and redrying			Total: Textile-mill products			Scouring and combing plants			Yarn and thread mills ⁴			Yarn mills					
		Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings			
		1953: Average	\$50.90	37.7	\$1.35	\$39.73	38.2	\$1.04	\$53.57	39.1	\$1.37	\$62.01	39.0	\$1.59	\$48.39	38.1	\$1.27	\$48.26	38.0	\$1.27		
1954: Average	52.73	37.4	1.41	39.43	37.2	1.06	52.09	38.3	1.36	60.53	38.8	1.56	46.00	36.8	1.25	45.63	36.5	1.25				
April	51.80	37.0	1.40	44.53	36.2	1.23	50.46	37.1	1.36	58.09	37.0	1.57	43.90	35.4	1.24	43.65	35.2	1.24				
May	53.02	37.6	1.41	45.14	36.4	1.24	51.10	37.3	1.37	61.30	38.8	1.58	45.00	36.0	1.25	44.50	35.6	1.25				
June	53.02	37.6	1.41	47.00	37.9	1.24	51.41	37.8	1.36	65.03	40.9	1.59	45.50	36.4	1.25	45.13	36.1	1.25				
July	51.97	36.6	1.42	42.12	35.1	1.20	51.41	37.8	1.36	65.51	43.1	1.52	45.88	37.0	1.24	45.51	36.7	1.24				
August	55.10	38.8	1.42	37.86	36.4	1.04	52.36	38.5	1.36	62.78	41.3	1.52	46.88	37.5	1.25	46.25	37.3	1.24				
September	55.63	38.9	1.43	38.21	39.8	1.06	52.50	38.6	1.36	60.61	39.1	1.55	46.75	37.1	1.26	46.49	36.9	1.26				
October	54.53	38.4	1.42	39.96	41.2	1.07	53.70	39.2	1.37	55.03	35.5	1.55	47.00	37.6	1.25	47.13	37.7	1.25				
November	53.20	37.2	1.43	34.17	33.5	1.02	54.53	39.8	1.37	56.25	35.6	1.58	48.13	38.5	1.25	48.00	38.4	1.25				
December	54.20	37.9	1.43	39.59	37.7	1.05	55.07	40.2	1.37	60.28	39.4	1.53	49.00	39.2	1.25	48.63	38.9	1.25				
1955: January	53.28	37.0	1.44	39.70	37.1	1.07	54.25	39.6	1.37	63.29	41.1	1.54	49.01	38.9	1.26	48.38	38.7	1.25				
February	50.64	35.1	1.44	40.43	36.1	1.12	55.20	40.0	1.38	62.22	40.4	1.54	49.77	39.5	1.26	49.25	39.4	1.25				
March	53.80	37.1	1.45	44.04	36.4	1.21	54.80	40.0	1.37	61.35	40.1	1.53	49.77	39.5	1.26	49.25	39.4	1.25				
April	54.23	37.4	1.45	46.74	36.8	1.27	53.16	38.8	1.37	60.34	39.7	1.52	48.64	38.6	1.26	48.76	38.7	1.26				
Year and month		Cotton, silk, synthetic fiber									Woolen and worsted											
		Thread mills			Broad-woven fabric mills ⁴			United States			North			South			Woolen and worsted					
		Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings			
		1953: Average	\$49.53	39.0	\$1.27	\$52.80	39.4	\$1.34	\$51.09	39.3	\$1.30	\$56.37	39.7	\$1.42	\$49.78	39.2	\$1.27	\$61.93	39.7	\$1.56		
1954: Average	47.50	37.4	1.27	50.69	38.4	1.32	49.28	38.2	1.29	55.10	38.8	1.42	47.88	38.0	1.26	61.05	39.9	1.53				
April	45.47	35.8	1.27	48.73	37.2	1.31	47.36	37.0	1.28	53.44	37.9	1.41	46.00	36.8	1.25	60.06	39.0	1.54				
May	47.37	37.3	1.27	48.97	37.1	1.32	47.34	36.7	1.29	53.72	38.1	1.41	45.86	36.4	1.26	62.16	40.1	1.55				
June	47.63	37.5	1.27	49.63	37.6	1.32	47.49	37.1	1.28	54.63	38.4	1.42	46.13	36.9	1.25	62.68	40.7	1.54				
July	48.01	37.8	1.27	49.52	37.8	1.31	47.87	37.4	1.28	54.14	38.4	1.41	46.50	37.2	1.25	60.65	39.9	1.52				
August	49.28	38.5	1.28	50.69	38.4	1.32	49.15	38.1	1.29	54.57	38.7	1.41	47.88	38.0	1.26	60.55	40.1	1.51				
September	49.02	38.3	1.28	51.08	38.7	1.32	49.54	38.4	1.29	55.38	39.0	1.42	48.26	38.3	1.26	61.41	40.4	1.52				
October	44.80	35.0	1.28	52.14	39.5	1.32	50.96	39.5	1.29	55.81	39.3	1.42	50.17	39.5	1.27	60.80	40.0	1.52				
November	47.74	37.3	1.28	53.20	40.3	1.32	52.26	40.2	1.30	57.77	40.4	1.43	51.05	40.2	1.27	61.86	40.7	1.52				
December	50.82	39.7	1.28	53.59	40.6	1.32	52.52	40.4	1.30	58.06	40.6	1.43	51.31	40.4	1.27	62.67	41.5	1.51				
1955: January	51.21	39.7	1.29	52.67	39.9	1.32	51.74	39.8	1.30	57.51	40.5	1.42	50.42	39.7	1.27	61.31	40.6	1.51				
February	52.13	40.1	1.30	53.33	40.1	1.33	52.40	40.0	1.31	57.92	40.5	1.43	51.07	39.9	1.28	61.65	41.1	1.50				
March	52.65	40.5	1.30	52.93	40.1	1.32	51.87	39.9	1.30	57.23	40.3	1.42	50.55	39.8	1.27	62.21	41.2	1.51				
April	50.83	39.4	1.29	52.00	39.1	1.33	50.44	38.8	1.30	54.29	38.5	1.41	49.79	38.9	1.28	61.91	41.0	1.51				
Year and month		Narrow fabrics and small wares									Full-fashioned hosiery									Seamless hosiery		
		United States			North			South			United States			United States								
		Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings						
		1953: Average	\$54.53	39.8	\$1.37	\$48.75	37.5	\$1.30	\$56.70	37.3	\$1.52	\$57.00	37.5	\$1.52	\$56.24	37.0	\$1.52	\$40.26	36.6	\$1.10		
1954: Average	54.37	39.4	1.38	48.60	37.1	1.31	55.50	37.5	1.48	55.65	37.1	1.50	55.80	37.7	1.48	40.77	36.4	1.12				
April	53.96	39.1	1.38	46.73	35.4	1.32	54.53	36.6	1.49	52.35	34.9	1.50	56.02	37.6	1.49	37.97	33.9	1.12				
May	54.65	39.6	1.38	47.65	36.1	1.32	55.12	36.5	1.51	54.87	36.1	1.52	55.20	36.8	1.50	39.31	35.1	1.12				
June	54.23	39.3	1.38	48.34	36.9	1.31	54.09	36.3	1.49	54.96	36.4	1.51	53.58	36.2	1.48	40.63	36.6	1.11				
July	53.68	38.9	1.38	47.58	36.6	1.30	52.98	35.8	1.48	54.81	36.3	1.51	51.83	35.5	1.46	39.74	35.8	1.11				
August	53.98	39.4	1.37	48.88	37.6	1.30	54.46	36.8	1.48	53.79	36.1	1.49	54.68	37.2	1.47	41.78	37.3	1.12				
September	54.39	39.7	1.37	49.13	37.5	1.31	54.31	37.2	1.46	54.24	36.9	1.47	54.46	37.3	1.46	41.58	36.8	1.13				
October	54.60	39.0	1.40	50.17	38.3	1.31	54.96	37.9	1.45	53												

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees ¹—Continued

Year and month	Manufacturing—Continued																				
	Textile-mill products—Continued																				
	Seamless hosiery—Continued						Knit outerwear			Knit underwear			Dyeing and finishing textiles ⁴			Dyeing and finishing textiles (except wool)					
	North			South			Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings			
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings													Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1953: Average	\$43.88	37.5	\$1.17	\$39.31	36.4	\$1.08	\$50.81	38.2	\$1.33	\$45.12	37.6	\$1.20	\$61.65	41.1	\$1.50	\$61.65	41.1	\$1.50			
1954: Average	43.07	36.5	1.18	40.40	36.4	1.11	51.85	37.3	1.39	44.53	36.5	1.22	61.61	40.8	1.51	61.35	40.9	1.50			
April	39.63	33.3	1.19	37.74	34.0	1.11	49.90	35.9	1.39	41.97	34.4	1.22	59.85	39.9	1.50	59.60	40.0	1.49			
May	42.72	36.2	1.18	38.85	35.0	1.11	51.32	36.4	1.41	43.68	36.1	1.21	59.55	39.7	1.50	59.30	39.8	1.49			
June	44.25	37.5	1.18	40.15	36.5	1.10	52.13	37.5	1.39	45.02	36.9	1.22	59.90	40.2	1.49	59.64	40.3	1.48			
July	43.88	37.5	1.17	39.05	35.5	1.10	52.03	37.7	1.38	44.53	36.8	1.21	60.00	40.0	1.50	59.60	40.0	1.49			
August	44.46	38.0	1.17	41.29	37.2	1.11	52.72	38.2	1.38	45.13	37.3	1.21	61.16	40.5	1.51	60.90	40.6	1.50			
September	43.52	37.2	1.17	41.10	36.7	1.12	53.65	38.6	1.39	45.26	37.1	1.22	61.31	40.6	1.51	61.05	40.7	1.50			
October	44.72	37.9	1.18	43.39	38.4	1.13	53.38	38.4	1.39	45.74	37.8	1.21	62.67	41.5	1.51	62.55	41.7	1.50			
November	44.25	37.5	1.18	43.78	38.4	1.14	54.00	38.3	1.41	46.49	37.8	1.23	65.18	42.6	1.53	65.06	42.8	1.52			
December	43.44	36.5	1.19	42.83	37.9	1.13	52.36	37.4	1.40	45.13	37.3	1.21	66.22	43.0	1.54	66.10	43.2	1.53			
1955: January	43.32	36.1	1.20	41.75	36.3	1.15	51.10	36.5	1.40	45.87	37.6	1.22	64.30	42.3	1.52	64.60	42.5	1.52			
February	43.80	36.2	1.21	42.32	36.8	1.15	51.57	37.1	1.39	47.72	38.8	1.23	65.33	42.7	1.53	65.06	42.8	1.52			
March	44.77	37.0	1.21	41.61	36.5	1.14	52.16	37.8	1.38	48.19	39.5	1.22	63.72	42.2	1.51	63.60	42.4	1.50			
April	45.96	38.3	1.20	37.73	33.1	1.14	50.23	36.4	1.38	46.34	38.3	1.21	61.31	40.6	1.51	61.05	40.7	1.50			
	Carpets, rugs, other floor coverings ⁴						Wool carpets, rugs, and carpet yarn			Hats (except cloth and millinery)			Miscellaneous textile goods ⁴			Felt goods (except women felts and hats)			Lace goods		
1953: Average	\$70.58	40.8	\$1.73	\$69.08	39.7	\$1.74	\$56.10	37.4	\$1.50	\$62.42	40.8	\$1.53	\$71.04	41.3	\$1.72	\$61.85	38.9	\$1.59			
1954: Average	69.95	40.2	1.74	66.95	38.7	1.73	54.66	36.2	1.51	62.56	40.1	1.56	69.60	40.0	1.74	60.80	37.3	1.63			
April	67.94	39.5	1.72	66.26	38.3	1.73	46.11	31.8	1.45	60.68	39.4	1.54	68.46	39.8	1.72	58.81	36.3	1.62			
May	68.38	39.3	1.74	65.19	37.9	1.72	52.39	35.4	1.48	61.23	39.5	1.55	66.05	38.4	1.72	57.96	36.0	1.61			
June	68.38	39.3	1.74	65.02	37.8	1.72	54.96	36.4	1.51	61.69	39.8	1.55	71.40	40.8	1.75	60.31	37.0	1.63			
July	69.13	39.5	1.75	65.57	37.9	1.73	53.76	35.6	1.51	61.70	39.3	1.57	69.83	39.9	1.75	60.39	36.6	1.65			
August	71.63	40.7	1.76	67.99	39.3	1.73	59.90	38.4	1.56	61.85	39.9	1.55	69.25	39.8	1.74	61.55	37.3	1.65			
September	73.69	41.4	1.78	69.65	39.8	1.75	54.60	36.4	1.50	62.56	40.1	1.56	70.45	39.8	1.77	62.54	37.9	1.65			
October	72.28	41.3	1.75	67.82	39.2	1.73	53.59	34.8	1.54	62.87	40.3	1.56	71.81	40.8	1.76	61.38	37.2	1.65			
November	70.47	40.5	1.74	65.84	38.5	1.71	57.82	37.3	1.55	64.06	40.8	1.57	71.98	40.9	1.76	62.05	38.3	1.62			
December	71.86	41.3	1.74	69.20	40.0	1.73	60.76	39.2	1.55	65.59	41.7	1.58	72.16	41.0	1.76	64.62	39.4	1.64			
1955: January	72.69	41.3	1.76	70.30	40.4	1.74	56.54	37.2	1.52	65.10	41.2	1.58	70.70	40.4	1.75	62.32	38.0	1.64			
February	71.69	41.2	1.74	70.12	40.3	1.74	61.69	38.8	1.59	66.78	42.0	1.59	72.34	41.1	1.76	63.91	38.5	1.66			
March	73.25	42.1	1.74	71.40	40.8	1.75	55.72	36.9	1.51	66.80	41.7	1.59	72.92	41.2	1.77	63.36	38.4	1.65			
April	71.93	41.1	1.75	68.78	39.3	1.75	54.93	35.9	1.53	64.87	40.8	1.59	72.98	41.0	1.78	62.54	37.9	1.65			
	Textile-mill products—Continued												Apparel and other finished textile products								
	Paddings and upholstery filling			Processed waste and recovered fibers			Artificial leather, oil-cloth, and other coated fabrics			Cordage and twine			Total: Apparel and other finished textile products			Men's and boys' suits and coats					
1953: Average	\$65.19	41.0	\$1.59	\$51.30	42.4	\$1.21	\$80.10	44.5	\$1.80	\$53.33	39.5	\$1.35	\$48.41	36.4	\$1.33	\$57.93	36.9	\$1.57			
1954: Average	67.89	40.9	1.66	51.41	41.8	1.23	79.24	43.3	1.83	53.02	38.7	1.37	48.06	35.6	1.35	56.05	34.6	1.62			
April	66.66	40.4	1.65	50.02	41.0	1.22	76.93	42.5	1.81	51.41	37.8	1.36	45.62	34.3	1.33	52.64	32.9	1.60			
May	69.14	41.4	1.67	51.73	42.4	1.22	77.59	42.4	1.83	52.20	38.1	1.37	46.07	34.9	1.32	52.97	32.9	1.61			
June	64.71	39.7	1.63	51.29	41.7	1.23	79.61	43.5	1.83	52.06	38.0	1.37	46.55	35.0	1.33	55.08	34.0	1.62			
July	67.60	40.0	1.69	52.03	42.3	1.23	74.03	40.9	1.81	52.88	38.6	1.37	47.17	35.2	1.34	56.80	35.5	1.60			
August	65.67	39.8	1.65	50.68	41.2	1.23	76.32	42.4	1.80	53.99	39.7	1.36	48.87	36.2	1.35	57.05	35.0	1.63			
September	64.19	38.9	1.65	51.83	41.8	1.24	81.33	44.2	1.84	53.31	39.2	1.36	48.82	35.9	1.36	57.35	35.4	1.62			
October	67.57	41.2	1.64	52.08	42.0	1.24	81.84	44.0	1.86	53.54	38.8	1.38	47.84	35.7	1.34	53.63	32.9	1.63			
November	70.73	42.1	1.68	52.58	42.4	1.24	84.52	45.2	1.87	52.61	38.4	1.37	48.37	36.1	1.34	55.09	33.8	1.63			
December	75.41	44.1	1.71	53.20	42.9	1.24	86.10	45.8	1.88	53.70	39.2	1.37	49.01	36.3	1.35	58.32	36.0	1.62			
1955: January	72.76	42.8	1.70	53.20	42.9	1.24	86.71	45.4	1.91	53.96	39.1	1.38	48.60	36.0	1.35	57.87	35.5	1.63			
February	77.33	44.7	1.73	52.45	42.3	1.24	88.70	46.2	1.92	55.20	40.0	1.38	49.55	36.7	1.35	59.66	36.6	1.63			
March	73.70	43.1	1.71	53.07	42.8	1.24	86.45	45.5	1.90	55.20	40.0	1.38	49.71	37.1	1.34	60.64	37.2	1.63			
April	73.87	43.2	1.71	50.22	40.5	1.24	83.47	44.4	1.88	54.49	39.2	1.39	46.64	35.6	1.31	55.57	34.3	1.62			
	Men's and boys' furnishings and work clothing ⁴			Shirts, collars, and nightwear			Separate trousers			Work shirts			Women's outerwear ⁴			Women's dresses					
1953: Average	\$41.18	37.1	\$1.11	\$41.40	37.3	\$1.11	\$44.63	37.5	\$1.19	\$34.32	36.9	\$0.93	\$52.65	35.1	\$1.50	\$52.15	35.0	\$1.49			
1954: Average	40.81	35.8	1.14	41.04	36.0	1.14	43.32	36.1	1.20	33.63	35.4	.95	52.05	34.7	1.50	52.20	34.8	1.50			
April	39.10	34.6	1.13	39.22	34.4	1.14	42.72	35.6	1.20	34.69	36.9	.94	49.01	33.8	1.45	52.25	34.6	1.51			
May	39.67	34.8	1.14	39.67	34.8	1.14	41.41	34.8	1.19	34.20	36.0	.95	49.76	34.8	1.43	53.45	35.4	1.51			
June	40.00	35.4	1.13	39.67	34.8	1.14	40.83	34.6	1.18	34.04	36.6	.93	48.53	33.7	1.44	47.91	33.5	1.43			
July	39.76	35.5	1.12	39.55	35.0	1.13	41.77	35.7	1.17	33.37	35.5	.94	50.81	34.1	1.49	48.67	33.8	1.44			
August	41.70	36.9	1.13	41.47	36.7	1.13	43.32	36.1	1.20	34.78	37.0	.94	53.15	35.2	1.51	52.69	35.6	1.48			
September	41.84	36.7	1.14	42.44	36.9	1.15	43.44	36.5	1.19	33.44	35.2	.95	52.17	34.1	1.53	52.86	34.1	1.55			
October	41.58	36.8	1.13	42.75	37.5	1.14	42.13	35.7	1.18	33.65	35.8	.94	50.40	33.6	1.50	52.05	33.8	1.54			
November	41.61	36.5	1.14	43.82	38.1	1.15	42.36	35.6	1.19	32.59	34.3	.95	51.65	34.9	1.48	52.50	35.0	1.50			
December	40.91	36.2	1.13	42.41	37.2	1.14	43.55	36.6	1.19	33.12	34.5	.96	53.55	35.7	1.50	53.70	35.8	1.50			
1955: January	40.68	3																			

Table C-1: Hours and gross earnings of production workers or nonsupervisory employees 1—Continued

Year and month	Manufacturing—Continued																	
	Apparel and other finished textile products—Continued																	
	Household apparel			Women's suits, coats, and skirts			Women's and children's undergarments †			Underwear and nightwear, except corsets			Corsets and allied garments			Millinery		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1953: Average	\$39.74	36.8	\$1.08	\$64.81	32.9	\$1.97	\$44.28	36.9	\$1.20	\$41.58	36.8	\$1.13	\$48.10	37.0	\$1.30	\$58.48	36.1	\$1.62
1954: Average	39.82	36.2	1.10	63.31	32.3	1.96	44.04	36.1	1.22	41.27	36.2	1.14	48.24	36.0	1.34	58.16	35.9	1.62
1955: Average	40.59	36.9	1.10	67.42	33.2	1.92	45.51	35.7	1.22	42.98	35.9	1.13	46.95	35.3	1.33	50.17	31.9	1.48
1953: Average	\$44.53	36.5	\$1.22	\$44.52	37.1	\$1.20	\$47.75	37.6	\$1.27	\$42.18	37.0	\$1.14	\$49.53	38.1	\$1.30	\$51.09	39.0	\$1.31
1954: Average	45.14	36.7	1.23	48.68	36.1	1.21	47.99	37.2	1.29	42.80	36.9	1.16	50.79	37.9	1.34	52.38	38.8	1.35
1955: Average	45.62	37.7	1.21	44.53	36.8	1.21	49.66	38.2	1.30	44.49	37.7	1.18	52.47	38.3	1.37	53.60	39.7	1.35
1953: Average	\$65.93	40.7	\$1.62	\$70.00	39.5	\$2.00	\$65.37	40.6	\$1.61	\$66.18	40.6	\$1.63	\$43.78	42.5	\$1.03	\$83.81	38.8	\$2.16
1954: Average	66.18	40.6	1.63	73.72	38.0	1.94	66.83	41.0	1.63	67.40	41.1	1.64	44.20	42.5	1.04	85.06	39.2	2.17
1955: Average	66.50	40.8	1.63	71.24	38.3	1.80	67.57	41.2	1.64	67.98	41.2	1.65	45.26	43.1	1.05	86.29	39.4	2.19
1953: Average	\$68.89	41.5	\$1.66	\$68.55	41.8	\$1.64	\$71.32	42.2	\$1.69	\$51.25	41.0	\$1.25	\$51.34	41.4	\$1.24	\$55.46	41.7	\$1.33
1954: Average	70.97	41.5	1.71	70.81	41.9	1.69	73.08	42.0	1.74	50.00	40.0	1.25	49.48	39.9	1.24	54.95	40.7	1.35
1955: Average	72.73	41.8	1.74	70.04	41.2	1.70	80.99	44.5	1.82	49.23	39.7	1.24	49.20	40.0	1.23	57.13	41.1	1.39

See footnotes at end of table.

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees ¹—Continued

Year and month		Manufacturing—Continued																	
		Furniture and fixtures																	
		Total: Furniture and fixtures			Household furniture ⁴			Wood household furniture (except upholstered)			Wood household furniture, upholstered			Mattresses and bed-springs			Office, public-building, and professional furniture ⁴		
Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings		
1953: Average	\$63.14	41.0	\$1.54	\$60.38	40.8	\$1.48	\$55.21	41.2	\$1.34	\$65.45	40.4	\$1.62	\$66.23	39.9	\$1.66	\$71.06	41.8	\$1.70	
1954: Average	62.96	40.1	1.57	60.25	39.9	1.51	54.54	40.4	1.35	64.29	39.2	1.64	66.86	39.8	1.68	71.10	41.1	1.73	
1955: Average	65.67	41.3	1.59	62.78	41.3	1.52	56.85	41.3	1.52	68.88	41.0	1.68	68.23	40.9	1.71	73.52	42.0	1.76	
		Furniture and fixtures—Continued																	
		Wood office furniture			Metal office furniture			Partitions, shelving, lockers, and fixtures			Screens, blinds, and miscellaneous furniture and fixtures			Total: Paper and allied products			Pulp, paper, and paperboard mills		
1953: Average	\$61.71	40.6	\$1.52	\$75.70	40.7	\$1.86	\$73.85	40.8	\$1.81	\$62.31	42.1	\$1.48	\$72.67	43.0	\$1.69	\$78.76	44.0	\$1.79	
1954: Average	59.15	39.7	1.49	77.55	40.6	1.91	75.01	39.9	1.88	64.43	41.3	1.56	74.03	42.3	1.75	80.04	43.5	1.84	
1955: Average	60.49	40.6	1.49	78.34	40.8	1.92	75.84	39.5	1.92	65.41	41.4	1.58	76.01	42.7	1.78	82.16	43.7	1.88	
		Paper and allied products—Continued																	
		Paperboard containers and boxes ⁴			Paperboard boxes			Fiber cans, tubes, and drums			Other paper and allied products			Total: Printing, publishing, and allied industries			Newspapers		
1953: Average	\$67.68	42.3	\$1.60	\$67.42	42.4	\$1.59	\$71.65	41.9	\$1.71	\$65.31	41.6	\$1.57	\$85.58	38.9	\$2.20	\$91.22	36.2	\$2.52	
1954: Average	68.97	41.3	1.67	68.72	41.4	1.66	73.02	39.9	1.83	66.67	40.9	1.63	87.17	38.4	2.27	92.98	35.9	2.59	
1955: Average	71.90	41.8	1.72	71.65	41.9	1.71	74.56	40.3	1.85	69.14	41.4	1.67	90.79	38.8	2.34	94.15	35.8	2.63	
		Printing, publishing, and allied industries																	
		Periodicals			Books			Commercial printing			Lithographing			Greeting cards			Bookbinding and related industries		
1953: Average	\$86.98	39.9	\$2.18	\$73.84	39.7	\$1.86	\$84.42	40.2	\$2.10	\$85.26	40.6	\$2.10	\$48.50	37.6	\$1.29	\$66.30	39.7	\$1.67	
1954: Average	88.70	39.6	2.24	76.24	39.3	1.94	85.72	39.5	2.17	87.20	40.0	2.18	53.06	37.9	1.40	67.82	39.2	1.73	
1955: Average	90.85	39.5	2.30	79.60	39.9	2.01	88.36	40.2	2.22	88.03	39.3	2.24	57.30	38.2	1.50	69.74	39.4	1.77	

See footnotes at end of table.

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees ¹—Continued

Year and month	Manufacturing—Continued																				
	Printing, publishing, and allied industries—Continued			Chemicals and allied products																	
	Miscellaneous publishing and printing services			Total: Chemicals and allied products			Industrial inorganic chemicals ⁴			Alkalies and chlorine			Industrial organic chemicals ⁴			Plastics, except synthetic rubber					
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings			
1953: Average	\$104.15	39.6	\$2.63	\$75.58	41.3	\$1.83	\$82.81	41.2	\$2.01	\$82.39	41.4	\$1.99	\$80.18	40.7	\$1.97	\$82.88	42.5	\$1.95			
1954: Average	104.91	39.0	2.69	78.50	41.1	1.91	86.09	40.8	2.11	83.81	40.1	2.09	83.23	40.6	2.05	83.80	41.9	2.00			
April	102.98	38.0	2.71	77.27	41.1	1.88	84.66	40.7	2.08	83.22	40.4	2.06	82.62	40.3	2.05	82.15	41.7	1.97			
May	104.13	39.0	2.67	77.71	40.9	1.90	85.06	40.7	2.09	82.21	40.1	2.05	82.62	40.5	2.04	82.76	41.8	1.98			
June	103.60	38.8	2.67	79.10	41.2	1.92	85.89	40.9	2.10	81.58	39.6	2.06	84.05	41.0	2.05	83.60	41.8	2.00			
July	104.49	38.7	2.70	79.35	40.9	1.94	86.88	40.6	2.14	83.50	39.2	2.13	84.24	40.5	2.08	83.02	41.1	2.02			
August	105.30	39.0	2.70	78.94	40.9	1.93	86.48	40.6	2.13	84.38	39.8	2.12	83.43	40.5	2.06	84.02	41.8	2.01			
September	105.84	39.2	2.70	79.52	41.2	1.93	88.32	40.7	2.17	85.36	39.7	2.15	85.07	40.9	2.08	85.24	42.2	2.02			
October	104.99	38.6	2.72	78.69	41.2	1.91	87.31	40.8	2.14	86.67	40.5	2.14	83.64	40.6	2.06	85.87	42.3	2.03			
November	106.11	39.3	2.70	79.71	41.3	1.93	87.53	40.9	2.14	85.86	40.5	2.12	84.66	40.9	2.07	85.85	42.5	2.02			
December	106.77	39.4	2.71	79.90	41.4	1.93	87.53	40.9	2.14	84.61	40.1	2.11	84.46	41.0	2.06	85.45	42.3	2.02			
1955: January	107.32	39.6	2.71	79.73	41.1	1.94	87.29	40.6	2.15	84.35	39.6	2.13	84.25	40.7	2.07	84.23	41.7	2.02			
February	111.35	40.2	2.77	80.34	41.2	1.95	88.15	41.0	2.15	86.07	40.6	2.12	84.86	40.8	2.08	84.85	41.8	2.03			
March	111.76	40.2	2.78	80.32	41.4	1.94	88.34	40.9	2.16	85.44	40.3	2.12	85.69	41.0	2.09	86.92	42.4	2.05			
April	108.38	39.7	2.73	81.58	41.2	1.98	89.69	40.4	2.22	85.75	38.8	2.21	87.12	40.9	2.13	86.72	42.3	2.05			
	<i>Synthetic rubber</i>			<i>Synthetic fibers</i>			<i>Explosives</i>			<i>Drugs and medicines</i>			<i>Soap, cleaning and polishing preparations ⁴</i>			<i>Soap and glycerin</i>					
1953: Average	\$87.29	40.6	\$2.15	\$69.87	39.7	\$1.76	\$74.84	39.6	\$1.89	\$68.71	40.9	\$1.68	\$78.47	41.3	\$1.90	\$85.90	41.1	\$2.09			
1954: Average	90.76	40.7	2.23	72.98	40.1	1.82	78.01	39.8	1.96	72.16	41.0	1.76	81.79	41.1	1.99	89.19	41.1	2.17			
April	89.69	40.4	2.22	72.47	39.6	1.83	76.44	39.2	1.95	70.64	40.6	1.74	79.77	40.7	1.96	87.29	40.6	2.15			
May	89.20	40.0	2.23	72.98	40.1	1.82	77.81	39.7	1.96	71.46	40.6	1.76	80.97	41.1	1.97	88.56	41.0	2.16			
June	90.76	40.7	2.23	74.07	40.7	1.82	78.40	40.0	1.96	71.81	40.8	1.76	81.97	41.4	1.98	89.19	41.1	2.17			
July	91.39	40.8	2.24	75.11	40.6	1.85	76.05	38.8	1.96	71.46	40.6	1.76	81.39	40.9	1.99	89.16	40.9	2.18			
August	91.39	40.8	2.24	72.07	39.6	1.82	78.21	39.7	1.97	71.63	40.7	1.76	82.81	41.2	2.01	90.86	41.3	2.20			
September	94.92	42.0	2.26	75.52	40.6	1.86	78.60	39.9	1.97	72.34	41.1	1.76	83.42	41.5	2.01	91.74	41.7	2.20			
October	91.39	40.8	2.24	72.40	40.0	1.81	78.01	39.6	1.97	73.34	41.2	1.78	82.01	40.8	2.01	89.54	40.7	2.20			
November	92.89	41.1	2.26	73.12	40.4	1.81	79.20	40.0	1.98	72.80	40.9	1.78	82.82	41.0	2.02	89.98	40.9	2.20			
December	92.80	40.7	2.28	73.31	40.5	1.81	79.00	40.1	1.97	73.39	41.0	1.79	84.25	41.5	2.03	91.91	41.4	2.22			
1955: January	93.02	40.8	2.28	72.76	40.2	1.81	80.60	40.3	2.00	73.21	40.9	1.79	84.25	41.3	2.04	91.02	41.0	2.22			
February	93.07	41.0	2.27	74.52	40.5	1.84	79.40	39.7	2.00	74.93	41.4	1.81	84.25	41.3	2.04	91.46	41.2	2.22			
March	94.12	41.1	2.29	74.89	40.7	1.84	79.20	39.6	2.00	73.62	40.9	1.80	76.76	38.0	2.02	78.59	35.4	2.22			
April	100.69	43.4	2.32	77.11	40.8	1.89	78.80	39.4	2.00	72.94	40.3	1.81	84.46	40.8	2.07	92.75	40.5	2.29			
	<i>Paints, pigments, and fillers ⁴</i>			<i>Paints, varnishes, lacquers, and enamels</i>			<i>Gum and wood chemicals</i>			<i>Fertilizers</i>			<i>Vegetable and animal oils and fats ⁴</i>			<i>Vegetable oils</i>					
1953: Average	\$76.08	41.8	\$1.82	\$74.64	41.7	\$1.79	\$64.22	41.7	\$1.54	\$59.36	42.4	\$1.40	\$64.89	45.7	\$1.42	\$59.67	45.9	\$1.30			
1954: Average	77.87	41.2	1.89	76.26	41.0	1.86	67.52	42.2	1.60	61.48	42.4	1.45	68.24	45.8	1.49	63.16	46.1	1.37			
April	77.04	41.2	1.87	74.70	40.6	1.84	67.89	42.7	1.59	62.76	44.2	1.42	68.25	45.2	1.51	63.66	45.8	1.39			
May	77.87	41.2	1.89	76.45	41.1	1.86	66.17	41.1	1.61	62.33	42.4	1.47	68.53	44.5	1.54	63.35	44.3	1.43			
June	79.04	41.6	1.90	77.00	41.4	1.86	67.73	42.6	1.59	61.90	42.4	1.46	69.89	44.8	1.56	64.53	44.2	1.46			
July	79.65	41.7	1.91	77.38	41.6	1.86	69.17	43.5	1.59	62.16	42.0	1.48	70.78	44.8	1.58	64.96	43.6	1.49			
August	78.88	41.3	1.91	76.86	41.1	1.87	68.80	43.0	1.60	61.30	41.7	1.47	69.99	44.3	1.58	64.37	43.2	1.49			
September	77.93	40.8	1.91	75.74	40.5	1.87	70.14	42.0	1.67	62.40	41.6	1.50	67.74	46.4	1.46	62.38	46.9	1.33			
October	77.90	41.0	1.90	76.11	40.7	1.87	67.36	42.1	1.60	60.19	41.8	1.44	67.68	47.0	1.44	63.10	47.8	1.32			
November	79.27	41.5	1.91	77.64	41.3	1.88	69.21	42.2	1.64	60.88	41.7	1.46	69.41	46.9	1.48	64.74	47.6	1.36			
December	79.68	41.5	1.92	77.87	41.2	1.89	67.84	42.4	1.60	61.86	41.8	1.48	68.36	46.5	1.47	63.32	46.9	1.35			
1955: January	78.72	41.0	1.92	77.11	40.8	1.89	69.37	42.3	1.64	61.01	41.5	1.47	68.24	45.8	1.49	62.88	45.9	1.37			
February	79.71	41.3	1.93	77.87	41.2	1.89	68.04	42.0	1.62	59.16	40.8	1.45	69.46	45.4	1.53	63.84	45.6	1.40			
March	81.71	41.9	1.95	79.84	41.8	1.91	69.01	42.6	1.62	64.78	45.3	1.43	69.60	44.9	1.55	63.62	44.8	1.42			
April	83.75	42.3	1.98	81.25	42.1	1.93	70.95	43.0	1.65	64.23	43.4	1.48	69.96	44.0	1.59	63.65	43.3	1.47			
	Chemicals and allied products—Continued																				
	<i>Animal oils and fats</i>						<i>Miscellaneous chemicals ⁴</i>			<i>Essential oils, perfumes, cosmetics</i>			<i>Compressed and liquefied gases</i>			<i>Total: Products of petroleum and coal</i>			<i>Petroleum refining</i>		
1953: Average	\$74.29	45.3	\$1.64	\$69.94	40.9	\$1.71	\$57.66	38.7	\$1.49	\$80.37	42.3	\$1.90	\$90.17	40.8	\$2.21	\$94.19	40.6	\$2.32			
1954: Average	77.46	45.3	1.71	71.51	40.4	1.77	60.37	38.7	1.56	82.32	42.0	1.96	92.62	40.8	2.27	96.22	40.6	2.37			
April	75.58	44.2	1.71	70.53	40.3	1.75	60.22	38.6	1.56	82.06	42.3	1.94	91.08	40.3	2.26	94.87	40.2	2.36			
May	75.99	44.7	1.70	70.93	40.3	1.76	59.90	38.4	1.56	81.29	41.9	1.94	93.52	41.2	2.27	97.17	41.0	2.37			
June	77.98	45.6	1.71	71.28	40.5	1.76	60.68	38.9	1.56	81.71	41.9	1.95	93.98	41.4	2.27	97.17	41.0	2.37			
July	78.88	46.4	1.70	70.98	40.1	1.77	58.28	37.6	1.55	82.52	42.1	1.96	94.53	41.1	2.30	97.51	40.8	2.37			
August	78.66	46.0	1.71	71.33	40.3	1.77	59.68	38.5	1.55	82.71	42.2	1.96	93.07	41.0	2.27	96.05	40.7	2.36			
September	78.43	45.6	1.72	71.73	40.3	1.78	60.14	38.8	1.55	83.13	42.2	1.97	95.58	41.2	2.32	97.85	40.6	2.41			
October	77.63	45.4	1.71	72.09	40.5	1.78	60.76	39.2	1.55	82.74	42.0	1.97	92.57	40.6	2.28	95.75	40.4	2.37			
November	80.08	45.5	1.76	72.54	40.3	1.80	60.76	39.2	1.55	83.60	41.8	2.00	93.66	40.9	2.29	97.10	40.8	2.38			
December	78.32	45.8	1.71	73.49	40.6	1.81	62.09	39.3	1.58	84.60	42.3	2.00	92.57	40.6	2.28	96.22	40.6	2.37			
1955: January	78.26	45.5	1.72	73.53	40.4	1.82	61.60	38.5													

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees ¹—Continued

Year and month	Manufacturing—Continued																	
	Products of petroleum and coal—Continued			Rubber products												Leather and leather products		
	Coke, other petroleum and products	petroleum	petroleum	Total: Rubber products			Tires and inner tubes			Rubber footwear			Other rubber products			Total: Leather and leather products		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1953: Average	\$78.81	41.7	\$1.89	\$77.78	40.3	\$1.93	\$88.31	39.6	\$2.23	\$65.60	40.0	\$1.64	\$70.93	41.0	\$1.73	\$51.65	37.7	\$1.37
1954: Average	80.73	41.4	1.95	78.21	39.7	1.97	87.85	38.7	2.27	67.43	39.9	1.69	71.91	40.4	1.78	50.92	36.9	1.38
April	76.95	40.5	1.90	74.88	38.8	1.93	84.14	37.9	2.22	63.58	38.3	1.66	69.30	39.6	1.75	49.48	35.6	1.39
May	80.06	41.7	1.92	77.81	39.7	1.96	88.65	39.4	2.25	65.46	39.2	1.67	70.98	40.1	1.77	49.21	35.4	1.39
June	83.27	42.7	1.95	79.60	40.2	1.98	92.06	40.2	2.29	67.30	40.3	1.67	70.98	40.1	1.77	51.01	36.7	1.39
July	83.78	42.1	1.99	76.44	39.4	1.94	87.01	38.5	2.26	68.45	40.5	1.69	70.62	39.9	1.77	51.38	37.5	1.37
August	83.13	42.2	1.97	75.85	39.1	1.94	85.65	37.4	2.29	66.40	40.0	1.66	70.62	40.2	1.77	49.96	36.2	1.38
September	87.67	43.4	2.02	77.42	39.3	1.97	86.18	38.3	2.25	66.08	39.1	1.66	72.36	40.2	1.77	51.24	37.4	1.39
October	82.17	41.5	1.98	81.20	40.4	2.01	90.39	39.3	2.30	71.34	41.0	1.69	74.98	41.2	1.82	49.62	35.7	1.39
November	81.79	41.1	1.99	83.02	41.1	2.02	94.54	40.4	2.34	71.51	41.1	1.74	75.71	41.6	1.82	51.43	37.0	1.39
December	79.58	40.6	1.96	84.85	41.8	2.03	98.18	41.6	2.36	71.69	41.2	1.74	76.44	42.0	1.82	52.16	37.8	1.38
1955: January	79.79	40.5	1.97	83.84	41.3	2.03	97.41	41.1	2.37	68.97	40.1	1.72	76.08	41.8	1.82	52.68	37.9	1.39
February	79.00	40.1	1.97	84.25	41.3	2.04	96.46	40.7	2.37	69.72	40.3	1.73	76.86	42.0	1.83	53.93	38.8	1.39
March	83.38	41.9	1.99	83.64	41.0	2.04	95.51	40.3	2.37	69.72	40.3	1.73	76.49	41.8	1.83	53.52	38.5	1.39
April	83.38	41.9	1.99	86.11	41.8	2.06	101.28	42.2	2.40	70.99	40.8	1.74	76.13	41.6	1.83	51.24	36.6	1.40
	Leather: tanned, curried, and finished			Industrial leather belting and packing			Boot and shoe cut stock and findings			Footwear (except rubber)			Luggage			Handbags and small leather goods		
1953: Average	\$68.23	39.9	\$1.71	\$67.97	41.7	\$1.63	\$50.16	38.0	\$1.32	\$49.10	37.2	\$1.32	\$57.09	39.1	\$1.46	\$46.99	38.2	\$1.23
1954: Average	69.17	39.3	1.76	66.30	39.7	1.67	49.71	37.1	1.34	48.15	36.2	1.33	56.93	37.7	1.51	48.00	38.4	1.25
April	67.34	38.7	1.74	64.91	39.1	1.66	48.06	35.6	1.35	46.42	34.9	1.33	54.60	36.4	1.50	45.00	36.0	1.25
May	68.25	39.0	1.75	61.94	38.0	1.63	48.96	36.0	1.36	45.89	34.5	1.33	57.60	38.4	1.50	45.18	35.3	1.28
June	69.70	39.6	1.76	65.01	39.4	1.65	50.12	37.4	1.34	47.75	35.9	1.33	58.11	39.0	1.49	47.13	37.7	1.25
July	68.43	39.1	1.75	63.63	38.8	1.64	49.50	37.5	1.32	48.73	37.2	1.31	56.83	38.4	1.48	46.62	37.9	1.23
August	68.99	39.2	1.76	66.97	40.1	1.67	48.55	36.5	1.33	48.71	36.9	1.32	56.24	38.0	1.48	47.82	39.2	1.22
September	68.32	38.6	1.77	66.63	39.9	1.67	49.68	36.8	1.35	46.68	35.1	1.33	59.36	38.8	1.53	48.09	39.1	1.23
October	69.60	39.1	1.78	66.53	39.6	1.68	47.66	35.3	1.35	45.62	34.3	1.33	61.20	40.0	1.53	48.63	38.9	1.25
November	71.64	39.8	1.80	68.68	40.4	1.70	50.05	36.8	1.36	47.39	35.9	1.32	59.58	39.2	1.52	50.02	39.7	1.26
December	72.18	40.1	1.80	69.02	40.6	1.70	52.52	38.9	1.35	49.10	37.2	1.32	54.66	36.2	1.51	49.88	39.9	1.25
1955: January	71.46	39.7	1.80	68.06	39.8	1.71	52.39	39.1	1.34	49.88	37.5	1.33	55.50	37.0	1.50	47.85	38.9	1.23
February	71.42	39.9	1.79	67.77	39.4	1.72	52.52	38.9	1.35	51.59	38.5	1.34	62.68	40.7	1.54	48.83	39.7	1.23
March	71.60	40.0	1.79	68.80	40.0	1.72	51.44	38.1	1.35	51.05	38.1	1.34	61.60	40.0	1.54	49.88	39.9	1.25
April	72.18	40.1	1.80	72.92	41.2	1.77	49.64	36.5	1.36	48.24	36.0	1.34	61.10	40.2	1.52	44.23	35.1	1.26
	Leather and leather products—Continued			Stone, clay, and glass products														
	Gloves and miscellaneous leather goods			Total: Stone, clay, and glass products			Flat glass			Glass and glassware, pressed or blown ⁴			Glass containers			Pressed and blown glass		
1953: Average	\$44.04	36.4	\$1.21	\$70.35	40.9	\$1.72	\$97.34	40.9	\$2.38	\$67.89	39.7	\$1.71	\$69.60	40.0	\$1.74	\$65.46	39.2	\$1.67
1954: Average	44.64	36.0	1.24	71.86	40.6	1.77	100.61	40.9	2.46	70.77	39.1	1.81	72.47	39.6	1.83	68.15	38.5	1.77
April	43.77	35.3	1.24	70.35	40.2	1.75	96.80	40.0	2.42	68.94	38.3	1.80	72.52	39.2	1.85	63.81	37.1	1.72
May	44.02	35.5	1.24	71.10	40.4	1.76	99.38	40.4	2.46	69.81	39.0	1.79	73.38	40.1	1.83	65.25	37.5	1.74
June	43.65	35.2	1.24	70.88	40.5	1.75	96.64	40.1	2.41	69.45	38.8	1.79	72.83	39.8	1.83	65.25	37.5	1.74
July	43.79	35.6	1.23	71.33	40.3	1.77	97.84	40.1	2.44	69.50	38.4	1.81	70.98	39.0	1.82	66.75	37.5	1.78
August	44.90	36.5	1.23	72.04	40.7	1.77	96.29	39.3	2.45	70.77	39.1	1.81	73.45	39.7	1.85	66.85	38.2	1.75
September	45.14	36.7	1.23	72.85	40.7	1.79	100.44	40.5	2.48	71.53	39.3	1.82	71.41	38.6	1.85	71.96	40.2	1.79
October	45.38	36.6	1.24	73.34	41.2	1.78	102.12	42.2	2.42	72.25	39.7	1.82	73.63	39.8	1.85	70.31	39.5	1.78
November	46.50	37.5	1.24	74.57	41.2	1.81	111.11	42.9	2.59	72.91	39.2	1.86	73.63	39.8	1.85	72.19	38.4	1.88
December	45.00	36.0	1.25	73.98	41.1	1.80	109.04	43.1	2.53	73.08	39.5	1.85	73.84	39.7	1.86	71.92	39.3	1.83
1955: January	45.38	36.6	1.24	73.49	40.6	1.81	114.04	44.2	2.58	72.31	39.3	1.84	72.71	39.3	1.85	71.92	39.3	1.83
February	46.00	37.1	1.24	73.49	40.6	1.81	110.34	43.1	2.56	72.47	39.6	1.83	74.21	39.9	1.86	70.74	39.3	1.80
March	45.63	36.5	1.25	74.75	41.3	1.81	111.02	43.2	2.57	74.21	39.9	1.86	76.40	40.0	1.91	71.46	39.7	1.80
April	42.56	34.6	1.23	74.80	41.1	1.82	109.14	42.8	2.55	73.68	39.4	1.87	76.22	39.7	1.92	70.20	39.0	1.80
	Glass products made of purchased glass			Cement, hydraulic			Structural clay products ⁴			Brick and hollow tile			Floor and wall tile			Sewer pipe		
1953: Average	\$60.01	41.1	\$1.46	\$73.39	41.7	\$1.76	\$64.06	40.8	\$1.57	\$61.77	42.6	\$1.45	\$67.47	40.4	\$1.67	\$64.56	40.1	\$1.61
1954: Average	70.75	40.5	1.50	75.71	41.6	1.82	66.26	40.9	1.62	64.63	42.8	1.51	68.17	40.1	1.70	66.99	40.6	1.65
April	59.19	39.2	1.51	74.05	41.6	1.78	65.85	40.9	1.61	65.53	43.4	1.51	67.03	39.9	1.68	66.26	40.4	1.64
May	59.10	39.4	1.50	73.98	41.1	1.80	66.74	41.2	1.62	65.82	43.3	1.52	68.40	40.0	1.71	68.06	41.0	1.66
June	58.29	39.7	1.51	77.10	41.9	1.84	66.33	41.2	1.61	65.23	43.2	1.51	70.18	40.8	1.72	67.57	41.2	1.64
July	59.95	39.7	1.51	78.44	41.5	1.89	66.17	41.1	1.61	65.21	42.9	1.52	68.68	40.4	1.70	68.64	41.1	1.67
August	61.76	40.9	1.51	76.36	41.5	1.84	67.23	41.5	1.62	66.40	43.4	1.53	69.19	40.7	1.70	69.22	41.7	1.66
September	62.47	41.1	1.52	80.22	42.0	1.91	67.49	40.9	1.65	65.76	42.7	1.54	69.08	40.4	1.71	68.45	40.5	1.69
October	63.72	42.2	1.51	76.01	41.8	1.84	67.40	41.1	1.64	65.79	43.0	1.53	68.28	40.4	1.69	69.19	40.7	1.70
November	63.57	42.1	1.52	76.53	41.6	1.83	67.65	41.0	1.65	66.19	42.7	1.55	67.26	39.8	1.69	68.95	40.8	1.69
December	64.30	42.3	1.52	75.53	41.5	1.82	67.57	41.2	1.64	65.79	43.0	1.53	68.74	40.2	1.71	66.23	39.9	1.66
1955: January	61.56	40.5	1.52	76.59	41.4	1.85	66.26	40.4	1.64	63.54	41.8	1.52	68.80	40.0				

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees¹—Continued

Year and month	Manufacturing—Continued																		
	Stone, clay, and glass products—Continued																		
	Clay refractories			Pottery and related products			Concrete, gypsum, and plaster products ⁴			Concrete products			Cut-stone and stone products			Miscellaneous non-metallic products ⁴			
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	
1953: Average	\$66.47	38.2	\$1.74	\$62.04	37.6	\$1.65	\$72.87	43.9	\$1.66	\$71.56	43.9	\$1.63	\$63.91	41.5	\$1.54	\$74.07	40.7	\$1.82	
1954: Average	67.16	36.9	1.82	61.69	36.5	1.69	73.92	44.0	1.68	71.88	44.1	1.63	64.53	41.1	1.57	73.66	39.6	1.86	
April	64.44	36.0	1.79	61.32	36.5	1.68	73.04	44.0	1.66	70.56	44.1	1.60	64.27	41.2	1.56	71.02	38.6	1.84	
May	66.06	36.7	1.80	60.82	36.2	1.68	73.48	44.0	1.67	71.44	44.1	1.62	65.16	41.5	1.57	72.52	39.2	1.85	
June	64.98	36.1	1.80	60.45	36.0	1.68	73.54	44.3	1.66	72.45	45.0	1.61	63.18	40.5	1.56	73.47	39.5	1.86	
July	66.06	36.7	1.80	58.14	34.2	1.70	75.99	44.7	1.70	73.35	45.0	1.63	62.87	40.3	1.56	72.73	39.1	1.86	
August	67.16	36.9	1.82	60.50	35.8	1.69	76.05	45.0	1.69	73.51	45.1	1.63	64.78	41.0	1.58	73.68	39.4	1.87	
September	69.33	36.3	1.91	60.86	35.8	1.70	75.82	44.6	1.70	72.86	44.7	1.63	65.35	41.1	1.59	74.64	39.7	1.88	
October	68.63	36.9	1.86	64.26	37.8	1.70	76.27	44.6	1.71	74.09	44.9	1.65	66.04	41.8	1.58	75.58	40.2	1.88	
November	70.13	37.5	1.87	65.11	38.3	1.70	75.24	44.0	1.71	72.27	43.8	1.65	66.36	42.0	1.58	76.33	40.6	1.88	
December	72.00	38.5	1.87	63.10	36.9	1.71	74.12	43.6	1.70	70.58	43.3	1.63	66.56	41.6	1.60	77.30	40.9	1.89	
1955: January	71.62	38.3	1.87	61.07	35.3	1.73	72.50	42.9	1.69	68.69	42.4	1.62	64.21	40.9	1.57	78.09	41.1	1.90	
February	72.37	38.7	1.87	62.44	36.3	1.72	72.59	42.7	1.70	68.85	42.5	1.62	63.67	40.3	1.58	78.09	41.1	1.90	
March	73.32	39.0	1.88	64.70	37.4	1.73	75.41	44.1	1.71	72.49	44.2	1.64	65.67	41.3	1.59	77.87	41.2	1.89	
April	73.51	39.1	1.88	63.34	36.4	1.74	76.37	44.4	1.72	73.43	44.5	1.65	65.93	40.7	1.62	81.06	42.0	1.93	
	Stone, clay, and glass products—Continued									Primary metal industries									
	Abrasive products			Asbestos products			Nonclay refractories			Total: Primary metal industries			Blast furnaces, steelworks, and rolling mills ⁴			Blast furnaces, steelworks, and rolling mills, except electro-metallurgical products			
1953: Average	\$79.98	40.6	\$1.97	\$76.43	42.7	\$1.79	\$71.51	36.3	\$1.97	\$84.25	40.9	\$2.06	\$87.48	40.5	\$2.16	\$87.48	40.5	\$2.16	
1954: Average	76.44	38.8	1.97	77.42	41.4	1.87	67.66	34.0	1.99	80.88	38.7	2.09	83.38	37.9	2.20	83.16	37.8	2.20	
April	74.69	38.3	1.95	74.37	40.2	1.85	61.74	31.5	1.96	77.90	38.0	2.05	79.39	37.1	2.14	79.18	37.0	2.14	
May	75.86	38.9	1.95	77.23	41.3	1.87	61.04	31.3	1.95	79.49	38.4	2.07	81.22	37.6	2.16	81.22	37.6	2.16	
June	75.27	38.8	1.94	79.71	42.4	1.88	60.28	30.6	1.97	80.70	38.8	2.08	83.22	38.0	2.19	83.22	38.0	2.19	
July	73.06	36.9	1.98	78.40	41.7	1.88	63.24	32.1	1.97	80.81	38.3	2.11	84.00	37.5	2.24	84.00	37.5	2.24	
August	73.48	37.3	1.97	78.25	41.4	1.89	65.93	33.3	1.98	80.64	38.4	2.10	82.43	37.3	2.21	82.43	37.3	2.21	
September	75.04	37.9	1.98	79.57	42.1	1.89	68.71	34.7	1.98	82.39	38.5	2.14	84.90	37.4	2.27	84.90	37.4	2.27	
October	78.20	39.1	2.00	78.66	41.4	1.90	72.00	36.0	2.00	82.86	38.9	2.13	84.45	37.7	2.24	84.45	37.7	2.24	
November	80.40	40.0	2.01	79.04	41.6	1.90	75.55	37.4	2.02	84.53	39.5	2.14	87.30	38.8	2.25	87.30	38.8	2.25	
December	83.84	41.3	2.03	79.99	42.1	1.90	75.89	37.2	2.04	85.60	40.0	2.14	87.98	39.1	2.25	87.98	39.1	2.25	
1955: January	83.03	40.9	2.03	80.98	42.4	1.91	76.09	37.3	2.04	87.26	40.4	2.16	90.12	39.7	2.27	90.12	39.7	2.27	
February	84.46	41.4	2.04	80.56	42.4	1.90	74.98	36.4	2.06	87.29	40.6	2.15	89.95	39.8	2.26	89.95	39.8	2.26	
March	84.45	41.6	2.03	82.32	43.1	1.91	77.77	38.5	2.02	88.54	40.9	2.16	91.25	40.2	2.27	91.25	40.2	2.27	
April	86.73	41.9	2.07	85.46	43.6	1.96	76.33	37.6	2.03	89.19	41.1	2.17	91.71	40.4	2.27	91.71	40.4	2.27	
	Electrometallurgical products			Iron and steel foundries ⁴			Gray-iron foundries			Malleable-iron foundries			Steel foundries			Primary smelting and refining of nonferrous metals ⁴			
1953: Average	\$80.36	41.0	\$1.96	\$76.33	40.6	\$1.88	\$74.89	40.7	\$1.84	\$76.95	40.5	\$1.90	\$79.98	40.6	\$1.97	\$80.93	41.5	\$1.95	
1954: Average	79.80	40.1	1.99	74.30	38.9	1.91	73.70	39.2	1.88	73.92	38.5	1.92	75.82	38.1	1.99	80.00	40.2	1.99	
April	80.18	40.7	1.97	72.96	38.4	1.90	72.56	38.8	1.87	72.58	37.8	1.92	73.68	37.4	1.97	78.01	39.8	1.96	
May	78.41	39.8	1.97	72.77	38.3	1.90	72.56	38.8	1.87	72.01	37.7	1.91	73.48	37.3	1.97	78.40	40.0	1.96	
June	79.00	39.7	1.99	73.53	38.7	1.90	73.30	39.2	1.87	71.25	37.7	1.89	74.45	37.6	1.98	79.39	40.3	1.97	
July	79.80	39.7	2.01	72.95	38.6	1.89	72.73	39.1	1.86	69.55	36.8	1.89	75.04	37.9	1.98	79.60	39.8	2.00	
August	79.00	39.5	2.00	74.10	39.0	1.90	73.49	39.3	1.87	75.07	39.1	1.92	75.62	38.0	1.99	79.79	40.3	1.98	
September	82.82	40.6	2.04	74.11	38.8	1.91	73.51	39.1	1.88	74.11	38.2	1.94	75.62	38.0	1.99	79.59	39.4	2.02	
October	82.01	40.4	2.03	75.66	39.2	1.93	75.05	39.5	1.90	77.02	39.7	1.94	76.00	38.0	2.00	80.40	40.0	2.01	
November	82.42	40.4	2.04	76.04	39.4	1.93	76.02	39.8	1.91	78.60	40.1	1.96	75.60	37.8	2.00	80.60	40.3	2.00	
December	82.42	40.6	2.03	77.99	40.2	1.94	77.76	40.5	1.92	79.17	40.6	1.95	78.38	38.8	2.02	81.00	40.5	2.00	
1955: January	83.44	40.9	2.04	78.78	40.4	1.95	78.36	40.6	1.93	79.79	40.5	1.97	79.79	39.5	2.02	81.61	40.6	2.01	
February	86.32	41.7	2.07	81.56	41.4	1.97	81.12	41.6	1.95	82.76	41.8	1.98	83.44	40.7	2.05	81.20	40.4	2.01	
March	84.87	41.4	2.05	82.17	41.5	1.98	81.54	41.6	1.96	82.96	41.9	1.98	84.46	41.0	2.06	81.41	40.5	2.01	
April	86.53	41.8	2.07	83.58	42.0	1.99	83.13	42.2	1.97	84.60	42.3	2.00	85.08	41.1	2.07	81.61	40.6	2.01	
	Primary smelting and refining of copper, lead, and zinc			Primary refining of aluminum			Secondary smelting and refining of nonferrous metals			Rolling, drawing, and alloying of nonferrous metals ⁴			Rolling, drawing, and alloying of copper			Rolling, drawing, and alloying of aluminum			
1953: Average	\$80.41	42.1	\$1.91	\$81.81	40.5	\$2.02	\$73.63	41.6	\$1.77	\$82.29	42.2	\$1.99	\$85.37	42.9	\$1.99	\$77.74	40.7	\$1.91	
1954: Average	76.61	39.9	1.92	85.05	40.5	2.10	74.80	41.1	1.82	80.80	40.4	2.00	81.20	40.2	2.02	79.79	40.3	1.98	
April	74.28	39.3	1.89	84.45	40.6	2.08	72.85	40.7	1.79	78.41	39.6	1.98	76.23	38.5	1.98	79.58	40.6	1.96	
May	74.66	39.5	1.89	84.45	40.6	2.08	73.80	41.0	1.80	80.40	40.4	1.99	79.80	39.9	2.00	79.58	40.6	1.96	
June	76.21	39.9	1.91	84.45	40.6	2.08	75.12	41.5	1.81	81.19	40.8	1.99	82.01	40.8	2.00	79.77	40.7	1.96	
July	75.85	39.3	1.93	85.24	40.4	2.11	73.31	40.5	1.81	79.40	39.9	1.99	81.40	40.7	2.01	75.85	38.5	1.97	
August	76.59	40.1	1.91	84.82	40.2	2.11	72.67	40.6	1.79	80.60	40.1	2.01	80.40	40.0	2.01	80.00	40.0	2.00	
September	74.69	38.3	1.95	85.01	40.1	2.12	75.99	41.3	1.84	83.23	41.0	2.03	84.46	41.4	2.04	82.22	40.5	2.03	
October	76.43	39.6	1.93	86.46	40.4	2.14	77.15	41.7	1.85	83.03	40.7	2.04	83.64	40.6	2.06	81.61	40.4	2.02	
November	77.60	40.0	1.94	86.90	40.8	2.13	77.56	41.7	1.86	85.49	41.7	2.05	88.40	42.5	2.08	81.81	40.5	2.02	
December	77.97	40.4	1.93	86.46	40.4	2.14	78.31	42.1	1.86	85.69	41.8	2.05	87.56	42.3	2.07	82.82	40.8	2.03	
1955: January	79.37	40.7	1.95	86.24	40.3	2.14	77.79	41.6	1.87	87.35	42.2	2.07	89.03	42.6					

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees ¹—Continued

Year and month		Manufacturing—Continued																	
		Machinery (except electrical)—Continued																	
		General industrial machinery ⁴			Pumps, air and gas compressors			Conveyors and conveying equipment			Blowers, exhaust and ventilating fans			Industrial trucks, tractors, etc.			Mechanical power-transmission equipment		
Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings		
1953: Average	\$83.42	43.0	\$1.94	\$81.98	42.7	\$1.92	\$84.44	43.3	\$1.95	\$76.50	42.5	\$1.80	\$83.50	42.6	\$1.96	\$85.93	43.4	\$1.98	
1954: Average	80.19	40.5	1.98	78.99	40.3	1.96	81.40	40.7	2.00	74.59	40.1	1.86	77.42	39.5	1.96	81.00	40.5	2.00	
1955: Average	81.61	40.6	2.01	80.99	40.7	1.99	80.98	39.5	2.05	75.81	39.9	1.90	80.60	40.1	2.01	84.05	41.2	2.03	
Mechanical stokers and industrial furnaces and ovens		Office and store machines and devices ⁴			Computing machines and cash registers			Typewriters			Service-industry and household machines ⁴			Domestic laundry equipment					
1953: Average	\$81.02	42.2	\$1.92	\$77.38	40.3	\$1.92	\$83.21	40.2	\$2.07	\$70.93	40.3	\$1.76	\$79.15	40.8	\$1.94	\$78.57	40.5	\$1.94	
1954: Average	81.00	40.5	2.00	79.20	39.8	1.99	85.17	39.8	2.14	73.23	39.8	1.84	77.82	39.5	1.97	79.80	39.9	2.00	
1955: Average	84.04	41.4	2.03	79.60	39.6	2.01	86.15	39.7	2.17	74.26	39.5	1.88	81.61	40.6	2.01	81.61	40.4	2.02	
Commercial laundry, dry-cleaning, and pressing machines		Sewing machines			Refrigerators and air-conditioning units			Miscellaneous machinery parts ⁴			Fabricated pipe, fittings, and valves			Ball and roller bearings					
1953: Average	\$76.38	42.2	\$1.81	\$77.01	39.9	\$1.93	\$79.76	40.9	\$1.95	\$78.85	41.5	\$1.90	\$77.90	41.0	\$1.90	\$77.71	40.9	\$1.90	
1954: Average	74.74	40.4	1.85	79.60	39.8	2.00	77.81	39.3	1.98	78.00	40.0	1.95	78.60	39.9	1.97	76.25	39.1	1.95	
1955: Average	72.50	39.4	1.84	80.00	39.8	2.02	80.40	39.2	2.01	80.20	40.2	1.99	80.00	40.2	1.99	80.00	39.8	2.01	
Machinery (except electrical)—Con.		Electrical machinery																	
Machine shops (job and repair)		Total: Electrical machinery			Electrical generating, transmission, distribution, and industrial apparatus ⁴			Wiring devices and supplies			Carbon and graphite products (electrical)			Electrical indicating, measuring, and recording instruments					
1953: Average	\$80.28	42.7	\$1.88	\$71.81	40.8	\$1.76	\$77.83	41.4	\$1.88	\$68.54	40.8	\$1.68	\$77.83	41.4	\$1.88	\$73.57	41.1	\$1.79	
1954: Average	79.32	41.1	1.93	72.44	39.8	1.82	77.59	40.2	1.93	67.72	39.6	1.71	74.80	40.0	1.87	72.80	40.0	1.82	
1955: Average	82.35	41.9	1.98	74.56	40.4	1.85	79.17	40.6	1.95	69.08	39.7	1.74	76.73	40.6	1.89	73.05	39.7	1.84	

See footnotes at end of table.

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees¹—Continued

Year and month	Manufacturing—Continued																	
	Electrical machinery—Continued																	
	Motors, generators, and motor-generator sets			Power and distribution transformers			Switchgear, switchboard, and industrial controls			Electrical welding apparatus			Electrical appliances			Insulated wire and cable		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1953: Average	\$84.03	41.6	\$2.02	\$76.33	40.6	\$1.88	\$75.84	41.9	\$1.81	\$85.20	42.6	\$2.00	\$76.92	40.7	\$1.89	\$72.24	42.0	\$1.72
1954: Average	\$82.82	40.4	2.05	78.59	40.3	1.95	75.95	40.4	1.88	83.21	41.4	2.01	75.84	39.5	1.92	70.47	40.5	1.74
April	80.59	39.7	2.03	76.44	39.2	1.95	73.66	39.6	1.86	83.73	42.5	1.97	75.26	39.2	1.92	67.77	39.4	1.72
May	80.78	39.6	2.04	79.10	40.2	1.97	74.99	40.1	1.87	81.99	41.2	1.99	76.22	39.7	1.92	69.14	40.2	1.72
June	80.99	39.7	2.04	78.59	40.3	1.95	75.36	40.3	1.87	83.42	41.5	2.01	74.68	39.1	1.91	69.77	40.1	1.74
July	81.80	40.1	2.04	77.02	39.7	1.94	75.39	40.1	1.88	83.23	40.8	2.04	75.46	39.3	1.92	70.30	40.4	1.74
August	83.64	40.6	2.06	78.98	40.5	1.95	75.98	40.2	1.89	86.48	42.6	2.03	75.46	39.3	1.92	69.95	40.2	1.74
September	85.08	41.1	2.07	76.14	40.5	1.88	76.76	40.4	1.90	87.55	42.5	2.06	76.43	39.6	1.93	73.39	41.7	1.76
October	84.87	41.0	2.07	79.76	40.9	1.95	76.78	40.2	1.91	83.64	41.0	2.04	73.73	38.2	1.93	72.39	40.9	1.77
November	84.05	40.8	2.06	80.77	41.0	1.97	79.32	41.1	1.93	83.64	41.2	2.03	79.17	40.6	1.95	74.82	41.8	1.79
December	83.84	40.5	2.07	84.58	42.5	1.99	79.13	41.0	1.93	84.84	42.0	2.02	78.38	40.4	1.94	73.69	41.4	1.78
1955: January	84.25	40.7	2.07	81.95	41.6	1.97	76.40	40.0	1.91	83.02	41.1	2.02	77.81	39.9	1.95	73.34	41.2	1.78
February	84.87	41.2	2.06	82.59	41.5	1.99	76.99	40.1	1.92	84.66	41.5	2.04	77.01	39.9	1.93	73.93	41.3	1.79
March	84.67	41.3	2.05	82.17	41.5	1.98	77.38	40.3	1.92	86.72	42.3	2.05	79.15	40.8	1.94	73.57	41.1	1.79
April	83.85	40.9	2.05	83.80	41.9	2.00	77.97	40.4	1.93	89.42	43.2	2.07	79.17	40.6	1.95	74.64	41.7	1.79
	Electric equipment for vehicles			Electric lamps			Communication equipment ⁴			Radios, phonographs, television sets, and equipment			Radio tubes			Telephone, telegraph, and related equipment		
1953: Average	\$76.70	40.8	\$1.88	\$65.21	40.5	\$1.61	\$66.66	43.4	\$1.65	\$64.64	39.9	\$1.62	\$62.27	40.7	\$1.53	\$82.49	42.3	\$1.95
1954: Average	75.84	39.5	1.92	64.91	39.1	1.66	68.68	39.7	1.73	67.49	39.7	1.70	63.43	39.4	1.61	80.40	40.4	1.99
April	72.19	38.4	1.88	64.19	38.9	1.65	66.30	39.0	1.70	65.35	38.9	1.68	62.02	39.5	1.57	77.03	39.5	1.95
May	78.17	40.5	1.93	64.85	39.3	1.65	67.42	39.2	1.72	66.08	39.1	1.69	62.65	39.4	1.59	78.41	39.8	1.97
June	75.26	39.2	1.92	63.69	38.6	1.65	68.51	39.6	1.73	67.32	39.6	1.70	63.27	39.3	1.61	79.40	39.9	1.99
July	73.54	38.3	1.92	60.42	36.4	1.66	67.64	39.1	1.73	67.20	39.3	1.71	61.99	38.5	1.61	78.21	39.5	1.98
August	74.10	39.0	1.90	63.69	38.6	1.65	69.03	39.9	1.73	67.66	39.8	1.70	64.08	39.8	1.61	80.60	40.3	2.00
September	74.50	38.8	1.92	65.63	39.3	1.67	69.55	40.2	1.73	68.34	40.2	1.70	63.99	39.5	1.62	81.60	40.8	2.00
October	81.18	41.0	1.98	67.77	40.1	1.69	70.88	40.5	1.75	69.32	40.3	1.72	66.99	40.6	1.65	83.43	41.1	2.03
November	79.59	40.4	1.97	68.51	40.3	1.70	71.23	40.7	1.75	69.26	40.5	1.71	67.49	40.9	1.65	84.66	41.5	2.04
December	79.38	40.5	1.96	68.51	40.3	1.70	70.53	40.3	1.75	69.32	40.3	1.72	64.94	39.6	1.64	83.64	41.2	2.03
1955: January	80.78	40.8	1.98	68.17	40.1	1.70	70.53	40.3	1.75	69.32	40.3	1.72	64.06	39.3	1.63	85.90	41.7	2.06
February	84.82	42.2	2.01	68.91	40.3	1.71	70.40	40.0	1.76	68.11	39.6	1.72	65.60	40.0	1.64	86.53	41.8	2.07
March	84.80	42.4	2.00	69.60	40.7	1.71	70.80	40.0	1.77	68.68	39.7	1.73	64.55	39.6	1.63	86.53	41.8	2.07
April	82.19	41.3	1.99	69.26	40.5	1.71	71.15	40.2	1.77	69.03	39.9	1.73	64.55	39.6	1.63	87.57	42.1	2.08
	Electrical machinery—Continued									Transportation equipment								
	Miscellaneous electrical products ⁴			Storage batteries			Primary batteries (dry and wet)			X-ray and non-radio electronic tubes			Total: Transportation equipment			Automobiles ⁴		
1953: Average	\$67.94	40.2	\$1.69	\$76.67	41.0	\$1.87	\$59.20	40.0	\$1.48	\$72.36	40.2	\$1.80	\$85.28	41.2	\$2.07	\$87.95	41.1	\$2.14
1954: Average	68.95	39.4	1.75	76.82	39.6	1.94	59.04	39.1	1.51	78.18	40.3	1.94	86.67	40.5	2.14	89.32	40.6	2.20
April	68.73	39.5	1.74	75.84	39.5	1.92	60.28	39.4	1.53	77.57	40.4	1.92	84.82	40.2	2.11	87.26	40.4	2.16
May	67.51	38.8	1.74	75.66	39.2	1.93	57.91	38.1	1.52	77.59	40.2	1.93	85.67	40.6	2.11	88.34	40.9	2.16
June	69.52	39.5	1.76	79.00	40.1	1.97	59.19	39.2	1.51	76.62	39.7	1.93	84.59	39.9	2.12	85.28	39.3	2.17
July	68.43	39.1	1.75	76.24	39.3	1.94	58.35	38.9	1.50	79.79	40.3	1.98	84.38	39.8	2.12	85.06	39.2	2.17
August	67.25	39.1	1.72	75.06	39.3	1.91	57.90	38.6	1.50	77.60	40.0	1.94	85.63	40.2	2.13	88.00	40.0	2.20
September	67.82	39.2	1.73	75.66	39.0	1.94	58.26	39.1	1.49	78.41	39.8	1.97	86.40	40.0	2.16	89.15	39.8	2.24
October	69.48	39.7	1.75	78.60	39.9	1.97	58.35	38.9	1.50	79.00	40.1	1.97	87.26	40.4	2.16	90.54	40.6	2.23
November	70.98	40.1	1.77	81.80	40.9	2.00	58.20	38.8	1.50	78.98	40.5	1.95	91.12	41.8	2.18	96.53	42.9	2.25
December	70.53	39.4	1.79	77.62	39.4	1.97	59.13	38.9	1.52	81.16	41.2	1.97	93.08	42.5	2.19	99.44	44.0	2.26
1955: January	70.17	39.2	1.79	76.64	39.1	1.96	59.74	39.3	1.52	77.03	39.3	1.96	92.62	42.1	2.20	96.75	43.0	2.25
February	72.58	40.1	1.81	81.80	40.9	2.00	60.83	39.5	1.54	78.60	40.1	1.96	93.28	42.4	2.20	98.99	43.8	2.26
March	71.06	39.7	1.79	78.80	39.6	1.99	60.28	39.4	1.53	77.81	39.7	1.96	94.37	42.7	2.21	100.56	44.3	2.27
April	72.72	40.4	1.80	81.00	40.5	2.00	62.22	40.4	1.54	79.40	39.9	1.99	91.96	41.8	2.20	96.54	43.1	2.24
	Motor vehicles, bodies, parts, and accessories			Truck and bus bodies			Trailers (truck and automobile)			Aircraft and parts ⁴			Aircraft			Aircraft engines and parts		
1953: Average	\$88.78	41.1	\$2.16	\$74.26	40.8	\$1.82	\$73.60	40.0	\$1.84	\$83.80	41.9	\$2.00	\$82.19	41.3	\$1.99	\$87.29	43.0	\$2.03
1954: Average	89.95	40.7	2.21	75.98	40.2	1.89	76.19	40.1	1.90	85.07	40.9	2.08	85.07	40.9	2.08	85.06	43.7	2.09
April	88.07	40.4	2.18	74.96	40.3	1.86	72.68	39.5	1.84	83.43	40.5	2.06	83.22	40.4	2.06	83.84	40.5	2.07
May	89.16	40.9	2.18	77.08	41.0	1.88	76.17	40.3	1.89	83.84	40.7	2.06	83.84	40.7	2.06	83.42	40.3	2.07
June	85.85	39.2	2.19	77.71	40.9	1.90	78.72	41.0	1.92	84.86	40.8	2.08	84.86	40.8	2.08	84.65	40.5	2.09
July	86.07	39.3	2.19	74.10	39.0	1.90	74.29	39.1	1.90	84.66	40.7	2.08	84.86	40.8	2.08	86.51	41.0	2.11
August	88.58	39.9	2.22	78.09	41.1	1.90	73.70	39.2	1.88	85.27	40.8	2.09	85.07	40.9	2.08	86.10	41.0	2.10
September	89.95	39.8	2.26	76.22	39.7	1.92	74.50	38.6	1.93	85.68	40.8	2.10	85.89	40.9	2.10	84.63	40.3	2.10
October	91.35	40.6	2.25	75.83	39.7	1.91	79.90	41.4	1.93	85.47	40.7	2.10	85.47	40.7	2.10	84.63	40.3	2.10
November	97.18	43.0	2.26	76.80	40.0	1.92	82.32	42.0	1.96	87.34	41.2	2.12	87.77	41.4	2.12	85.46	40.5	2.11
December	100.11	44.1	2.27	78.38	40.4	1.94	82.68	42.4	1.95	87.77	41.4	2.12	87.56	41.3	2.12	87.34	41.2	2.12
1955: January	97.63	43.2	2.26	76.82	39.6	1.94	78.38	40.4	1.94	88.81	41.5	2.14	89.44	41.6	2.15	87.54	41.1	2.13
February	99.65	43.9	2.27	80.93	41.5	1.95	80.77	41.0	1.97	87.95	41.1	2.14	88.80	41.3	2.15	86.69	40.7	2.13
March	101.23	44.4	2.28	91.43	44.6	2.05	84.15	42.5	1.98	88.38	41.3	2.14	89.23	41.5	2.15	87.74	41.0	2.14
April	97.41	43.1	2.26	85.89	43.6	1.97	85.06	43.4	1.96	86.88	40.6	2.14	87.51	40.7	2.15	85.65	40.4	2.12

See footnotes at end of table.

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees¹—Continued

Year and month	Manufacturing—Continued															Transportation and public utilities		
	Miscellaneous manufacturing industries—Continued																	
	Sporting and athletic goods			Pens, pencils, other office supplies			Costume jewelry, buttons, notions			Fabricated plastic products			Other manufacturing industries					
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1953: Average	\$60.35	40.5	\$1.49	\$58.98	40.4	\$1.46	\$59.09	40.2	\$1.47	\$67.97	41.7	\$1.63	\$64.80	40.5	\$1.60	\$76.33	40.6	\$1.88
1954: Average	59.04	39.1	1.51	60.90	40.6	1.50	57.09	39.1	1.46	67.87	40.4	1.68	66.47	39.8	1.67	78.74	40.8	1.93
April	56.77	38.1	1.49	61.61	40.8	1.51	55.63	38.1	1.46	65.40	39.4	1.66	65.18	39.5	1.65	78.50	41.1	1.91
May	58.71	39.4	1.49	61.31	40.8	1.51	56.45	38.4	1.47	66.86	39.8	1.68	66.13	39.6	1.67	76.05	39.2	1.94
June	58.20	38.8	1.50	61.05	40.7	1.50	57.77	39.3	1.47	67.20	40.0	1.68	66.30	39.7	1.67	79.84	41.8	1.91
July	57.98	38.4	1.51	59.30	39.8	1.49	56.21	38.5	1.46	67.60	40.0	1.69	65.35	38.9	1.68	77.59	40.2	1.93
August	58.74	38.9	1.51	59.35	40.1	1.48	56.74	39.4	1.44	68.61	40.6	1.69	66.63	39.9	1.67	79.10	41.2	1.92
September	58.98	38.8	1.52	60.45	40.3	1.50	56.50	38.7	1.46	69.36	40.8	1.70	66.23	39.9	1.66	80.32	41.4	1.94
October	59.58	39.2	1.52	62.58	40.9	1.53	57.77	39.3	1.47	69.53	40.9	1.70	66.57	40.1	1.66	78.38	40.4	1.94
November	59.04	39.1	1.51	63.76	41.4	1.54	57.82	39.6	1.46	70.38	41.4	1.70	66.40	40.0	1.66	80.90	41.7	1.94
December	59.80	39.6	1.51	61.50	41.0	1.50	58.58	40.4	1.45	71.04	41.3	1.72	68.51	40.3	1.70	81.64	42.3	1.93
1955: January	59.28	39.0	1.52	61.46	40.7	1.51	59.64	40.5	1.47	70.76	40.9	1.73	68.63	39.9	1.72	78.78	40.4	1.95
February	59.98	39.2	1.53	62.97	41.7	1.51	58.84	40.3	1.46	72.56	41.7	1.74	68.97	40.1	1.72	83.36	42.1	1.92
March	60.52	39.3	1.54	63.54	41.8	1.52	59.28	40.6	1.46	71.45	41.3	1.73	68.51	40.3	1.70	80.64	42.0	1.92
April	59.67	39.0	1.53	62.51	41.4	1.51	59.60	40.0	1.49	71.69	41.2	1.74	67.89	39.7	1.71			
	Transportation and public utilities—Continued																	
	Communication															Other public utilities		
	Local railways and bus lines			Telephone			Switchboard operating employees ⁶			Line construction, installation, and maintenance employees ⁷			Telegraph					
1953: Average	\$77.12	45.1	\$1.71	\$65.02	38.7	\$1.68	\$54.39	37.0	\$1.47	\$92.23	42.5	\$2.17	\$74.23	41.7	\$1.78	\$80.51	41.5	\$1.94
1954: Average	78.19	43.2	1.81	68.46	38.9	1.76	56.61	37.0	1.53	97.61	43.0	2.27	76.13	41.6	1.83	83.01	41.3	2.01
April	77.58	43.1	1.80	66.09	38.2	1.73	54.09	36.3	1.49	93.46	42.1	2.22	75.78	42.1	1.80	80.77	41.0	1.97
May	77.94	43.3	1.80	67.38	38.5	1.75	56.98	37.0	1.54	93.88	42.1	2.23	75.78	42.1	1.80	81.59	41.0	1.99
June	79.10	43.7	1.81	67.34	38.7	1.74	56.39	37.1	1.52	94.75	42.3	2.24	77.15	41.7	1.85	82.40	41.2	2.00
July	78.51	42.9	1.83	68.60	39.2	1.75	57.15	37.6	1.52	96.95	42.9	2.26	77.15	41.7	1.85	83.83	41.5	2.02
August	78.26	43.0	1.82	67.69	38.9	1.74	56.47	37.4	1.51	95.18	42.3	2.25	77.33	41.8	1.85	83.43	41.3	2.02
September	78.14	42.7	1.83	71.60	40.0	1.79	58.90	38.0	1.55	105.77	45.2	2.34	77.93	41.9	1.86	85.49	41.7	2.05
October	78.32	42.8	1.83	72.04	39.8	1.81	60.04	38.0	1.58	104.13	44.5	2.34	78.31	42.1	1.86	86.94	42.0	2.07
November	77.78	42.5	1.83	72.65	39.7	1.83	60.86	37.8	1.61	104.08	44.1	2.36	76.78	41.5	1.85	85.28	41.4	2.06
December	79.49	43.2	1.84	70.74	39.3	1.80	56.83	36.9	1.54	103.66	44.3	2.34	77.00	41.4	1.86	84.87	41.4	2.05
1955: January	78.63	42.5	1.85	69.63	38.9	1.79	56.89	36.7	1.55	98.41	42.6	2.31	76.82	41.3	1.86	84.25	40.9	2.06
February	79.37	42.9	1.85	70.98	39.0	1.82	58.62	37.1	1.58	100.42	43.1	2.33	76.82	41.3	1.86	84.66	40.9	2.07
March	79.18	42.8	1.85	70.20	39.0	1.80	56.98	37.0	1.54	99.56	43.1	2.31	77.19	41.5	1.86	84.05	40.8	2.06
April	81.10	43.6	1.86	71.71	39.4	1.82	59.03	37.6	1.57	100.69	43.4	2.32	78.54	42.0	1.87	84.25	40.9	2.06
	Transportation and public utilities—Continued																	
	Other public utilities—Continued															Wholesale and retail trade		
	Electric light and power utilities			Gas utilities			Electric light and gas utilities combined			Wholesale trade			Retail trade					
1953: Average	\$81.56	41.4	\$1.97	\$76.41	41.3	\$1.85	\$82.15	41.7	\$1.97	\$71.69	40.5	\$1.77	\$54.88	39.2	\$1.40	\$38.96	35.1	\$1.11
1954: Average	84.67	41.3	2.05	79.13	41.0	1.93	84.25	41.5	2.03	73.93	40.4	1.83	56.84	39.2	1.45	40.71	35.4	1.15
April	82.41	41.0	2.01	77.33	40.7	1.90	82.60	41.3	2.00	73.16	40.2	1.82	55.91	39.1	1.43	40.12	35.5	1.13
May	83.23	41.0	2.03	78.55	40.7	1.93	82.61	41.1	2.01	73.93	40.4	1.83	56.41	38.9	1.45	40.25	34.7	1.16
June	84.46	41.4	2.04	77.95	40.6	1.92	83.63	41.4	2.02	73.93	40.4	1.83	57.38	39.3	1.46	41.30	35.3	1.17
July	86.32	41.7	2.07	79.54	41.0	1.94	84.45	41.6	2.03	74.34	40.4	1.84	58.51	39.8	1.47	42.35	36.2	1.17
August	85.28	41.4	2.06	78.94	40.9	1.93	84.04	41.4	2.03	74.34	40.4	1.84	57.96	39.7	1.46	41.76	36.0	1.16
September	87.57	41.9	2.09	80.36	41.0	1.96	86.73	41.9	2.07	74.74	40.4	1.85	57.09	39.1	1.46	40.83	35.2	1.16
October	87.36	41.6	2.10	81.36	41.3	1.97	89.88	42.8	2.10	74.93	40.5	1.85	57.18	38.9	1.47	40.48	34.9	1.16
November	86.73	41.3	2.10	80.95	41.3	1.96	85.49	41.3	2.07	74.74	40.4	1.85	56.50	38.7	1.46	40.14	34.6	1.16
December	85.90	41.3	2.08	80.97	41.1	1.97	85.28	41.4	2.06	75.89	40.8	1.86	56.88	39.5	1.44	41.92	37.1	1.13
1955: January	85.06	40.7	2.09	81.18	41.0	1.98	85.28	41.2	2.07	75.14	40.4	1.86	57.57	38.9	1.48	41.65	35.3	1.18
February	85.05	40.5	2.10	82.61	41.1	2.01	85.28	41.4	2.06	74.96	40.3	1.86	57.57	38.9	1.48	41.07	35.1	1.17
March	85.47	40.7	2.10	80.39	40.6	1.98	85.28	41.2	2.07	75.76	40.3	1.88	57.42	38.8	1.48	41.18	35.2	1.17
April	85.89	40.9	2.10	79.99	40.4	1.98	86.11	41.4	2.08	76.36	40.4	1.89	57.51	38.6	1.49	40.60	34.7	1.17
	Wholesale and retail trade—Continued																	
	Retail trade—Continued															Other retail trade		
	Department stores and general mail-order houses			Food and liquor stores			Automotive and accessories dealers			Apparel and accessories stores			Furniture and appliance stores						Lumber and hardware supply stores
1953: Average	\$44.88	35.9	\$1.25	\$58.89	39.0	\$1.51	\$73.92	44.8	\$1.65	\$44.96	35.4	\$1.27	\$62.31	42.1	\$1.48	\$64.65	43.1	\$1.50
1954: Average	46.53	36.3	1.29	60.83	38.5	1.58	74.42	44.3	1.68	46.51	35.5	1.31	63.72	42.2	1.51	67.24	43.1	1.56
April	45.74	36.3	1.26	59.75	38.3	1.56	74.76	44.5	1.68	46.37	35.4	1.31	62.31	42.1	1.48	66.22	43.0	1.54
May	45.82	35.8	1.28	59.66	38.0	1.57	75.75	44.3	1.71	45.37	34.9	1.30	62.73	42.1	1.49	67.39	43.2	1.56
June	47.06	36.2	1.30	60.92	38.8	1.57	76.37	44.4	1.72	46.51	35.5	1.31	63.30	42.2	1.50	67.70	43.4	1.56
July	47.84	36.8	1.30	62.57	39.6	1.58	76.37	44.4	1.72	47.29	36.1	1.31	64.30	42.3	1.52	67.86	43.5	1.56
August	47.32	36.4	1.30	62.09	39.3	1.58	75.75	44.3	1.71	46.70	36.2	1.29	63.84	42.0	1.52	68.45	43.6	1.57
September	46.93	36.1	1.30	61.53	38.7	1.59	74.70	44.2	1.69	46.51	35.5	1.31	63.99	42.1	1.52	67.98	43.3	1.57
October	46.41	35.7	1.30	60.80	38.0	1.60	74.70	44.2	1.69	46.95	35.3	1.33	64.99	42.2	1.54	68.85	43.3	1.59
November	46.05	35.7	1.29	61.34	38.1	1.61	74.70	44.2	1.69	46.68	35.1	1.33	64.99	42.2	1.54	67.94	43.0	1.58
December	49.15	38.4	1.28	61.44	38.4	1.60	76.37	44.4	1.72	47.92	36.3	1.32	66.81	43.1	1.55	67.78	42.9	1.58
1955: January	47.03	35.9	1.31	61.18	38.0	1.61	75.68	44.0	1.72</									

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees ¹—Continued

Year and month	Finance, insurance, and real estate ²			Service and miscellaneous										Motion picture production and distribution ³
	Banks and trust companies	Security dealers and exchanges	Insurance carriers	Hotels, year-round ⁴			Personal services							
							Laundries			Cleaning and dyeing plants				
	Avg. wkly. earnings	Avg. wkly. earnings	Avg. wkly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	
1953: Average.....	\$54.84	\$82.94	\$67.29	\$38.40	42.2	\$0.91	\$39.69	40.5	\$0.98	\$45.71	40.1	\$1.14	\$81.52	
1954: Average.....	57.39	95.02	70.08	40.13	41.8	.96	40.10	40.1	1.00	47.12	39.6	1.19	89.09	
April.....	56.76	92.09	68.99	39.62	41.7	.95	40.80	40.4	1.01	50.40	42.0	1.20	84.36	
May.....	57.19	91.53	69.72	40.13	41.8	.96	40.30	40.3	1.00	47.32	40.1	1.18	88.57	
June.....	57.09	92.97	69.78	39.81	41.9	.95	40.50	40.5	1.00	49.20	41.0	1.20	92.08	
July.....	57.66	94.89	71.12	40.03	41.7	.96	40.00	40.0	1.00	45.78	38.8	1.18	93.38	
August.....	57.75	97.66	71.09	40.13	41.8	.96	39.40	39.4	1.00	45.46	38.2	1.19	92.34	
September.....	57.71	96.75	70.68	40.64	41.9	.97	40.50	40.1	1.01	47.24	39.7	1.19	89.81	
October.....	58.02	97.24	70.90	40.87	41.7	.98	40.50	40.5	1.00	47.72	40.1	1.19	92.95	
November.....	58.11	100.09	70.79	41.16	42.0	.98	40.40	40.0	1.01	46.77	39.3	1.19	89.44	
December.....	58.51	111.75	71.29	41.38	41.8	.99	40.70	40.3	1.01	47.01	39.5	1.19	92.74	
1955: January.....	58.97	110.82	72.22	41.26	42.1	.98	40.40	40.0	1.01	46.41	39.0	1.19	93.98	
February.....	59.02	108.37	71.79	40.96	41.8	.98	40.20	39.8	1.01	45.22	38.0	1.19	90.54	
March.....	59.08	107.97	71.90	40.45	41.7	.97	40.60	40.2	1.01	47.04	39.2	1.20	93.36	
April.....	59.03	102.73	72.61	40.55	41.8	.97	40.80	40.4	1.01	47.32	40.1	1.18	92.69	

¹ Data are based upon reports from cooperating establishments covering both full- and part-time employees who worked during, or received pay for, any part of the pay period ending nearest the 15th of the month. For mining, manufacturing, laundries, and cleaning and dyeing plants, data refer to production and related workers only. For the remaining industries, unless otherwise noted, data relate to nonsupervisory employees and working supervisors.

Data for the most recent month are subject to revision without notation; revised figures for earlier months will be identified by asterisks the first month they are published.

² See footnote 2, table A-2.

³ See footnote 3, table A-2.

⁴ Italicized titles which follow are components of this industry.

⁵ Figures for class I railroads (excluding switching and terminal companies) are based upon monthly data summarized in the M-300 report by the Interstate Commerce Commission and relate to all employees who received pay during the month, except executives, officials, and staff assistants (ICC Group I).

⁶ Data relate to employees in such occupations in the telephone industry as switchboard operators, service assistants, operating-room instructors, and pay-station attendants. During 1954 such employees made up 43 percent of

the total number of nonsupervisory employees in telephone establishments reporting hours and earnings data.

⁷ Data relate to employees in such occupations in the telephone industry as central office craftsmen; installation and exchange repair craftsmen; line, cable, and conduit craftsmen; and laborers. During 1954 such employees made up 25 percent of the total number of nonsupervisory employees in telephone establishments reporting hours and earnings data.

⁸ Data on average weekly hours and average hourly earnings are not available.

⁹ Money payments only; additional value of board, room, uniforms, and tips not included.

See footnote 1 on p. 827.

NOTE.—Information on concepts, methodology, etc., is given in a technical note on Hours and Earnings in Non-agricultural Industries, which appeared in the April 1954 Monthly Labor Review.

TABLE C-2: Gross average weekly earnings of production workers in selected industries, in current and 1947-49 dollars ¹

Year	Manufacturing		Bituminous-coal mining		Laundries		Year and month	Manufacturing		Bituminous-coal mining		Laundries	
	Current	1947-49	Current	1947-49	Current	1947-49		Current	1947-49	Current	1947-49	Current	1947-49
1939: Average.....	\$23.86	\$40.17	\$23.88	\$40.20	\$17.64	\$29.70	1954: April.....	\$70.20	\$61.26	\$71.67	\$62.54	\$40.80	\$35.60
1940: Average.....	25.20	42.07	24.71	41.25	17.93	29.93	May.....	71.13	61.85	76.32	66.37	40.30	35.04
1941: Average.....	29.58	47.03	30.86	49.06	18.69	29.71	June.....	71.50	62.12	83.00	72.11	40.50	35.19
1942: Average.....	36.65	52.58	35.02	50.24	20.34	29.18	July.....	70.92	61.56	75.39	65.44	40.00	34.72
1943: Average.....	43.14	58.30	41.62	56.24	23.08	31.19	August.....	71.06	61.79	82.09	71.38	39.40	34.26
1944: Average.....	46.08	61.28	51.27	68.18	25.95	34.51	September.....	71.86	62.65	81.17	70.77	40.50	35.31
1945: Average.....	44.39	57.72	52.25	67.95	27.73	36.06	October.....	72.22	63.07	87.54	76.45	40.50	35.37
1946: Average.....	43.82	52.54	58.03	69.58	30.20	36.21	November.....	73.57	64.20	88.29	77.04	40.40	35.25
1947: Average.....	49.97	52.32	66.59	69.73	32.71	34.25	December.....	74.12	64.85	92.01	80.50	40.70	35.61
1948: Average.....	54.14	52.67	72.12	70.16	34.23	33.30	1955: January.....	73.97	64.72	92.01	80.50	40.40	35.35
1949: Average.....	54.92	53.95	63.28	62.16	34.98	34.36	February.....	74.74	65.39	94.50	82.68	40.20	35.17
1950: Average.....	59.33	57.71	70.35	68.43	35.47	34.50	March.....	75.11	65.71	91.88	80.38	40.60	35.52
1951: Average.....	64.71	58.30	77.79	70.08	37.81	34.06	April ²	74.77	65.47	93.25	81.65	40.80	35.73
1952: Average.....	67.97	59.89	78.09	68.80	38.63	34.04							
1953: Average.....	71.69	62.67	85.31	74.57	39.69	34.69							
1954: Average.....	71.86	62.60	80.85	70.43	40.10	34.93							

¹ These series indicate changes in the level of average weekly earnings prior to and after adjustment for changes in purchasing power as measured by the Bureau's Consumer Price Index, the years 1947-49 being the base period.

² Preliminary.
See footnote 1 on p. 827.

TABLE C-3: Average weekly earnings, gross and net spendable, of production workers in manufacturing industries, in current and 1947-49 dollars ¹

Year	Gross average weekly earnings		Net spendable average weekly earnings				Year and month	Gross average weekly earnings		Net spendable average weekly earnings			
	A-mount	Index (1947-49=100)	Worker with no dependents		Worker with 3 dependents			A-mount	Index (1947-49=100)	Worker with no dependents		Worker with 3 dependents	
			Current	1947-49	Current	1947-49				Current	1947-49	Current	1947-49
1939: Average.....	\$23.86	45.1	\$23.58	\$39.70	\$23.62	\$39.76	1954: April.....	\$70.20	132.6	\$58.22	\$50.80	\$65.41	\$57.08
1940: Average.....	25.20	47.6	24.69	41.22	24.95	41.65	May.....	71.13	134.3	58.97	51.28	66.18	57.55
1941: Average.....	29.58	55.9	28.05	44.59	29.28	46.55	June.....	71.50	135.0	59.26	51.49	66.48	57.76
1942: Average.....	36.65	69.2	31.77	45.58	38.28	52.05	July.....	70.92	133.9	58.80	51.04	66.00	57.29
1943: Average.....	43.14	81.5	36.01	48.66	41.39	55.93	August.....	71.06	134.2	58.91	51.23	66.12	57.50
1944: Average.....	46.08	87.0	38.29	50.92	44.06	58.59	September.....	71.86	135.7	59.55	51.92	66.78	58.22
1945: Average.....	44.39	83.8	36.97	48.08	42.74	55.58	October.....	72.22	136.4	59.84	52.26	67.07	58.58
1946: Average.....	43.82	82.8	37.72	45.23	43.20	51.80	November.....	73.57	138.9	60.92	53.16	68.18	59.49
1947: Average.....	49.97	94.4	42.76	44.77	48.24	50.51	December.....	74.12	140.0	61.36	53.68	68.63	60.04
1948: Average.....	54.14	102.2	47.43	46.14	53.17	51.72	1955: January.....	73.97	139.7	61.15	53.50	68.41	59.85
1949: Average.....	54.92	103.7	48.09	47.24	53.83	52.88	February.....	74.74	141.2	61.76	54.03	69.02	60.38
1950: Average.....	59.33	112.0	51.09	49.70	57.21	55.65	March.....	75.11	141.9	62.05	54.29	69.32	60.65
1951: Average.....	64.71	122.2	54.04	48.68	61.28	55.21	April ²	74.77	141.2	61.78	54.10	69.05	60.46
1952: Average.....	67.97	128.4	55.66	49.04	63.62	56.05							
1953: Average.....	71.69	135.4	58.54	51.17	66.58	58.20							
1954: Average.....	71.86	135.7	59.55	51.87	66.78	58.17							

¹ Net spendable average weekly earnings are obtained by deducting from gross average weekly earnings, Federal social security and income taxes for which the worker is liable. The amount of income tax liability depends, of course, on the number of dependents supported by the worker as well as on the level of his gross income. Net spendable earnings have, therefore, been computed for 2 types of income-receivers: (1) A worker with no dependents; (2) A worker with 3 dependents. See footnote 1, table C-2.

The computation of net spendable earnings for both the worker with no dependents and the worker with 3 dependents are based upon the gross average weekly earnings for all production workers in manufacturing industries without direct regard to marital status and family composition. The

primary value of the spendable series is that of measuring relative changes in disposable earnings for 2 types of income-receivers.

² Preliminary.
See footnote 1 on p. 827.

NOTE.—Information on concepts, methodology, etc., is contained in a technical note on the Calculation and Uses of the Net Spendable Earnings Series (Revised May 1954), which is available upon request to the Bureau of Labor Statistics.

TABLE C-4: Average hourly earnings, gross and excluding overtime, of production workers in manufacturing industries ¹

Year	Manufacturing			Durable goods		Nondurable goods		Year and month	Manufacturing			Durable goods		Nondurable goods	
	Gross amount	Excluding overtime		Gross	Excluding overtime	Gross	Excluding overtime		Gross amount	Excluding overtime		Gross	Excluding overtime	Gross	Excluding overtime
		Amount	Index (1947-49=100)							Amount	Index (1947-49=100)				
1941: Average	\$0.729	\$0.702	54.5	\$0.808	\$0.770	\$0.640	\$0.625	1954: April	\$1.80	\$1.75	\$135.9	\$1.90	\$1.85	\$1.65	\$1.61
1942: Average	.853	.805	62.5	.947	.881	.723	.698	May	1.81	1.76	136.6	1.91	1.86	1.66	1.62
1943: Average	.961	.894	69.4	1.059	.976	.803	.763	June	1.81	1.76	136.6	1.91	1.86	1.66	1.62
1944: Average	1.019	.947	73.5	1.117	1.029	.861	.814	July	1.80	1.76	136.6	1.91	1.86	1.66	1.62
1945: Average	1.023	² 1.963	² 74.8	1.111	² 1.042	.904	² .858	August	1.79	1.74	135.1	1.91	1.86	1.65	1.60
1946: Average	1.086	1.051	81.6	1.156	1.122	1.015	.981	September	1.81	1.76	136.6	1.93	1.87	1.66	1.61
1947: Average	1.237	1.198	93.0	1.292	1.250	1.171	1.133	October	1.81	1.76	136.6	1.93	1.87	1.66	1.61
1948: Average	1.350	1.310	101.7	1.410	1.366	1.278	1.241	November	1.83	1.77	137.4	1.94	1.88	1.67	1.62
1949: Average	1.401	1.367	106.1	1.469	1.434	1.325	1.292	December	1.83	1.77	137.4	1.95	1.88	1.67	1.62
1950: Average	1.465	1.415	109.9	1.537	1.480	1.378	1.337	1955: January	1.84	1.78	138.2	1.96	1.89	1.68	1.63
1951: Average	1.59	1.53	118.8	1.67	1.60	1.48	1.43	February	1.85	1.78	138.2	1.96	1.89	1.68	1.63
1952: Average	1.67	1.61	125.0	1.77	1.70	1.54	1.49	March	1.85	1.79	139.0	1.97	1.89	1.68	1.63
1953: Average	1.77	1.71	132.8	1.87	1.80	1.61	1.56	April ³	1.86	1.80	139.8	1.97	1.90	1.69	1.65
1954: Average	1.81	1.76	136.6	1.92	1.86	1.66	1.61								

¹ Overtime is defined as work in excess of 40 hours per week and paid for at time and one-half. The computation of average hourly earnings excluding overtime makes no allowance for special rates of pay for work done on holidays. These data are based on the application of adjustment factors to gross average hourly earnings, as described in Eliminating Premium Overtime From

Hourly Earnings in Manufacturing, Monthly Labor Review, May 1950; reprint R. 2020.

² 11-month average; August 1945 excluded because of V-J holiday period.

³ Preliminary.

See footnote 1 on p. 827.

TABLE C-5: Indexes of aggregate weekly man-hours in industrial and construction activity ¹

[1947-49=100]

Industry	1955				1954								Annual average		
	Apr. ³	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	1954	1953
Total ³	103.1	103.0	100.8	99.9	102.9	103.5	103.0	102.3	102.2	99.5	101.4	99.7	99.3	101.5	113.3
Mining division	76.0	76.0	76.4	76.8	77.4	76.5	75.8	73.5	77.3	74.8	78.1	74.5	73.5	76.6	87.5
Contract construction division	105.9	100.6	92.4	96.0	108.9	118.2	123.5	123.8	129.8	127.5	124.6	118.2	112.1	115.9	123.1
Manufacturing division	104.5	105.2	103.6	102.0	103.8	103.2	101.9	101.2	99.9	97.1	99.6	98.8	99.1	101.1	113.6
Durable goods	114.3	113.6	111.5	109.4	110.5	109.4	106.6	103.9	102.9	101.6	106.3	106.6	107.4	107.5	125.2
Ordnance and accessories	398.9	410.8	411.6	415.6	429.0	431.7	437.9	441.8	437.4	451.3	466.1	484.0	524.6	502.2	798.5
Lumber and wood products (except furniture)	86.0	84.6	85.5	84.2	88.4	92.2	94.0	89.2	80.4	78.0	90.3	85.5	82.6	85.0	93.0
Furniture and fixtures	99.0	102.0	101.3	98.0	101.7	102.0	102.6	100.7	97.4	89.6	90.9	89.6	92.4	96.5	108.5
Stone, clay, and glass products	104.8	103.3	99.8	98.9	101.6	102.1	102.2	100.7	99.9	96.7	97.8	97.6	97.3	99.0	106.6
Primary metal industries	109.3	106.5	103.2	100.7	98.7	96.2	92.8	91.5	91.6	91.4	93.9	92.3	92.6	94.5	113.9
Fabricated metal products (except ordnance, machinery, and transportation equipment)	114.0	113.2	110.6	109.1	111.5	110.6	107.9	106.2	105.7	102.9	107.5	107.7	106.7	108.3	123.4
Machinery (except electrical)	104.3	102.2	99.6	97.6	97.5	95.1	94.8	95.4	95.0	96.1	100.9	102.4	104.0	100.6	119.0
Electrical machinery	127.4	127.0	126.6	125.7	127.7	128.7	125.9	122.9	119.0	114.9	117.5	119.7	121.6	123.4	147.1
Transportation equipment	153.2	154.4	150.9	147.1	146.0	139.2	125.9	118.1	124.4	127.2	132.2	136.4	139.0	135.0	158.6
Instruments and related products	113.3	114.2	112.9	112.2	113.7	112.9	112.3	111.9	108.7	108.8	112.2	114.0	116.4	114.9	129.9
Miscellaneous manufacturing industries	97.8	99.3	97.4	93.9	98.3	102.4	103.2	100.3	96.7	90.5	95.3	94.5	95.5	98.0	109.5
Nondurable goods	92.8	95.2	94.2	93.2	95.8	95.8	96.3	97.9	96.3	91.8	91.7	89.4	89.3	93.5	99.7
Food and kindred products	81.5	80.4	79.8	82.3	88.0	91.7	96.7	105.2	102.1	95.6	89.9	84.6	81.7	90.3	93.7
Tobacco manufactures	73.0	77.2	81.4	85.4	95.4	94.0	111.0	107.9	97.4	78.1	78.4	75.5	73.5	87.8	90.1
Textile-mill products	80.2	83.0	83.0	81.4	83.2	82.4	80.9	79.5	78.9	75.2	77.4	75.4	75.9	78.7	89.8
Apparel and other finished textile products	100.1	109.5	107.6	102.4	103.6	101.8	100.3	101.1	101.4	92.1	92.2	91.8	94.2	99.0	106.9
Paper and allied products	109.8	110.5	109.3	108.7	110.7	111.7	111.4	111.1	109.9	108.0	109.3	107.6	106.3	109.2	111.6
Printing, publishing, and allied industries	105.5	105.7	104.0	103.3	107.0	105.4	105.4	105.6	103.5	103.0	104.1	103.2	103.2	104.4	105.4
Chemicals and allied products	107.8	107.4	104.4	103.9	104.7	104.3	104.1	103.3	100.7	100.2	101.8	102.6	104.5	103.5	108.1
Products of petroleum and coal	93.3	92.7	90.3	91.2	92.2	93.8	94.0	96.7	97.5	98.6	99.3	97.4	94.0	95.7	100.9
Rubber products	110.6	109.1	108.6	108.3	108.5	104.3	102.3	96.9	86.0	84.7	98.7	96.9	93.7	97.0	111.6
Leather and leather products	91.0	98.4	98.6	94.0	93.3	90.6	86.8	88.3	93.1	90.6	87.7	82.3	85.4	89.9	96.5

¹ Aggregate man-hours are for the weekly pay period ending nearest the 15th of the month and do not represent totals for the month. For mining and manufacturing industries, data refer to production and related workers. For contract construction, the data relate to construction workers.

² Preliminary.

³ Includes only the divisions shown.

See footnote 1 on p. 827.

D: Consumer and Wholesale Prices

TABLE D-1: Consumer Price Index¹—United States average, all items and commodity groups

[1947-49=100]

Year and month	All items	Total food ²	Total apparel	Housing ³					Transportation	Medical care	Personal care	Reading and recreation	Other goods and services ⁴	
				Total ⁵	Rent	Gas and electricity	Solid fuels and fuel oil	House furnishings						Household operation
1947: Average.....	95.5	95.9	97.1	95.0	94.4	97.6	88.8	97.2	97.2	90.6	94.9	97.6	95.5	96.1
1948: Average.....	102.8	104.1	103.5	101.7	100.7	100.0	104.4	103.2	102.6	100.9	100.9	101.3	100.4	100.5
1949: Average.....	101.8	100.0	99.4	103.3	105.0	102.5	106.8	99.6	100.1	108.5	104.1	101.1	104.1	103.4
1950: Average.....	102.8	101.2	98.1	106.1	108.8	102.7	110.5	100.3	101.2	111.3	106.0	101.1	103.4	105.2
1951: Average.....	111.0	112.6	106.9	112.4	113.1	103.1	116.4	111.2	109.0	118.4	111.1	110.5	106.5	109.7
1952: Average.....	113.5	114.6	105.8	114.6	117.9	104.5	118.7	108.5	111.8	126.2	117.2	111.8	107.0	115.4
1953: Average.....	114.4	112.8	104.8	117.7	124.1	106.6	123.9	107.9	115.3	129.7	121.3	112.8	108.0	118.2
1954: Average.....	114.8	112.6	104.3	119.1	128.5	107.9	123.5	106.1	117.4	128.0	125.2	113.4	107.0	120.1
1952: January.....	113.1	115.0	107.0	113.9	116.0	103.5	117.7	110.2	110.9	122.8	114.7	111.0	107.2	113.2
February.....	112.4	112.6	106.8	114.0	116.4	103.8	117.6	110.0	110.8	123.7	114.8	111.1	106.6	114.4
March.....	112.4	112.7	106.4	114.0	116.7	103.8	117.7	109.4	111.0	124.4	115.7	111.0	106.3	114.8
April.....	112.9	113.9	106.0	114.0	116.9	103.9	117.3	108.7	111.0	124.8	115.9	111.3	106.2	115.2
May.....	113.0	114.3	105.8	114.0	117.4	104.1	115.6	108.3	111.2	125.1	116.1	111.6	106.2	115.8
June.....	113.4	114.6	105.6	114.0	117.6	104.3	115.8	107.7	111.2	126.3	117.8	111.7	106.8	115.7
July.....	114.1	116.3	105.3	114.4	117.9	104.2	118.6	107.6	111.8	126.8	118.0	111.9	107.0	116.0
August.....	114.3	116.6	105.1	114.6	118.2	105.0	119.0	107.6	111.9	127.0	118.1	112.1	107.0	115.9
September.....	114.1	115.4	105.8	114.8	118.3	105.0	119.6	108.1	112.1	127.7	118.8	112.1	107.3	115.9
October.....	114.2	115.0	105.6	115.2	118.8	105.0	121.1	107.9	112.8	128.4	118.9	112.3	107.6	115.8
November.....	114.3	115.0	105.2	115.7	119.5	105.4	121.6	108.0	113.3	128.9	118.9	112.4	107.4	115.8
December.....	114.1	113.8	105.1	116.4	120.7	105.6	123.2	108.2	113.4	128.9	119.3	112.5	108.0	115.9
1953: January.....	113.9	113.1	104.6	116.4	121.1	105.9	123.3	107.7	113.4	129.3	119.4	112.4	107.8	115.9
February.....	113.4	111.5	104.6	116.6	121.5	106.1	123.3	108.0	113.5	129.1	119.3	112.5	107.5	115.8
March.....	113.6	111.7	104.7	116.8	121.7	106.5	124.4	108.0	114.0	129.3	119.5	112.4	107.7	117.5
April.....	113.7	111.5	104.6	117.0	122.1	106.5	123.6	107.8	114.3	129.4	120.2	112.5	107.9	117.9
May.....	114.0	112.1	104.7	117.1	123.0	106.6	121.8	107.6	114.7	129.4	120.7	112.8	108.0	118.0
June.....	114.5	113.7	104.6	117.4	123.3	106.4	121.8	108.0	115.4	129.4	121.1	112.6	107.8	118.2
July.....	114.7	113.8	104.4	117.8	123.8	106.4	123.7	108.1	115.7	129.7	121.5	112.6	107.4	118.3
August.....	115.0	114.1	104.3	118.0	125.1	106.9	123.9	107.4	115.8	130.6	121.8	112.7	107.6	118.4
September.....	115.2	113.8	105.3	118.4	126.0	106.9	124.6	108.1	116.0	130.7	122.6	112.9	107.8	118.5
October.....	115.4	113.6	105.5	118.7	126.8	107.0	125.7	108.1	116.6	130.7	122.8	113.2	108.6	118.7
November.....	115.0	112.0	105.5	118.9	127.3	107.3	125.9	108.3	116.9	130.1	123.3	113.4	108.9	120.2
December.....	114.9	112.3	105.3	118.9	127.6	107.2	125.3	108.1	117.0	128.9	123.6	113.6	108.9	120.3
1954: January.....	115.2	113.1	104.9	118.8	127.8	107.1	125.7	107.2	117.2	130.5	123.7	113.7	108.7	120.3
February.....	115.0	112.6	104.7	118.9	127.9	107.5	126.2	107.2	117.3	129.4	124.1	113.9	108.0	120.2
March.....	114.8	112.1	104.3	119.0	128.0	107.6	125.8	107.2	117.5	129.0	124.4	114.1	108.2	120.1
April.....	114.6	112.4	104.1	118.5	128.2	107.6	123.9	106.1	116.9	129.1	124.9	112.9	106.5	120.2
May.....	115.0	113.3	104.2	118.9	128.3	107.7	120.9	105.9	117.2	129.1	125.1	113.0	106.4	120.1
June.....	115.1	113.8	104.2	118.9	128.3	107.6	120.9	105.8	117.2	128.9	125.1	112.7	106.4	120.1
July.....	115.2	114.6	104.0	119.0	128.5	107.8	121.1	105.7	117.2	126.7	125.2	113.3	107.0	120.3
August.....	115.0	113.9	103.7	119.2	128.6	107.8	121.9	105.4	117.3	126.6	125.5	113.4	106.6	120.2
September.....	114.7	112.4	104.3	119.5	128.8	107.9	122.4	106.0	117.4	126.4	125.7	113.5	106.5	120.1
October.....	114.5	111.8	104.6	119.5	129.0	108.5	123.8	105.6	117.6	125.0	125.9	113.4	106.9	120.1
November.....	114.6	111.1	104.6	119.5	129.2	108.7	124.2	105.4	117.8	127.6	126.1	113.8	106.8	120.0
December.....	114.3	110.4	104.3	119.7	129.4	109.1	125.5	105.4	117.7	127.3	126.3	113.6	106.6	119.9
1955: January.....	114.3	110.6	103.3	119.6	129.5	109.4	126.1	104.6	117.7	127.6	126.5	113.7	106.9	119.9
February.....	114.3	110.8	103.4	119.6	129.7	109.9	126.2	104.8	117.7	127.4	126.8	113.5	106.4	119.8
March.....	114.3	110.8	103.2	119.6	130.0	110.3	126.2	104.6	117.9	127.3	127.0	113.5	106.6	119.8
April.....	114.2	111.2	103.1	119.5	129.9	110.3	125.7	104.5	118.1	125.3	127.3	113.7	106.6	119.8
May.....	114.2	111.1	103.3	119.4	130.3	110.9	122.5	103.7	119.0	125.5	127.5	113.9	106.5	119.9

¹A major revision was incorporated in the Consumer Price Index beginning January 1953. The revised index, based on 46 cities, has been linked to the previously published "Interim adjusted" indexes for 34 cities and rebased on 1947-49=100 to form a continuous series. For the convenience of users, the "All-items" indexes are also shown on the 1935-39=100 base in table D-4.

The revised Consumer Price Index measures the average change in prices of goods and services purchased by urban wage-earner and clerical-worker families. Data for 46 large, medium, and small cities are combined for the United States average.

For a history and description of the index, see: The Consumer Price Index—A Layman's Guide, Bulletin 1140; The Consumer Price Index, in the February 1953 Monthly Labor Review; The Interim Adjustment of Consumers' Price Index, in the April 1951 Monthly Labor Review; Interim Adjustment of Consumers' Price Index, Bulletin 1039; and the following reports: Consumers' Price Index, Report of a Special Subcommittee of the House Com-

mittee on Education and Labor (1951); and Report of the President's Committee on the Cost of Living (1945).

Mimeographed tables are available upon request showing indexes for the United States and 20 individual cities regularly surveyed by the Bureau for "All items" and 8 major components from 1947 to date. Indexes are also available from 1913 for "All items," food, apparel, and rent, for all large cities combined, and from varying dates for individual cities.

²Includes "Food away from home" (restaurant meals and other food bought and eaten away from home); prior to January 1953, prices for this category were estimated to move like prices for "Food at home" but, since that date, have been measured by prices of restaurant meals.

³Includes "Other shelter."

⁴Includes tobacco, alcoholic beverages, and "miscellaneous services" (such as legal services, banking fees, and burial services).

TABLE D-2: Consumer Price Index ¹—United States average, food and its subgroups

[1947-49=100]

Year and month	Total food ²	Food at home					Year and month	Total food ²	Food at home						
		Total food at home	Cereals and bakery products	Meats, poultry, and fish	Dairy products	Fruits and vegetables			Other foods ³	Total food at home	Cereals and bakery products	Meats, poultry, and fish	Dairy products	Fruits and vegetables	Other foods ³
1947: Avg.....	95.9	95.9	94.0	93.5	96.7	97.6	100.1	1947: Jan.....	113.1	112.6	121.2	110.2	109.7	110.8	113.5
1948: Avg.....	104.1	104.1	103.4	106.1	106.3	100.5	102.5	1948: Feb.....	112.6	112.0	121.3	109.7	109.0	108.0	114.0
1949: Avg.....	100.0	100.0	102.7	100.5	96.9	101.9	97.5	1949: Mar.....	112.1	111.4	121.2	109.5	108.0	107.8	112.3
1950: Avg.....	101.2	101.2	104.5	104.9	95.9	97.6	101.2	1950: Apr.....	112.4	111.8	121.1	110.5	104.6	110.0	113.6
1951: Avg.....	112.6	112.6	114.0	117.2	107.0	106.7	114.6	1951: May.....	113.3	112.8	121.3	111.0	103.5	114.6	114.5
1952: Avg.....	114.6	114.6	116.8	116.2	111.5	117.2	109.3	1952: June.....	113.8	113.3	121.3	111.1	102.9	117.1	115.2
1953: Avg.....	112.8	112.5	119.1	109.9	109.6	113.5	112.2	1953: July.....	114.6	114.2	121.6	109.7	104.3	120.1	117.3
1954: Avg.....	112.6	111.9	121.9	108.0	106.1	111.9	114.8	1954: Aug.....	113.9	113.3	122.3	107.6	105.1	114.7	119.6
1953: Jan.....	113.1	112.9	117.7	110.9	111.6	116.7	109.7	1953: Sept.....	112.4	111.6	122.6	106.7	105.8	110.5	116.0
1953: Feb.....	111.5	111.1	117.6	107.7	110.7	115.9	107.3	1953: Oct.....	111.8	110.9	122.7	103.9	106.7	111.1	115.7
1953: Mar.....	111.7	111.3	117.7	107.4	110.3	115.5	109.1	1953: Nov.....	111.1	110.1	123.1	103.5	106.6	109.6	113.7
1953: Apr.....	111.5	111.1	118.0	106.8	109.0	115.0	110.4	1953: Dec.....	110.4	109.2	123.3	102.2	106.8	108.4	112.0
1953: May.....	112.1	111.7	118.4	109.2	107.8	115.2	110.3	1955: Jan.....	110.6	109.4	123.4	102.4	106.4	110.6	111.3
1953: June.....	113.7	113.7	118.9	111.3	107.5	121.7	110.9	1955: Feb.....	110.8	109.6	123.8	102.5	106.1	110.7	112.1
1953: July.....	113.8	113.8	119.1	112.0	108.3	118.2	112.3	1955: Mar.....	110.8	109.7	123.9	102.3	105.4	112.0	111.9
1953: Aug.....	114.1	114.1	119.5	114.1	109.1	112.7	114.4	1955: Apr.....	111.2	110.1	123.9	103.0	104.6	117.5	109.4
1953: Sept.....	113.8	113.5	120.3	113.5	109.6	106.6	116.7	1955: May.....	111.1	110.0	123.8	102.1	104.0	120.2	108.4
1953: Oct.....	113.6	113.3	120.4	111.1	110.1	107.7	117.4								
1953: Nov.....	112.0	111.4	120.6	107.0	110.5	107.4	114.8								
1953: Dec.....	112.3	111.7	120.9	107.8	110.3	109.2	113.5								

¹ See footnote 1 to table D-1. Indexes for 18 food subgroups (1935-39=100) from 1923 to December 1952 were published in the March 1953 Monthly Labor Review and in previous issues.

² See footnote 2 to table D-1.
³ Includes eggs, fats and oils, sugar and sweets, beverages (nonalcoholic), and other miscellaneous foods.

TABLE D-3: Consumer Price Index ¹—United States average, apparel and its subgroups

[1947-49=100]

Year and month	Total apparel	Men's and boys'	Women's and girls'	Foot-wear	Other apparel ²	Year and month	Total apparel	Men's and boys'	Women's and girls'	Foot-wear	Other apparel ²
1947: Avg.....	97.1	97.3	98.0	94.5	(³)	1947: Jan.....	104.9	107.4	99.8	116.2	90.4
1948: Avg.....	103.5	102.7	103.8	103.2	108.6	1948: Feb.....	104.7	107.4	99.5	116.1	90.4
1949: Avg.....	99.4	100.0	98.1	102.4	93.2	1949: Mar.....	104.3	107.2	99.0	116.1	90.0
1950: Avg.....	98.1	99.5	94.8	104.0	92.0	1950: Apr.....	104.1	107.1	98.4	116.1	90.4
1951: Avg.....	106.9	107.7	102.2	117.7	101.6	1950: May.....	104.2	107.3	98.5	115.9	90.9
1952: Avg.....	105.8	108.2	100.9	115.3	92.1	1951: June.....	104.2	107.0	98.5	116.3	91.0
1953: Avg.....	104.8	107.4	99.7	115.2	92.1	1951: July.....	104.0	106.6	98.2	116.5	90.8
1954: Avg.....	104.3	106.8	98.9	116.4	90.7	1951: Aug.....	103.7	106.4	97.7	116.9	90.7
1953: Jan.....	104.6	107.1	99.7	114.3	92.0	1951: Sept.....	104.3	106.4	99.0	116.5	90.9
1953: Feb.....	104.6	107.3	99.3	114.6	92.3	1951: Oct.....	104.6	106.4	99.6	116.7	91.1
1953: Mar.....	104.7	107.3	99.6	114.5	92.4	1951: Nov.....	104.6	106.5	99.5	117.0	91.2
1953: Apr.....	104.6	107.3	99.4	114.8	92.1	1951: Dec.....	104.3	106.5	99.0	116.9	91.1
1953: May.....	104.7	107.4	99.4	115.1	92.5	1955: Jan.....	103.3	105.5	97.6	116.7	90.5
1953: June.....	104.6	107.2	99.2	115.3	92.3	1955: Feb.....	103.4	105.6	97.7	116.6	90.6
1953: July.....	104.4	107.4	98.9	115.0	92.2	1955: Mar.....	103.2	105.6	97.4	116.7	90.4
1953: Aug.....	104.3	107.3	98.7	115.0	92.0	1955: Apr.....	103.1	105.5	97.1	116.9	90.2
1953: Sept.....	105.3	107.5	100.5	115.3	92.5	1955: May.....	103.3	105.7	97.3	117.4	90.3
1953: Oct.....	105.5	107.6	100.8	115.8	92.3						
1953: Nov.....	105.5	107.8	100.7	116.2	91.3						
1953: Dec.....	105.3	107.6	100.5	116.1	90.9						

¹ See footnote 1 to table D-1.

² Includes diapers, yard goods, and an unpriced group of items represented

in the index by the weighted average of prices for all priced items in the total apparel group.

³ Not available

TABLE D-4: Consumer Price Index ¹—United States average, all items and food

Year	1947-49=100		1935-39=100	Year and month	1947-49=100		1935-39=100	Year and month	1947-49=100		1935-39=100
	All items	Total food ²	All items		All items	Total food ²	All items		All items	Total food ²	All items
1913: Average	42.3	39.6	70.7	1945: Average	76.9	68.9	128.6	1952: November	114.3	115.0	191.1
1914: Average	42.9	40.5	71.8	1946: Average	83.4	79.0	139.5	December	114.1	113.8	190.7
1915: Average	43.4	40.0	72.5	1947: Average	95.5	95.9	159.6	1953: January	113.9	113.1	190.4
1916: Average	46.6	45.0	77.9	1948: Average	102.8	104.1	171.9	February	113.4	111.5	189.6
1917: Average	54.8	57.9	91.6	1949: Average	101.8	100.0	170.2	March	113.6	111.7	189.9
1918: Average	64.3	66.5	107.5	1950: Average	102.8	101.2	171.9	April	113.7	111.5	190.1
1919: Average	74.0	74.2	123.8	1951: Average	111.0	112.6	185.6	May	114.0	112.1	190.6
1920: Average	85.7	83.6	143.3	1952: Average	113.5	114.6	189.8	June	114.5	113.7	191.4
1921: Average	76.4	63.5	127.7	1953: Average	114.4	112.8	191.3	July	114.7	113.8	191.8
1922: Average	71.6	59.4	119.7	1954: Average	114.8	112.6	191.9	August	115.0	114.1	192.3
1923: Average	72.9	61.4	121.9	1951: January	108.6	109.9	181.5	September	115.2	113.8	192.6
1924: Average	73.1	60.8	122.2	February	109.9	111.9	183.8	October	115.4	113.6	192.9
1925: Average	75.0	65.8	125.4	March	110.3	112.0	184.5	November	115.0	112.0	192.3
1926: Average	75.6	68.0	126.4	April	110.4	111.7	184.6	December	114.9	112.3	192.1
1927: Average	74.2	65.5	124.0	May	110.9	112.6	185.4	1954: January	115.2	113.1	192.6
1928: Average	73.3	64.8	122.6	June	110.8	112.3	185.2	February	115.0	112.6	192.3
1929: Average	73.3	65.6	122.5	July	110.9	112.7	185.5	March	114.8	112.1	191.9
1930: Average	71.4	62.4	119.4	August	110.9	112.4	185.5	April	114.6	112.4	191.6
1931: Average	65.0	51.4	108.7	September	111.6	112.5	186.6	May	115.0	113.3	192.3
1932: Average	58.4	42.8	97.6	October	112.1	113.5	187.4	June	115.1	113.8	192.4
1933: Average	55.3	41.6	92.4	November	112.8	114.6	188.6	July	115.2	114.6	192.6
1934: Average	57.2	46.4	95.7	December	113.1	115.0	189.1	August	115.0	113.9	192.3
1935: Average	58.7	49.7	98.1	1952: January	113.1	115.0	189.1	September	114.7	112.4	191.8
1936: Average	59.3	50.1	99.1	February	112.4	112.6	187.9	October	114.5	111.8	191.4
1937: Average	61.4	52.1	102.7	March	112.4	112.7	188.0	November	114.6	111.1	191.6
1938: Average	60.3	48.4	100.8	April	112.9	113.9	188.7	December	114.3	110.4	191.1
1939: Average	59.4	47.1	99.4	May	113.0	114.3	189.0	1955: January	114.3	110.6	191.1
1940: Average	59.9	47.8	100.2	June	113.4	114.6	189.6	February	114.3	110.8	191.1
1941: Average	62.9	52.2	105.2	July	114.1	116.3	190.8	March	114.3	110.8	191.1
1942: Average	69.7	61.3	116.6	August	114.3	116.6	191.1	April	114.2	111.2	190.9
1943: Average	74.0	68.3	123.7	September	114.1	115.4	190.8	May	114.2	111.1	190.9
1944: Average	75.2	67.4	125.7	October	114.2	115.0	190.9				

¹ See footnote 1 to table D-1.
² See footnote 2 to table D-1.

TABLE D-5: Consumer Price Index ¹—All items indexes for selected dates, by city

City	1947-49=100															1935-39=100
	May 1955	Apr. 1955	Mar. 1955	Feb. 1955	Jan. 1955	Dec. 1954	Nov. 1954	Oct. 1954	Sept. 1954	Aug. 1954	July 1954	June 1954	May 1954	June 1950	Revised series May 1955	
United States average ²	114.2	114.2	114.3	114.3	114.3	114.3	114.6	114.5	114.7	115.0	115.2	115.1	115.0	101.8	190.9	
Atlanta, Ga.	(3)	(3)	115.3	(3)	(3)	115.7	(3)	(3)	116.3	(3)	(3)	117.6	(3)	(3)	(3)	
Baltimore, Md.	(3)	(3)	114.9	(3)	(3)	114.8	(3)	(3)	115.2	(3)	(3)	115.5	(3)	101.6	(3)	
Boston, Mass.	(3)	113.4	(3)	(3)	113.0	(3)	(3)	113.5	(3)	(3)	113.8	(3)	(3)	102.8	(3)	
Chicago, Ill.	117.2	116.9	117.0	117.1	117.0	117.0	117.6	117.1	117.4	117.7	118.0	117.3	117.3	102.8	199.6	
Cincinnati, Ohio	(3)	(3)	113.4	(3)	(3)	113.3	(3)	(3)	114.3	(3)	(3)	114.2	(3)	101.2	(3)	
Cleveland, Ohio	115.3	(3)	(3)	114.9	(3)	(3)	115.3	(3)	(3)	115.3	(3)	(3)	115.3	(3)	196.5	
Detroit, Mich.	116.4	116.2	116.3	116.3	116.0	116.2	116.9	116.0	116.2	116.8	117.5	117.1	116.9	102.8	196.5	
Houston, Tex.	(3)	115.5	(3)	115.7	(3)	(3)	116.7	(3)	(3)	116.5	(3)	(3)	116.7	103.8	195.5	
Kansas City, Mo.	(3)	115.2	(3)	(3)	115.3	(3)	(3)	115.7	(3)	(3)	115.6	(3)	(3)	(3)	(3)	
Los Angeles, Calif.	115.4	114.5	115.1	114.7	115.4	115.3	115.0	114.8	115.4	115.1	114.9	115.7	115.9	101.3	192.8	
Minneapolis, Minn.	(3)	117.0	(3)	(3)	116.5	(3)	(3)	116.9	(3)	(3)	117.3	(3)	(3)	102.1	(3)	
New York, N. Y.	111.8	112.3	112.4	112.5	112.3	112.2	112.7	112.6	112.7	113.0	113.3	112.9	112.9	100.9	185.0	
Philadelphia, Pa.	115.5	115.8	115.8	115.7	115.4	115.6	115.9	116.1	116.2	116.2	116.3	115.9	115.3	101.6	192.2	
Pittsburgh, Pa.	(3)	113.8	(3)	(3)	113.8	(3)	(3)	114.3	(3)	(3)	115.4	(3)	(3)	101.1	(3)	
Portland, Oreg.	(3)	114.2	(3)	(3)	114.6	(3)	(3)	115.2	(3)	(3)	115.5	(3)	(3)	(3)	(3)	
St. Louis, Mo.	(3)	(3)	115.6	(3)	(3)	115.4	(3)	(3)	115.7	(3)	(3)	117.4	(3)	101.1	(3)	
San Francisco, Calif.	(3)	(3)	115.6	(3)	(3)	115.7	(3)	(3)	116.2	(3)	(3)	116.8	(3)	100.9	(3)	
Scranton, Pa.	111.4	(3)	(3)	111.7	(3)	(3)	112.3	(3)	(3)	112.4	(3)	(3)	112.3	(3)	185.1	
Seattle, Wash.	116.8	(3)	(3)	116.3	(3)	(3)	115.7	(3)	(3)	116.2	(3)	(3)	116.3	(3)	199.6	
Washington, D. C.	113.5	(3)	(3)	113.2	(3)	(3)	113.5	(3)	(3)	114.1	(3)	(3)	113.7	(3)	186.4	

¹ See footnote 1 to table D-1. Indexes are based on time-to-time changes in the cost of goods and services purchased by urban wage-earner and clerical-worker families. They do not indicate whether it costs more to live in one city than in another.
² Average of 46 cities beginning January 1953. See footnote 1 to table D-1.

³ Prior to January 1953, indexes were computed monthly for 9 of these cities and once every 3 months for the remaining 11 cities on a rotating cycle. Beginning in January 1953, indexes are computed monthly for 5 cities and once every 3 months for the 15 remaining cities on a rotating cycle.

TABLE D-6: Consumer Price Index ¹—All items and commodity groups, except food,² by city

[1947-49=100]

City and cycle of pricing	All items		Personal care		Medical care		Transportation		Reading and recreation		Other goods and services	
	May 1955	May 1954	May 1955	May 1954	May 1955	May 1954	May 1955	May 1954	May 1955	May 1954	May 1955	May 1954
United States average.....	114.2	115.0	113.9	113.0	127.5	125.1	125.5	129.1	106.5	106.4	119.9	120.1
Monthly:												
Chicago, Ill.....	117.2	117.3	114.9	113.2	128.0	122.8	130.2	133.7	113.1	107.5	118.1	119.0
Detroit, Mich.....	116.4	116.9	119.3	119.3	132.5	124.1	120.9	120.8	107.7	111.0	124.8	125.0
Los Angeles, Calif.....	115.4	115.9	117.2	117.3	121.4	122.6	124.0	127.4	96.9	99.2	114.6	115.2
New York, N. Y.....	111.8	112.9	108.5	107.4	126.1	123.9	128.8	134.5	104.7	104.8	121.0	121.5
Philadelphia, Pa.....	115.5	115.3	117.7	117.1	135.1	123.7	138.7	137.3	113.0	110.0	123.4	123.4
Feb., May, Aug., and Nov.:												
Cleveland, Ohio.....	115.3	115.3	114.6	114.6	136.6	129.5	117.9	122.7	114.3	114.0	118.1	119.9
Houston, Tex.....	115.5	116.7	119.6	119.3	124.5	119.6	121.9	125.2	108.2	111.0	119.2	119.5
Scranton, Pa.....	111.4	112.3	121.5	112.5	119.7	119.7	127.4	124.0	118.5	115.4	115.1	116.1
Seattle, Wash.....	116.8	116.3	117.5	110.4	130.7	131.0	126.8	129.8	109.0	107.7	128.4	127.1
Washington, D. C.....	113.5	113.7	110.9	111.4	118.4	117.2	128.6	127.1	105.3	105.3	129.9	127.0
	April 1955	April 1954	April 1955	April 1954	April 1955	April 1954	April 1955	April 1954	April 1955	April 1954	April 1955	April 1954
Jan., Apr., July, and Oct.:												
Boston, Mass.....	113.4	112.9	111.6	112.3	124.5	124.4	134.0	140.9	107.1	104.7	118.4	118.5
Kansas City, Mo.....	115.2	115.5	116.2	115.6	136.2	135.4	123.5	129.8	114.6	113.4	117.0	117.5
Minneapolis, Minn.....	117.0	116.3	115.7	115.7	146.7	141.9	117.5	120.9	117.5	114.1	125.6	125.1
Pittsburgh, Pa.....	113.8	114.5	116.5	116.5	127.4	127.8	137.7	138.6	98.6	96.8	120.4	120.5
Portland, Oreg.....	114.2	114.8	109.9	110.6	126.5	121.4	123.0	124.6	114.6	111.3	118.5	118.7
	March 1955	March 1954	March 1955	March 1954	March 1955	March 1954	March 1955	March 1954	March 1955	March 1954	March 1955	March 1954
Mar., June, Sept., and Dec.:												
Atlanta, Ga.....	115.3	117.0	114.7	116.6	122.8	120.8	123.6	127.3	107.2	112.0	118.0	118.2
Baltimore, Md.....	114.9	114.8	107.6	108.6	134.4	133.3	136.8	138.2	115.7	113.7	122.6	123.3
Cincinnati, Ohio.....	113.4	114.2	109.0	110.2	127.4	124.6	123.8	128.2	101.0	99.8	116.1	118.1
St. Louis, Mo.....	115.6	116.9	113.5	114.6	140.3	134.6	134.8	136.2	92.7	99.4	115.0	115.7
San Francisco, Calif.....	115.6	116.5	110.9	113.0	123.5	123.2	140.8	143.4	108.7	105.7	115.2	116.3
Apparel												
	Total		Men's and boys'		Women's and girls'		Footwear		Other apparel ³			
	May 1955	May 1954	May 1955	May 1954	May 1955	May 1954	May 1955	May 1954	May 1955	May 1954	May 1955	May 1954
United States average.....	103.3	104.2	105.7	107.3	97.3	98.5	117.4	115.9	90.3	90.9		
Monthly:												
Chicago, Ill.....	104.2	108.1	109.6	114.1	94.8	101.1	121.2	117.5	92.6	94.1		
Detroit, Mich.....	101.9	102.6	106.8	109.3	94.4	94.3	113.3	112.6	87.1	87.4		
Los Angeles, Calif.....	103.7	103.7	107.4	109.4	97.4	97.0	118.0	114.0	82.4	82.5		
New York, N. Y.....	101.4	103.9	105.7	106.7	93.6	98.2	116.8	115.4	92.9	94.1		
Philadelphia, Pa.....	104.1	105.1	104.3	104.9	101.6	103.3	111.5	110.8	91.1	92.6		
Feb., May, Aug., and Nov.:												
Cleveland, Ohio.....	103.8	104.6	108.5	109.2	96.1	97.1	117.0	116.8	92.7	93.4		
Houston, Tex.....	107.1	106.7	105.5	106.8	101.5	100.7	128.7	127.2	90.7	89.2		
Scranton, Pa.....	106.3	106.1	107.2	108.0	101.4	100.8	121.2	120.3	91.8	92.3		
Seattle, Wash.....	105.4	106.1	108.8	109.2	99.1	101.2	121.0	117.3	85.9	86.7		
Washington, D. C.....	101.1	102.5	104.7	105.5	94.8	97.0	115.2	115.2	90.1	90.8		
	April 1955	April 1954	April 1955	April 1954	April 1955	April 1954	April 1955	April 1954	April 1955	April 1954	April 1955	April 1954
Jan., Apr., July, and Oct.:												
Boston, Mass.....	102.6	101.1	103.5	103.2	97.5	95.3	112.5	112.0	103.6	102.0		
Kansas City, Mo.....	102.3	103.8	105.9	107.7	96.3	98.0	114.2	114.7	86.8	87.6		
Minneapolis, Minn.....	103.5	105.5	107.5	109.4	97.6	100.4	112.8	113.7	91.6	91.8		
Pittsburgh, Pa.....	102.7	103.4	104.9	107.1	96.1	96.6	115.7	114.9	98.2	98.3		
Portland, Oreg.....	106.0	104.6	109.3	110.3	98.9	95.3	119.9	119.9	94.6	93.6		
	March 1955	March 1954	March 1955	March 1954	March 1955	March 1954	March 1955	March 1954	March 1955	March 1954	March 1955	March 1954
Mar., June, Sept., and Dec.:												
Atlanta, Ga.....	108.4	111.2	110.9	114.6	102.2	105.8	123.2	122.6	91.0	91.3		
Baltimore, Md.....	102.7	102.4	101.2	101.3	99.5	98.9	116.7	117.5	94.4	93.1		
Cincinnati, Ohio.....	103.4	103.1	103.8	106.1	98.8	96.8	123.0	122.6	86.2	85.1		
St. Louis, Mo.....	104.1	104.5	107.6	109.7	96.7	96.8	119.0	117.8	96.0	95.6		
San Francisco, Calif.....	103.1	103.5	104.9	105.6	98.7	100.0	116.3	113.5	87.8	87.8		

See footnotes at end of table.

TABLE D-6: Consumer Price Index ¹—All items and commodity groups, except food, ² by city—Continued

[1947-49=100]

City and cycle of pricing	Housing											
	Total housing		Rent		Gas and electricity		Solid fuels and fuel oil		House furnishings		Household operation	
	May 1955	May 1954	May 1955	May 1954	May 1955	May 1954	May 1955	May 1954	May 1955	May 1954	May 1955	May 1954
United States average.....	119.4	118.9	130.3	128.3	110.9	107.7	122.5	120.9	103.7	105.9	119.0	117.2
Monthly:												
Chicago, Ill.....	129.0	126.1	(4)	(4)	110.5	106.3	126.2	122.9	105.5	107.3	121.1	120.6
Detroit, Mich.....	121.8	122.1	(4)	(4)	108.7	110.3	119.0	118.8	107.6	109.5	112.0	110.0
Los Angeles, Calif.....	125.5	123.9	139.2	138.5	116.2	109.5	(4)	(4)	105.8	107.6	124.5	106.8
New York, N. Y.....	114.9	115.2	(4)	(4)	109.0	108.7	123.9	122.1	103.6	106.1	119.3	118.9
Philadelphia, Pa.....	114.0	113.4	(4)	(4)	102.3	102.3	113.1	112.4	105.0	107.9	114.3	113.7
Feb., May, Aug., and Nov.:												
Cleveland, Ohio.....	122.0	119.4	(4)	(4)	109.1	106.8	120.3	120.5	102.5	102.8	113.8	110.6
Houston, Tex.....	122.0	123.8	(4)	(4)	106.8	106.5	(4)	(4)	99.2	101.2	127.0	128.5
Seranton, Pa.....	114.6	114.7	123.3	123.0	119.4	112.2	121.3	125.7	99.9	100.7	109.9	109.6
Seattle, Wash.....	121.3	119.4	(4)	(4)	88.8	88.5	130.8	127.3	104.8	106.2	114.5	112.3
Washington, D. C.....	116.9	116.8	123.5	123.0	121.6	118.1	128.6	125.5	105.4	107.2	119.4	114.8
	April 1955	April 1954	April 1955	April 1954	April 1955	April 1954	April 1955	April 1954	April 1955	April 1954	April 1955	April 1954
Jan., Apr., July, and Oct.:												
Boston, Mass.....	120.4	117.5	(4)	(4)	111.7	108.9	128.1	122.6	105.5	104.1	117.2	113.1
Kansas City, Mo.....	121.3	118.3	138.3	133.5	118.0	105.2	113.2	113.2	102.3	106.4	124.8	120.9
Minneapolis, Minn.....	122.8	119.8	(4)	(4)	118.8	110.0	117.2	114.8	102.4	106.3	120.2	121.0
Pittsburgh, Pa.....	116.2	116.5	124.0	122.8	120.5	116.7	118.8	123.2	105.2	104.6	120.0	119.8
Portland, Oreg.....	118.3	119.4	(4)	(4)	107.8	105.2	128.9	127.6	106.3	108.9	112.3	111.6
	March 1955	March 1954	March 1955	March 1954	March 1955	March 1954	March 1955	March 1954	March 1955	March 1954	March 1955	March 1954
Mar., June, Sept., and Dec.:												
Atlanta, Ga.....	123.9	124.1	132.3	130.5	113.3	112.0	119.5	119.5	107.4	112.0	128.5	128.2
Baltimore, Md.....	115.9	113.8	125.0	123.7	100.1	97.5	127.2	126.9	98.5	100.9	110.9	109.7
Cincinnati, Ohio.....	117.3	116.7	(4)	(4)	118.7	115.4	127.2	127.2	100.1	102.9	122.3	121.5
St. Louis, Mo.....	119.4	119.1	(4)	(4)	103.8	103.8	139.6	135.1	101.7	106.7	119.4	119.0
San Francisco, Calif.....	115.9	118.0	(4)	(4)	132.5	130.1	(4)	(4)	103.9	106.9	109.3	109.6

¹ See footnote 1 to table D-1.² See tables D-2, D-4, D-7, and D-8, for food.³ See footnote 2 to table D-3.⁴ Not available.

TABLE D-7: Consumer Price Index ¹—Food and its subgroups, by city

[1947-49=100]

City	Total food ²			Food at home								
				Total food at home			Cereals and bakery products			Meats, poultry, and fish		
	May 1955	Apr. 1955	May 1954	May 1955	Apr. 1955	May 1954	May 1955	Apr. 1955	May 1954	May 1955	Apr. 1955	May 1954
United States average ³	111.1	111.2	113.3	110.0	110.1	112.8	123.8	123.9	121.3	102.1	103.0	111.0
Atlanta, Ga.....	111.1	110.8	114.1	109.5	109.1	113.5	117.6	117.9	116.0	106.0	107.0	118.4
Baltimore, Md.....	111.3	111.6	114.9	109.7	110.1	114.2	121.9	121.9	121.7	101.7	103.3	113.7
Boston, Mass.....	108.8	109.0	110.1	107.2	107.5	109.2	119.2	119.1	119.3	99.7	100.6	106.7
Chicago, Ill.....	109.2	109.0	111.7	107.7	107.6	111.0	118.8	118.9	116.8	96.9	97.2	106.4
Cincinnati, Ohio.....	112.5	112.5	114.8	111.5	111.6	114.4	124.9	126.4	118.6	103.7	103.9	115.7
Cleveland, Ohio.....	109.6	108.1	111.4	108.6	106.8	110.8	120.1	120.5	116.3	100.8	98.8	108.6
Detroit, Mich.....	114.4	113.3	116.2	113.2	111.9	115.4	120.0	120.2	117.8	100.3	100.7	109.8
Houston, Tex.....	110.7	111.1	112.2	109.6	110.0	111.4	118.1	118.7	118.4	101.3	101.2	107.8
Kansas City, Mo.....	107.1	107.0	108.6	105.5	105.5	107.9	120.9	120.8	120.3	98.5	98.7	107.2
Los Angeles, Calif.....	112.1	113.0	113.4	109.6	110.7	112.3	127.9	127.9	122.5	101.8	102.1	110.7
Minneapolis, Minn.....	111.4	111.5	112.7	110.6	110.8	112.7	126.0	126.1	124.6	98.1	98.7	104.2
New York, N. Y.....	110.5	111.6	111.8	109.3	110.7	111.4	128.0	128.2	125.2	104.0	106.6	110.5
Philadelphia, Pa.....	112.9	113.4	115.6	111.7	112.3	114.8	120.9	121.0	120.8	104.9	107.0	113.4
Pittsburgh, Pa.....	111.3	111.5	114.8	110.5	110.7	114.3	123.9	124.5	122.5	98.8	99.3	108.1
Portland, Ore.....	110.1	110.0	112.9	109.7	109.6	112.9	124.1	124.3	115.4	102.0	102.1	114.8
St. Louis, Mo.....	112.5	112.5	115.8	110.1	110.1	114.4	118.8	118.9	116.5	102.3	102.5	112.1
San Francisco, Calif.....	113.4	113.5	114.7	112.6	112.8	114.1	130.9	130.9	127.5	106.7	107.4	110.7
Scranton, Pa.....	108.6	109.0	112.8	108.4	108.9	112.8	117.4	118.6	119.5	102.0	102.0	111.2
Seattle, Wash.....	113.2	111.9	113.1	112.3	111.3	113.1	127.8	127.3	121.9	101.6	100.5	110.6
Washington, D. C.....	111.3	111.5	112.9	109.7	110.2	112.1	122.0	122.2	120.7	99.3	100.5	107.2

City	Food at home—Continued								
	Dairy products			Fruits and vegetables			Other foods at home ⁴		
	May 1955	Apr. 1955	May 1954	May 1955	Apr. 1955	May 1954	May 1955	Apr. 1955	May 1954
United States average.....	104.0	104.6	103.5	120.2	117.5	114.6	108.4	109.4	114.5
Atlanta, Ga.....	108.9	108.0	108.1	120.6	117.2	112.9	101.5	101.5	108.4
Baltimore, Md.....	108.1	108.2	107.2	116.9	114.6	112.6	107.7	108.9	114.8
Boston, Mass.....	104.1	105.3	102.9	114.5	112.0	107.8	104.0	105.1	108.7
Chicago, Ill.....	103.4	105.5	102.1	118.6	114.1	112.7	113.9	114.7	121.4
Cincinnati, Ohio.....	106.4	106.4	103.5	118.8	115.6	111.7	113.7	115.3	120.4
Cleveland, Ohio.....	96.5	96.7	97.4	119.3	111.0	110.3	112.3	113.4	118.8
Detroit, Mich.....	105.8	102.1	104.1	137.2	131.6	125.0	110.0	110.6	117.2
Houston, Tex.....	108.6	108.7	106.7	119.2	119.8	111.0	108.2	109.3	113.8
Kansas City, Mo.....	104.4	104.5	96.6	109.9	108.0	105.1	102.2	103.1	109.7
Los Angeles, Calif.....	102.9	102.9	103.2	116.0	121.6	115.4	108.1	108.1	111.0
Minneapolis, Minn.....	102.6	102.9	101.8	124.8	123.1	123.1	116.2	117.2	119.5
New York, N. Y.....	101.6	104.1	100.6	113.4	111.4	108.8	109.5	111.5	115.9
Philadelphia, Pa.....	106.0	106.3	105.3	124.4	119.9	116.6	108.0	110.8	115.9
Pittsburgh, Pa.....	106.8	106.9	107.2	118.2	115.6	114.3	116.7	118.4	124.1
Portland, Ore.....	102.9	103.5	106.9	119.0	117.5	114.1	108.9	109.3	112.6
St. Louis, Mo.....	91.3	90.3	96.8	127.2	125.9	122.1	117.2	118.3	123.0
San Francisco, Calif.....	104.9	104.6	105.7	121.9	121.8	121.1	108.4	108.4	111.2
Scranton, Pa.....	104.9	105.1	105.6	117.0	115.2	112.7	105.6	108.2	113.8
Seattle, Wash.....	108.4	108.2	103.5	126.7	124.2	120.6	108.9	108.2	111.3
Washington, D. C.....	109.5	110.1	110.8	117.7	115.2	110.1	108.0	110.0	113.3

¹ See footnote 1 to table D-1. Indexes for 56 cities for total food (1935-39=100 or June 1940=100) were published in the March 1953 Monthly Labor Review and in previous issues. See table D-8 for U. S. average prices for 46 cities combined.

² See footnote 2 to table D-1.

³ Average of 46 cities beginning January 1953. See footnote 1 to table D-1.

⁴ See footnote 3 to table D-2.

TABLE D-8: Average retail prices of selected foods

Commodity	May 1955	Apr. 1955	May 1954	Commodity	May 1955	Apr. 1955	May 1954
Cereals and bakery products:				All fruits and vegetables—Continued			
Flour, wheat.....5 pounds..	53.9	54.1	53.7	Fresh fruits and vegetables—Continued			
Biscuit mix ¹.....20 ounces..	27.4	27.4	27.5	<i>Cents</i> <i>Cents</i> <i>Cents</i>			
Cornmeal ².....pound..	12.6	12.6	12.5	Peaches*.....pound..			
Rice ³.....do..	17.8	17.8	19.7	Strawberries*.....pint..	29.7	35.8	31.0
Rolled oats.....20 ounces..	19.1	19.0	18.5	Grapes, seedless*.....pound..			
Cornflakes ⁴.....12 ounces..	22.0	22.0	21.9	Watermelons*.....do..			
Bread.....pound..	17.7	17.7	17.0	Potatoes ¹⁰.....10 pounds..	80.9	70.6	74.3
Soda crackers.....do..	27.1	27.0	27.1	Sweet potatoes.....pound..	15.9	15.4	14.6
Vanilla cookies ⁵.....7 ounces..	23.8	23.8	23.6	Onions.....do..	8.5	8.5	7.8
Meats, poultry, and fish:				Carrots.....do..	12.5	12.7	13.4
Beef and veal:				Lettuce.....head..	15.2	17.6	18.1
Round steak ¹.....pound..	89.2	90.8	89.9	Celery.....pound..	14.3	14.9	12.7
Chuck roast ⁶.....do..	49.8	51.6	51.7	Cabbage.....do..	10.5	9.4	7.6
Rib roast ¹.....do..	70.7	71.6	70.0	Tomatoes.....do..	30.2	32.3	34.1
Hamburger.....do..	39.6	39.9	40.9	Beans, green.....do..	25.1	24.4	23.8
Veal cutlets ¹.....do..	109.6	110.1	110.9	Canned fruits and vegetables:			
Pork:				Orange juice.....46-ounce can..	33.0	32.8	33.0
Pork chops, center cut.....do..	82.9	77.8	90.3	Peaches.....No. 2½ can..	33.7	33.5	32.8
Bacon, sliced.....do..	65.5	65.9	89.5	Pineapple ¹¹.....No. 2 can..	32.8	32.8	38.7
Ham, whole ⁶.....do..	60.4	58.9	73.9	Fruit cocktail ¹¹.....No. 303 can..	26.4	26.5	41.1
Lamb, leg ¹.....do..	67.4	68.7	74.4	Corn, cream style.....do..	16.9	17.0	18.2
Other meats:				Peas, green.....do..	21.5	21.5	21.3
Frankfurters.....do..	53.0	53.3	55.9	Tomatoes ^{12,13}.....do..	15.2	15.1	17.3
Luncheon meat, canned.....12 ounces..	43.7	44.3	52.2	Baby foods.....4½-5 ounces..	9.7	9.7	9.8
Poultry:				Dried fruits and vegetables:			
Frying chickens:				Prunes.....pound..	33.4	32.9	30.3
Dressed ⁷.....pound..	46.0	50.3	43.5	Navy beans.....do..	18.8	18.9	17.4
Ready-to-cook ⁴.....do..	57.5	61.7	53.1	Other foods at home:			
Fish:				Partially prepared foods:			
Ocean perch fillet, frozen ⁸.....do..	43.0	42.9	44.3	Vegetable soup.....11-ounce can..	14.1	14.1	14.3
Haddock, fillet, frozen ⁸.....do..	47.0	47.3	49.6	Beans with pork.....16-ounce can..	14.8	14.9	14.5
Salmon, pink.....16-ounce can..	55.3	54.9	51.5	Condiments and sauces:			
Tuna fish.....7-ounce can..	37.6	37.7	39.6	Pickles, sweet.....7½ ounces..	28.1	28.2	29.8
Dairy products:				Catsup, tomato.....14 ounces..	22.4	22.3	22.3
Milk, fresh (grocery).....quart..	21.4	21.6	21.2	Beverages, nonalcoholic:			
Milk, fresh (delivered) ¹.....do..	22.5	22.6	22.2	Coffee.....pound..	92.2	92.5	118.0
Ice cream.....pint..	29.1	29.1	29.6	Tea.....¾ pound..	40.8	41.1	33.9
Butter.....pound..	70.4	70.8	69.6	Cola drink.....carton of 6, 6-ounce..	32.5	32.6	31.9
Cheese, American process.....do..	57.7	57.6	57.3	Fats and oils:			
Milk, evaporated.....14½-ounce can..	13.7	13.7	13.9	Shortening, hydrogenated.....pound..	34.4	35.0	34.7
All fruits and vegetables:				Margarine, colored ⁶.....do..	28.8	29.1	29.8
Frozen fruits and vegetables:				Lard.....do..	21.0	20.8	28.0
Strawberries ⁹.....10 ounces..	30.8	30.6	36.8	Salad dressing.....pint..	35.3	35.4	35.8
Orange juice concentrate.....6 ounces..	18.0	17.9	18.5	Peanut butter.....pound..	54.4	54.3	49.0
Peas, green.....10 ounces..	19.6	19.6	19.4	Sugar and sweets:			
Beans, green.....do..	24.2	24.2	24.5	Sugar.....5 pounds..	52.1	52.1	52.7
Fresh fruits and vegetables:				Corn syrup.....24 ounces..	23.7	23.7	23.6
Apples.....pound..	17.2	15.3	16.8	Grape jelly.....12 ounces..	26.0	25.9	25.3
Bananas.....do..	16.9	17.0	16.0	Chocolate bar ¹⁴.....7½ ounces..	4.6	4.6	4.6
Oranges, size 200.....dozen..	52.2	49.9	52.6	Eggs, fresh.....dozen..	53.2	54.9	53.8
Lemons.....pound..	18.0	18.3	18.4	Miscellaneous foods:			
Grapefruit*.....each..	10.4	9.9	-----	Gelatin, flavored.....3-4 ounces..	8.5	8.5	8.5

¹ 45 cities.⁵ 42 cities.² 39 cities.⁶ 44 cities.³ 33 cities.⁷ 8 cities.⁴ 37 cities.⁸ 36 cities.⁹ Specification changed from 12 ounces to 10 ounces, effective October 1954.¹⁰ Unit changed to 10 pounds, effective January 1955.¹¹ Formerly No. 2½ can, change effective April 1955.¹² 40 cities.¹³ Specification changed from No. 2 can to No. 303 can, effective October 1954.¹⁴ Specification changed from 1-ounce to 7½-ounce bar, effective January 1955.

* Priced only in season.

NOTE.—The United States average retail food prices appearing in table D-8 are based on prices collected monthly in 46 cities for use in the calculation of the food component of the revised Consumer Price Index. Average retail food prices for each of 20 large cities are published monthly and are available upon request. Prices for the 26 medium-size and small cities are not published on an individual city basis.

TABLE D-9: Indexes of wholesale prices, by group and subgroup of commodities ¹

[1947-49=100]

Commodity group	May 1955	Apr. 1955	Mar. 1955	Feb. 1955	Jan. 1955	Dec. 1954	Nov. 1954	Oct. 1954	Sept. 1954	Aug. 1954	July 1954	June 1954	May 1954	June 1950
All commodities.....	109.9	110.5	110.0	110.4	110.1	109.5	110.0	109.7	110.0	110.5	110.4	110.0	110.9	100.2
Farm products.....	91.3	94.2	92.1	93.1	92.5	89.9	93.2	93.1	93.6	95.8	96.2	94.8	97.9	94.5
Fresh and dried produce.....	118.7	120.9	104.4	103.8	105.2	96.9	103.2	101.9	99.8	103.3	110.9	96.6	104.4	89.8
Grains.....	92.4	91.0	92.2	93.1	93.5	92.5	93.5	92.9	93.6	91.2	88.1	86.5	91.2	89.6
Livestock and poultry.....	78.4	84.0	79.9	80.7	79.4	74.0	76.4	77.5	80.7	83.4	83.2	87.7	93.0	99.8
Plant and animal fibers.....	103.4	102.7	102.9	104.3	104.4	105.0	104.5	107.1	107.4	106.7	107.2	106.9	107.0	107.3
Fluid milk.....	87.5	*90.3	90.5	92.0	92.4	93.6	95.1	93.8	91.7	89.7	87.7	83.7	84.1	81.6
Eggs.....	71.5	77.9	82.2	90.1	65.1	64.0	83.5	82.5	77.3	86.4	84.4	70.8	69.0	70.6
Hay and seeds.....	88.7	89.9	93.1	93.2	94.3	93.8	92.0	91.7	87.5	94.2	94.8	96.0	95.3	87.6
Other farm products.....	138.3	142.3	143.0	139.4	156.4	157.7	164.6	159.6	164.6	168.8	184.0	181.7	181.2	122.4
Processed foods.....	102.1	102.5	101.6	103.2	103.8	103.5	103.8	103.7	105.5	106.4	106.5	105.0	106.8	96.8
Cereal and bakery products.....	118.3	116.8	116.5	116.3	116.9	116.8	116.5	114.5	113.8	113.2	114.0	113.5	113.3	96.5
Meats, poultry, fish.....	85.7	86.0	83.3	86.9	87.6	85.2	86.3	85.8	92.0	92.0	94.1	92.3	98.3	102.4
Dairy products and ice cream.....	104.0	106.9	107.2	107.2	107.0	108.2	108.8	108.7	106.6	105.9	105.1	102.4	101.7	90.0
Canned, frozen, fruits and vegetables.....	104.1	*104.7	104.8	104.4	104.6	106.0	105.5	105.5	105.0	104.8	104.7	104.7	104.5	98.0
Sugar and confectionery.....	110.3	110.8	110.8	112.6	111.3	111.6	112.3	112.0	113.0	114.5	113.7	113.3	113.1	94.7
Packaged beverage materials.....	179.8	180.2	180.4	186.4	203.7	203.4	197.8	206.3	206.0	226.5	231.3	231.3	229.6	136.9
Animal fats and oils.....	69.5	72.9	68.0	69.2	74.4	77.3	84.8	84.5	96.2	96.9	94.0	90.0	99.7	63.9
Crude vegetable oils.....	66.9	*63.7	63.5	65.1	64.8	65.6	65.1	65.0	69.0	73.5	72.2	73.0	71.8	67.9
Refined vegetable oils.....	73.2	71.1	70.9	73.7	73.9	73.7	73.2	76.4	76.5	78.8	79.1	79.1	76.4	67.4
Vegetable oil end products.....	82.2	82.1	82.1	83.6	83.4	83.5	83.1	84.5	87.3	87.3	87.3	87.3	87.2	79.2
Other processed foods.....	101.2	100.9	100.8	100.7	98.2	98.4	97.8	99.8	103.5	109.6	101.4	96.8	101.3	106.6
All commodities other than farm and foods.....	115.5	115.7	115.6	115.7	115.2	114.9	114.8	114.5	114.4	114.4	114.3	114.2	114.5	102.2
Textile products and apparel.....	95.0	*95.0	95.3	95.2	95.2	95.2	95.2	95.4	95.3	95.3	95.1	94.9	94.8	93.3
Cotton products.....	90.3	90.4	90.8	90.6	90.2	89.9	89.9	89.9	89.2	89.1	88.9	88.4	88.3	90.0
Wool products.....	106.1	106.0	106.1	106.3	106.6	106.7	106.6	108.4	109.6	110.3	109.8	110.1	109.5	105.3
Synthetic textiles.....	86.9	87.2	87.5	86.7	87.3	87.2	86.9	86.7	85.8	85.7	85.7	85.6	85.2	91.3
Silk products.....	123.2	122.8	121.1	122.4	124.1	123.9	127.4	127.0	128.4	126.3	124.2	123.9	131.6	88.8
Apparel.....	98.0	*98.0	98.3	98.2	98.2	98.4	98.4	98.6	98.6	98.6	98.4	98.1	98.2	92.7
Other textile products.....	76.4	*76.3	76.6	78.0	77.3	76.9	77.6	80.9	80.3	79.8	79.1	79.0	78.8	96.3
Hides, skins, and leather products.....	93.2	93.2	92.2	92.3	91.9	91.8	92.8	92.4	93.0	94.0	94.9	95.6	96.0	99.1
Hides and skins.....	53.4	56.9	50.7	51.6	49.5	47.4	52.7	49.5	51.5	55.8	58.2	60.6	62.5	94.3
Leather.....	85.0	83.6	82.1	82.2	81.2	81.5	82.0	82.1	82.9	84.4	86.5	87.4	87.6	98.2
Footwear.....	111.4	111.5	111.5	111.5	111.6	111.6	111.7	111.8	111.8	111.8	111.8	111.9	111.9	102.7
Other leather products.....	96.4	95.9	95.7	95.8	95.8	95.9	96.0	96.1	96.5	96.7	97.0	97.5	97.5	95.2
Fuel, power, and lighting materials.....	107.2	*107.4	108.5	108.7	108.5	107.5	107.4	106.9	106.9	106.9	106.2	107.8	108.2	102.4
Coal.....	100.5	*102.3	105.1	105.2	105.2	105.2	105.1	105.1	105.5	105.2	104.9	104.7	104.6	104.8
Coke.....	133.4	133.4	132.4	132.4	132.4	132.4	132.4	132.4	132.4	132.4	132.4	132.4	132.4	115.6
Gas.....	113.1	*113.1	116.6	116.3	113.0	110.2	107.3	105.8	106.0	105.4	105.4	107.8	109.0	94.8
Electricity.....	97.8	*97.8	99.5	100.1	100.7	100.7	103.0	101.8	101.2	102.4	101.8	101.8	101.8	101.3
Petroleum and products.....	111.5	111.5	111.7	111.7	111.7	110.4	109.5	109.3	109.4	109.3	108.2	110.9	111.7	103.1
Chemicals and allied products.....	106.8	107.1	106.8	107.1	107.1	107.0	107.0	106.9	106.8	106.8	106.7	106.8	107.1	92.1
Industrial chemicals.....	117.6	118.0	117.5	117.4	117.3	117.4	117.7	117.6	117.4	117.4	117.1	117.0	117.3	96.3
Prepared paint.....	114.8	114.8	114.0	113.1	112.8	112.8	112.8	112.8	112.8	112.8	112.8	112.8	112.8	98.0
Paint materials.....	97.0	*96.2	95.9	96.1	95.8	96.2	96.6	97.2	97.0	97.8	97.6	96.8	95.3	86.8
Drugs and pharmaceuticals ²	93.2	93.2	93.1	93.3	93.6	93.6	93.6	93.6	94.0	94.0	94.0	94.0	94.0	91.3
Fats and oils, inedible.....	53.2	55.2	55.4	61.0	61.8	59.3	57.8	56.5	54.0	53.5	52.0	55.7	59.3	48.8
Mixed fertilizer.....	108.8	108.8	108.9	109.0	108.8	108.9	109.1	109.2	109.3	109.8	109.7	109.9	109.9	101.2
Fertilizer materials.....	113.1	113.5	113.6	113.5	113.6	113.3	112.2	112.1	112.3	112.1	112.1	111.6	114.0	98.5
Other chemicals and products ³	107.6	107.6	107.6	108.0	107.7	107.9	107.6	107.6	107.6	107.6	107.9	107.7	108.1	91.1
Rubber and products.....	138.0	138.3	138.0	140.6	136.8	132.0	131.4	128.5	126.9	126.4	126.8	126.1	125.1	109.5
Crude rubber.....	142.4	143.8	142.8	151.3	146.0	137.6	134.1	132.0	125.6	123.5	126.5	122.8	117.5	129.0
Tire casings and tubes.....	142.3	142.3	142.3	142.4	139.9	134.9	134.9	129.6	129.6	129.6	129.3	129.3	129.3	106.1
Other rubber products.....	130.4	*130.3	130.3	132.0	127.9	125.2	125.4	125.2	124.0	123.7	123.7	123.7	123.7	103.6
Lumber and wood products.....	123.2	*122.4	121.4	121.2	120.3	120.0	119.9	119.8	119.3	119.1	119.1	116.3	116.1	112.4
Lumber.....	123.9	*122.9	121.8	121.4	120.3	119.8	119.6	119.5	119.0	118.7	118.6	115.5	115.0	113.5
Millwork.....	129.3	129.3	128.7	129.0	130.4	130.3	130.2	130.2	130.2	129.7	130.7	130.8	130.8	110.9
Plywood.....	105.6	104.8	104.8	104.8	104.7	104.3	104.3	104.3	103.2	105.4	103.0	99.7	101.4	*101.7
Pulp, paper, and allied products.....	117.7	117.4	116.8	116.6	116.3	115.9	116.0	116.3	116.3	116.3	116.2	115.8	115.8	95.9
Woodpulp.....	113.8	113.8	110.0	110.0	110.0	109.6	109.6	109.6	109.6	109.6	109.6	109.7	109.7	90.6
Wastepaper.....	92.7	89.4	89.4	90.2	90.2	85.5	87.3	83.8	80.0	80.0	79.2	70.1	67.2	79.0
Paper.....	128.8	128.0	128.0	128.0	127.5	126.9	126.5	126.5	126.5	126.5	126.5	126.5	126.5	103.3
Paperboard.....	126.0	126.0	125.7	124.0	124.0	124.1	124.1	124.2	124.2	124.2	124.2	124.2	124.4	97.2
Converted paper and paperboard.....	111.7	111.5	111.5	111.5	111.1	111.1	111.1	111.3	111.9	112.0	112.0	111.9	111.5	93.2
Building paper and board.....	129.7	129.7	129.7	129.4	127.6	127.6	127.6	127.6	127.6	127.6	127.9	127.9	127.9	106.3
Metals and metal products.....	132.5	*132.9	131.9	131.5	130.1	129.8	129.9	129.7	129.1	128.6	128.0	127.1	127.1	108.8
Iron and steel.....	135.6	*136.4	136.2	135.8	135.8	135.0	135.5	135.0	134.1	133.8	133.6	131.8	131.8	113.1
Nonferrous metals.....	137.8	*138.3	134.3	133.7	127.9	127.6	127.2	127.4	126.2	125.1	124.2	123.7	123.6	101.8
Metal containers.....	131.4	131.6	131.6	131.6	131.6	131.6	131.6	131.2	131.2	131.2	130.3	130.0	130.0	109.0
Hardware.....	144.4	144.4	144.4	143.3	142.6	142.3	142.0	141.6	140.9	138.9	138.2	137.9	137.9	111.1
Plumbing equipment.....	123.3	123.3	123.0	118.7	118.7	118.7	118.7	118.7	118.5	118.5	118.5	118.5	118.2	103.2

TABLE D-9: Indexes of wholesale prices, by group and subgroup of commodities¹—Continued

[1947-49=100]

Commodity group	[1947-49=100]													
	May ² 1955	April 1955	Mar. 1955	Feb. 1955	Jan. 1955	Dec. 1954	Nov. 1954	Oct. 1954	Sept. 1954	Aug. 1954	July 1954	June 1954	May 1954	June 1950
Machinery and motive products.....	126.6	*126.3	126.1	126.1	125.8	125.7	125.3	124.3	124.4	124.3	124.3	124.3	124.4	106.3
Agricultural machinery and equipment.....	121.5	121.5	121.5	121.6	121.5	121.2	121.3	122.0	121.9	122.1	122.3	122.3	122.6	108.3
Construction machinery and equipment.....	134.3	134.1	133.8	133.8	133.2	132.6	131.8	131.6	131.6	131.5	131.5	131.5	131.5	108.1
Metalworking machinery and equipment.....	139.1	*137.1	136.9	136.6	135.1	134.7	134.0	134.0	133.3	132.7	132.6	132.6	132.6	108.8
General purpose machinery and equipment.....	131.1	131.0	130.4	130.3	128.6	128.2	128.1	128.1	128.1	127.9	127.8	128.2	128.2	107.0
Miscellaneous machinery.....	126.9	126.8	126.8	126.4	126.4	126.0	126.0	126.1	125.9	125.6	125.5	125.5	125.2	105.0
Electrical machinery and equipment.....	126.5	126.4	126.4	126.7	126.8	126.8	126.7	125.2	125.6	125.7	125.8	125.9	126.0	102.1
Motor vehicles.....	122.0	*121.9	121.5	121.5	121.7	121.7	121.0	118.6	118.9	118.9	118.9	118.9	118.9	106.7
Furniture and other household durables.....	115.1	115.1	115.1	115.4	115.5	115.7	115.6	115.6	115.3	115.3	115.3	115.4	115.5	103.1
Household furniture.....	113.1	112.8	112.7	112.6	112.5	112.9	112.9	112.8	112.8	112.9	112.8	113.1	113.5	101.8
Commercial furniture.....	128.6	128.6	128.6	128.6	128.6	128.6	128.6	127.3	126.2	126.2	126.2	126.2	126.2	106.2
Floor covering.....	125.1	125.0	124.4	124.4	124.2	124.0	124.0	124.0	124.4	123.5	122.7	122.6	122.6	109.1
Household appliances.....	106.6	107.3	107.2	108.5	108.7	109.4	109.1	109.5	109.4	109.7	109.7	109.8	109.9	100.1
Television and radio receivers.....	93.3	93.1	93.1	93.2	93.5	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Other household durable goods.....	131.9	131.9	132.0	132.0	131.9	131.5	131.5	131.3	130.5	130.4	130.4	130.4	130.4	106.8
Nonmetallic minerals—structural.....	123.2	*122.3	121.9	121.8	122.0	121.8	121.8	121.9	121.7	120.5	120.4	119.1	119.3	105.4
Flat glass.....	124.9	124.9	123.9	123.9	123.9	123.9	123.9	123.9	124.7	124.7	124.7	124.7	124.7	105.6
Concrete ingredients.....	124.7	*124.8	124.1	123.9	123.1	122.3	122.1	122.1	122.1	122.2	122.1	120.1	120.0	105.7
Concrete products.....	118.2	118.2	118.2	117.0	116.7	117.4	117.4	117.8	117.8	117.9	117.7	117.5	117.3	104.5
Structural clay products.....	137.0	136.8	136.5	136.1	135.8	135.4	135.4	135.4	135.4	132.3	132.0	132.0	132.0	110.5
Gypsum products.....	122.1	122.1	122.1	122.1	122.1	122.1	122.1	122.1	122.1	122.1	122.1	122.1	122.1	102.3
Prepared asphalt roofing.....	105.8	98.5	98.8	100.4	106.1	106.1	106.1	106.1	104.1	98.6	98.5	94.2	96.3	98.9
Other nonmetallic minerals.....	121.0	119.2	119.2	119.2	119.2	119.5	119.5	120.8	120.8	120.8	120.2	120.2	120.2	105.7
Tobacco manufactures and bottled beverages.....	121.6	121.6	121.6	121.6	121.4	121.4	121.4	121.5	121.5	121.5	121.4	121.4	121.4	101.4
Cigarettes.....	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0	102.8
Cigars.....	103.7	103.7	103.7	103.7	103.7	103.7	103.7	103.7	103.7	103.7	103.7	103.7	103.5	100.6
Other tobacco products.....	121.4	121.4	121.4	121.4	121.4	121.4	121.4	121.4	121.4	121.4	121.4	120.7	120.7	103.3
Alcoholic beverages.....	114.7	114.7	114.7	114.6	114.3	114.3	114.3	114.3	114.3	114.3	114.2	114.2	114.3	100.9
Nonalcoholic beverages.....	148.1	148.1	148.1	148.1	148.1	148.1	148.1	148.1	148.1	148.1	148.1	148.1	147.9	100.8
Miscellaneous.....	91.3	94.0	95.6	97.1	97.0	98.0	97.0	96.7	99.1	102.3	103.9	105.1	109.2	96.9
Toys, sporting goods, small arms.....	113.2	113.2	113.2	113.1	113.2	112.9	112.8	112.7	112.7	113.4	113.5	113.6	113.6	104.8
Manufactured animal feeds.....	75.0	80.1	83.0	85.8	84.9	86.8	85.0	84.3	89.0	95.2	98.3	100.6	109.1	93.7
Notions and accessories.....	92.9	92.3	92.3	92.3	101.3	101.2	101.2	101.2	101.2	101.6	101.6	101.6	93.5	88.7
Jewelry, watches, photo equipment.....	103.0	*103.0	103.1	103.2	103.6	103.5	103.5	103.5	103.2	102.8	102.7	102.7	102.3	96.6
Other miscellaneous.....	120.8	*121.0	120.6	120.6	120.3	121.0	120.9	120.8	121.2	121.2	121.2	121.3	121.3	105.4

¹ The revised wholesale price index (1947-49=100) is the official index for January 1952 and subsequent months. The official index for December 1951 and previous dates is the former index (1926=100). The revised index has been computed back to January 1947 for purposes of comparison and analysis. Prices are collected from manufacturers and other producers. In some cases they are secured from trade publications or from other Government agencies which collect price quotations in the course of their regular work. For a more detailed description of the index, see A Description of the Revised Wholesale Price Index, Monthly Labor Review, February 1952 (p. 180), or reprint Serial No. R. 2067.

Beginning with the final wholesale price index for January 1955, the index weights are based on an average of the dollar value of primary market transactions in calendar years 1952 and 1953. Previously, the weights were based on the dollar value of transactions in 1947. The weight revision does not affect the comparability of the indexes.

² Preliminary.

³ Cosmetics and related products moved from drugs and pharmaceuticals subgroup to other chemicals and products subgroup.

⁴ Not available.

*Revised.

° Correction.

TABLE D-10: Special wholesale price indexes¹

[1947-49=100]

Commodity group	1955					1954							1950	
	May ²	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	June
All foods.....	101.6	102.5	100.8	102.5	101.9	101.0	102.7	102.4	103.7	105.5	105.6	102.7	104.6	95.0
All fish.....	98.1	98.7	100.7	101.8	105.7	100.5	102.8	101.8	113.9	111.1	103.5	97.4	103.7	92.4
Special metals and metal products.....	129.7	*130.0	129.2	128.9	128.0	127.7	127.6	127.1	126.6	126.3	125.8	125.2	125.2	108.3
Metalworking machinery.....	143.4	143.0	143.2	142.7	140.7	140.1	140.1	140.2	140.2	140.2	139.9	139.9	139.9	109.8
Machinery and equipment.....	129.1	128.7	128.6	128.6	128.1	127.9	127.7	127.4	127.4	127.2	127.2	127.3	127.3	106.1
Total tractors.....	122.5	122.5	122.4	122.4	122.2	121.9	122.0	123.2	123.2	123.2	123.9	123.9	123.9	107.5
Steel mill products.....	145.9	*145.9	145.8	145.8	145.7	145.8	145.8	145.8	145.7	145.6	145.6	141.9	141.9	114.9
Building materials.....	124.0	*123.4	122.8	122.5	122.1	122.0	121.9	121.7	121.3	120.8	120.5	118.5	118.6	107.5
Soaps.....	97.0	*97.1	98.5	98.9	97.4	96.9	96.4	96.1	96.1	96.0	96.6	96.3	97.1	80.9
Synthetic detergents.....	91.5	91.5	91.5	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	82.9
Refined petroleum products.....	109.9	109.8	110.1	109.9	109.9	108.4	107.4	107.2	107.3	107.2	105.9	109.1	110.0	102.1
East Coast petroleum.....	105.7	106.1	106.1	105.5	105.3	105.3	102.9	102.9	101.1	101.1	104.7	106.1	107.3	98.1
Mid-continent petroleum.....	109.7	107.5	107.5	107.5	107.5	105.5	105.2	104.6	104.0	103.7	102.8	104.8	105.4	101.8
Gulf Coast petroleum.....	115.5	117.7	118.5	118.5	117.9	116.9	115.9	115.9	114.9	114.9	109.0	113.1	113.1	109.7
Pacific Coast petroleum.....	105.4	105.4	105.4	105.4	106.9	103.1	102.6	102.6	108.8	108.8	108.8	115.9	118.8	94.1
Pulp, paper and products, excl. bldg. paper.....	117.4	117.1	116.5	116.4	116.0	115.7	115.8	116.0	116.0	116.0	115.9	115.5	115.5	95.6
Bituminous coal, domestic sizes.....	103.0	*102.7	111.8	112.1	112.2	112.2	112.3	112.1	110.8	108.5	106.7	104.2	103.6	106.8
Lumber and wood products, excl. millwork.....	122.4	*121.5	120.5	120.1	118.9	118.6	118.4	118.4	117.8	117.6	117.4	114.3	114.0	112.6
All commodities except farm products.....	113.1	*113.3	113.1	113.4	113.2	112.9	112.8	112.5	112.8	113.0	112.9	112.6	113.1	101.2

¹ See footnote 1, table D-9.

² Preliminary.

*Revised.

E: Work Stoppages

TABLE E-1: Work stoppages resulting from labor-management disputes ¹

Month and year	Number of stoppages		Workers involved in stoppages		Man-days idle during month or year	
	Beginning in month or year	In effect during month	Beginning in month or year	In effect during month	Number	Percent of estimated working time
1935-39 (average).....	2,862	-----	1,130,000	-----	16,900,000	0.27
1947-49 (average).....	3,573	-----	2,380,000	-----	39,700,000	.46
1945.....	4,750	-----	3,470,000	-----	38,000,000	.47
1946.....	4,985	-----	4,600,000	-----	116,000,000	1.43
1947.....	3,693	-----	2,170,000	-----	34,600,000	.41
1948.....	3,419	-----	1,960,000	-----	34,100,000	.37
1949.....	3,606	-----	3,030,000	-----	50,600,000	.59
1950.....	4,843	-----	2,410,000	-----	38,800,000	.44
1951.....	4,737	-----	2,220,000	-----	22,900,000	.23
1952.....	5,117	-----	3,540,000	-----	59,100,000	.57
1953.....	5,091	-----	2,400,000	-----	28,300,000	.26
1954.....	3,468	-----	1,530,000	-----	22,600,000	.21
1954: May.....	384	559	208,000	244,000	2,010,000	.24
June.....	358	577	196,000	281,000	2,390,000	.26
July.....	370	580	238,000	376,000	3,800,000	.44
August.....	328	525	143,000	300,000	3,740,000	.41
September.....	315	526	126,000	304,000	2,410,000	.27
October.....	285	488	164,000	259,000	1,820,000	.21
November.....	220	387	71,000	129,000	1,310,000	.15
December.....	153	293	29,000	78,000	486,000	.05
1955: January ²	225	325	50,000	80,000	400,000	.05
February ²	250	380	90,000	125,000	570,000	.07
March ²	300	450	165,000	220,000	1,600,000	.17
April ²	325	500	210,000	310,000	2,600,000	.30
May ²	375	575	170,000	310,000	2,600,000	.29

¹ All work stoppages known to the Bureau of Labor Statistics and its various cooperating agencies, involving six or more workers and lasting a full day or shift or longer, are included in this report. Figures on "workers involved" and "man-days idle" cover all workers made idle for as long as one

shift in establishments directly involved in a stoppage. They do not measure the indirect or secondary effects on other establishments or industries whose employees are made idle as a result of material or service shortages.

² Preliminary

F: Building and Construction

TABLE F-1: Expenditures for new construction ¹

[Value of work put in place]

Type of construction	Expenditures (in millions)														
	1955						1954						1954	1953	
	June ²	May ³	Apr. ³	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	Total	Total
Total new construction ⁴	\$3,812	\$3,555	\$3,257	\$2,974	\$2,697	\$2,819	\$3,092	\$3,329	\$3,503	\$3,674	\$3,693	\$3,556	\$3,385	\$37,577	\$35,271
Private construction.....	2,655	2,496	2,345	2,179	2,003	2,072	2,263	2,358	2,420	2,460	2,457	2,387	2,273	25,768	23,877
Residential building (nonfarm).....	1,466	1,380	1,298	1,170	1,049	1,122	1,258	1,293	1,321	1,327	1,313	1,267	1,193	13,496	11,930
New dwelling units.....	1,310	1,230	1,170	1,070	960	1,030	1,150	1,175	1,195	1,195	1,175	1,125	1,050	12,070	10,555
Additions and alterations.....	125	123	105	79	68	71	86	96	102	107	110	113	114	1,130	1,108
Nonhousekeeping ⁵	31	27	23	21	21	21	22	22	24	25	28	29	29	296	267
Nonresidential building (nonfarm) ⁶	634	590	562	559	549	542	552	564	554	558	556	551	530	6,250	5,680
Industrial.....	189	183	184	186	187	186	184	178	170	162	159	158	161	2,030	2,229
Commercial.....	257	234	213	208	199	188	192	203	202	210	210	206	192	2,212	1,791
Warehouses, office, and loft buildings.....	89	88	84	82	83	84	87	90	89	88	88	81	76	958	739
Stores, restaurants, and garages.....	168	146	129	126	116	104	105	113	113	122	122	125	116	1,254	1,052
Other nonresidential building.....	188	173	165	165	163	168	176	183	182	186	187	187	177	2,008	1,600
Religious.....	63	58	54	53	53	55	57	59	59	58	56	52	47	593	472
Educational.....	39	37	40	41	39	42	45	48	49	50	50	48	45	529	426
Social and recreational.....	24	20	17	16	17	18	19	21	22	22	22	21	20	228	163
Hospital and institutional ⁷	31	30	28	28	28	28	29	29	29	30	29	29	28	337	317
Miscellaneous.....	31	28	26	27	26	25	26	26	23	26	30	37	37	321	282
Farm construction.....	141	131	114	103	95	92	93	106	126	153	167	164	157	1,560	1,731
Public utilities.....	308	379	357	333	297	302	348	383	407	410	409	393	382	4,341	4,416
Railroad.....	30	29	28	25	19	20	28	28	38	28	26	30	31	353	442
Telephone and telegraph.....	60	60	55	55	50	50	51	55	56	57	58	58	58	655	615
Other public utilities.....	308	290	274	253	228	232	260	300	313	325	325	305	293	3,333	3,359
All other private ⁸	16	16	14	14	13	14	12	12	12	12	12	11	12	121	120
Public construction.....	1,157	1,059	912	795	694	747	829	971	1,083	1,214	1,236	1,169	1,112	11,809	11,394
Residential building ⁹	21	22	22	23	21	22	22	22	23	24	25	24	26	336	556
Nonresidential building (other than military facilities).....	395	379	366	354	316	342	351	366	390	410	437	420	407	4,641	4,346
Industrial.....	69	72	72	81	70	90	102	104	105	106	130	130	129	1,506	1,771
Educational.....	221	211	202	190	178	182	181	185	193	197	195	189	183	2,134	1,714
Hospital and institutional.....	34	32	31	28	23	25	25	28	31	33	37	34	35	365	365
Other nonresidential.....	71	64	61	55	45	45	43	49	61	74	75	67	60	636	496
Military facilities ¹⁰	115	110	99	83	78	82	88	95	101	98	97	90	90	1,030	1,307
Highways.....	425	360	255	180	150	155	214	320	389	492	479	440	400	3,750	3,160
Sewer and water.....	99	97	89	83	70	77	77	83	88	91	94	89	85	982	883
Miscellaneous public service enterprises ¹¹	26	20	16	14	11	13	15	16	19	23	25	25	22	218	200
Conservation and development.....	59	57	51	45	38	45	52	58	61	63	64	67	68	704	830
All other public ¹²	17	14	14	13	10	11	10	11	12	13	15	14	14	148	112

¹ Joint estimates of the Bureau of Labor Statistics, U. S. Department of Labor, and the Business and Defense Services Administration, U. S. Department of Commerce. Estimated construction expenditures represent the monetary value of the volume of work accomplished during the given period of time. These figures should be differentiated from permit valuation data reported in the tabulations for building permit activity (tables F-3, F-4, and F-5) and the data on value of contract awards reported in table F-2.

² Preliminary.

³ Revised.

⁴ Includes major additions and alterations.

⁵ Includes hotels, dormitories, and tourist courts and cabins.

⁶ Expenditures by privately owned public utilities for nonresidential building are included under "Public utilities."

⁷ Includes Federal contributions toward construction of private nonprofit hospital facilities under the National Hospital Program.

⁸ Covers privately owned sewer and water facilities, roads and bridges, and miscellaneous nonbuilding items such as parks and playgrounds.

⁹ Includes nonhousekeeping public residential construction as well as housekeeping units.

¹⁰ Covers all construction, building as well as nonbuilding (except for production facilities, which are included in public industrial building).

¹¹ Covers primarily publicly owned airports, electric light and power systems, and local transit facilities.

¹² Covers public construction not elsewhere classified, such as parks, playgrounds, and memorials.

TABLE F-2: Contract awards: Public construction, by ownership and type of construction ¹

Ownership and type of construction ²	Value (in millions)														1954 Total	1953 Total
	1955				1954								1954 Total			
	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May		Apr.		
All public construction.....	\$770.1	\$775.8	\$506.4	\$521.5	\$728.4	\$566.1	\$734.2	\$723.5	\$657.0	\$815.3	\$925.2	\$700.9	\$836.2	\$8,293.8	\$8,470.8	
Federally owned.....	111.8	139.7	77.6	82.4	87.2	92.8	136.4	109.1	73.7	96.5	188.0	117.2	258.1	1,407.1	2,154.2	
Residential building.....	.1	0	8.3	0	0	(³)	0	.3	(³)	0	.2	(³)	2.4	3.9	15.0	
Nonresidential building.....	69.4	98.3	29.6	44.8	33.4	62.9	81.6	55.9	42.8	66.1	119.6	70.6	198.9	863.8	1,525.2	
Educational.....	1.2	(³)	(³)	(³)	.1	(³)	3.1	1.3	.2	1.2	.4	1.6	.1	14.6	13.4	
Hospital and institutional.....	6.7	5.8	.4	6.8	.4	16.5	8.1	4.2	1.8	.5	15.3	13.6	1.4	72.9	29.7	
Administrative and general.....	3.3	4.4	2.0	3.8	1.4	4.1	2.5	4.7	2.9	3.3	7.6	2.3	3.0	38.7	45.7	
Other nonresidential building.....	58.2	88.1	27.2	34.2	31.5	42.3	67.9	45.7	37.9	61.1	96.3	53.1	194.4	737.6	1,436.4	
Airfield building.....	10.4	17.5	4.9	14.8	9.5	7.7	6.4	1.7	.5	3.6	13.4	5.6	17.2	89.7	71.9	
Industrial.....	15.7	47.3	10.5	6.8	10.9	29.0	22.1	23.5	20.6	19.6	44.1	20.4	142.8	390.3	1,151.9	
Troop housing.....	10.0	6.0	.6	3.7	3.2	.9	29.8	8.5	3.2	.8	6.0	8.5	2.9	68.5	60.7	
Warehouses.....	4.8	7.5	6.3	1.5	2.3	.4	3.0	1.6	3.4	25.1	7.1	6.1	24.4	82.3	64.7	
All other.....	17.3	9.8	4.9	7.4	5.6	4.3	6.6	10.4	10.2	12.0	25.7	12.5	7.1	106.8	87.2	
Airfields.....	17.9	16.2	10.6	22.3	5.9	7.0	11.9	14.1	11.2	12.5	14.3	16.5	20.3	152.9	103.9	
Conservation and development.....	12.4	11.9	20.8	6.0	19.2	16.0	32.2	23.8	7.4	6.6	29.9	16.9	23.3	199.7	225.5	
Highway.....	5.2	6.0	2.9	2.8	6.7	2.8	6.0	6.4	6.3	7.2	8.6	3.2	4.6	62.4	52.9	
Electric power utilities.....	3.2	4.3	3.1	1.3	15.6	1.4	3.6	5.0	1.8	.7	6.2	3.9	4.6	66.7	156.8	
All other federally owned.....	3.6	3.0	2.3	5.2	6.4	2.7	1.1	3.6	4.2	3.4	9.2	6.1	4.0	57.7	74.9	
State and locally owned.....	658.3	636.1	428.8	439.1	641.2	473.3	597.8	614.4	583.3	718.8	737.2	583.7	578.1	6,886.7	6,316.6	
Residential building.....	14.5	16.5	16.6	7.9	9.8	12.1	10.1	28.7	22.1	37.5	42.6	18.5	14.5	254.6	331.5	
Nonresidential building.....	246.6	260.7	183.9	224.3	246.7	203.6	225.7	261.4	248.6	292.5	293.3	243.7	227.1	2,869.4	2,258.7	
Educational.....	199.7	206.0	137.6	132.1	172.8	153.0	165.6	177.8	185.4	206.9	214.5	195.4	171.1	2,077.9	1,629.3	
Hospital and institutional.....	15.7	10.6	12.2	20.3	21.8	16.1	14.7	22.5	19.5	37.4	19.1	18.8	19.4	245.1	237.3	
Administrative and general.....	14.0	24.5	15.1	28.0	14.8	12.9	23.0	39.2	24.8	20.3	37.1	16.2	19.3	253.5	147.8	
Other nonresidential building.....	17.2	19.6	19.0	43.9	37.3	21.6	22.4	21.9	18.9	27.9	22.6	13.3	17.3	292.9	244.3	
Highway.....	268.7	248.3	161.0	121.4	270.2	179.7	244.0	240.9	226.0	292.7	299.7	225.5	223.4	2,684.6	2,662.8	
Sewerage systems.....	46.3	44.0	28.1	35.8	33.3	29.3	64.3	37.1	36.3	46.4	47.4	35.8	54.0	472.7	469.4	
Water supply facilities.....	26.8	28.2	24.0	27.6	28.9	23.7	26.7	25.5	23.2	24.8	24.3	35.6	27.6	292.7	282.7	
Utilities.....	43.8	29.0	8.2	12.7	42.4	15.8	10.5	12.4	17.0	13.7	21.9	11.5	17.7	197.4	185.3	
Electric power.....	34.2	2.0	3.9	4.3	27.4	11.6	3.4	3.3	12.3	7.1	6.0	4.2	15.3	105.3	72.4	
Other utilities.....	9.6	27.0	4.3	8.4	15.0	4.2	7.1	9.1	4.7	6.6	15.9	7.3	2.4	92.1	112.9	
All other State and locally owned.....	11.6	9.4	7.0	9.4	9.9	9.1	16.5	8.4	10.1	11.2	8.0	13.1	13.8	115.3	126.2	

¹ Prepared jointly by the Bureau of Labor Statistics, U. S. Department of Labor and the Business and Defense Services Administration, U. S. Department of Commerce. Includes major force account projects started, principally by TVA and State highway departments.

² Types not shown separately are included in the appropriate "other" category.

³ Less than \$50,000.

TABLE F-3: Building permit activity: Valuation, by private-public ownership, class of construction, and type of building ¹

Class of construction, ownership, and type of building	Valuation (in millions)									
	1955					1954				
	Apr.	Mar.	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	Annual total
All building construction.....	\$1,839.7	\$1,785.5	\$1,223.1	\$1,126.8	\$1,226.7	\$1,345.2	\$1,471.5	\$1,446.6	\$1,539.3	\$16,464.9
Private.....	1,710.8	1,638.7	1,102.9	1,038.7	1,098.6	1,225.9	1,349.3	1,318.0	1,387.8	14,806.8
Public.....	128.9	146.8	120.2	88.1	128.1	119.3	122.1	128.5	151.5	1,658.2
New residential building.....	1,216.5	1,153.9	757.5	711.5	742.6	838.2	894.1	912.6	928.8	9,990.7
New dwelling units (housekeeping only).....	1,199.7	1,136.0	743.2	702.6	729.4	830.1	881.6	905.0	920.6	9,854.5
Privately owned.....	1,192.6	1,127.8	728.9	699.9	718.1	827.2	879.6	892.0	906.4	9,695.2
1-family.....	1,124.9	1,034.7	673.4	647.9	665.5	767.4	816.5	837.0	847.5	8,918.3
2-family.....	21.7	26.1	15.0	12.8	16.1	17.3	16.9	17.4	18.2	210.7
3- and 4-family.....	9.4	8.3	6.5	6.2	7.6	6.8	9.2	6.8	6.3	87.6
5-or-more family.....	36.7	58.8	29.0	33.0	28.9	35.7	37.0	30.8	34.4	478.7
Publicly owned.....	7.1	8.2	19.3	2.7	11.3	2.8	2.0	13.0	14.2	159.2
Nonhousekeeping buildings.....	16.7	17.9	14.3	8.9	13.2	8.1	12.5	7.6	8.2	136.2
New nonresidential building.....	476.9	487.2	365.1	320.4	389.9	398.3	457.0	408.0	470.1	5,005.8
Commercial buildings.....	156.2	146.9	122.9	106.8	143.1	141.2	134.5	134.4	143.3	1,591.5
Amusement buildings.....	10.2	6.0	12.6	6.2	7.0	5.0	8.3	7.9	9.6	97.6
Commercial garages.....	4.1	3.0	2.7	5.0	3.4	4.3	7.8	6.5	3.3	60.1
Gasoline and service stations.....	13.5	12.2	8.5	8.8	9.0	10.8	10.6	11.0	12.2	119.9
Office buildings.....	44.7	39.2	31.7	29.8	53.4	41.8	25.8	37.1	41.5	454.6
Stores and other mercantile buildings.....	83.7	86.5	67.5	57.1	70.3	79.4	82.1	71.8	76.7	859.3
Community buildings.....	164.8	185.0	130.2	121.3	139.1	139.0	153.8	143.3	166.1	1,870.5
Educational buildings.....	108.4	127.3	85.2	77.4	96.7	80.6	96.7	89.1	106.2	1,173.6
Institutional buildings.....	20.3	25.4	22.9	21.7	20.2	28.5	18.7	23.3	24.5	335.5
Religious buildings.....	36.0	32.2	22.2	22.2	22.2	29.8	38.4	30.8	35.3	361.5
Garages, private residential.....	19.7	13.2	5.5	5.8	6.8	13.0	17.6	19.2	18.2	166.4
Industrial buildings.....	66.0	74.0	49.8	44.7	50.8	42.1	82.9	48.1	53.1	662.3
Public buildings.....	24.2	24.3	16.2	16.6	18.4	35.9	28.6	32.8	48.6	304.6
Public utilities buildings.....	31.5	24.4	28.5	13.2	20.0	12.7	20.3	14.4	21.1	209.4
All other nonresidential buildings.....	14.6	19.5	11.9	12.1	11.7	14.4	19.1	15.9	19.8	201.1
Additions, alterations, and repairs.....	146.3	144.3	100.5	94.9	94.3	108.7	120.3	126.0	140.5	1,468.4

¹ These statistics on building construction authorized by local building permits measure building activity in all localities having building-permit systems—rural nonfarm as well as urban. Such localities (over 7,000) include about 80 percent of the nonfarm population of the country, according to the 1950 Census. The data cover both federally and nonfederally owned projects. Figures on the amount of construction contracts awarded for Federal projects and for public housing (Federal, State, and local) in permitting places are added to the valuation data (estimated cost entered by builders on building-permit applications) for privately owned projects;

construction undertaken by State and local governments is reported by local officials. No adjustment has been made in the building-permit data to reflect the fact that permit valuations generally understate the actual cost of construction, nor for lapsed permits or the lag between permit issuance or contract-award dates and start of construction. Therefore, they should not be considered as representing the volume of building construction started. Components may not always equal totals because of rounding.

² Revised.

TABLE F-4: Building permit activity: Valuation, by class of construction and geographic region ¹

Class of construction and geographic region	Valuation (in millions)									
	1955					1954				
	Apr.	Mar.	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	Annual total
All building construction ¹	\$1,839.7	\$1,785.5	\$1,223.1	\$1,126.8	\$1,226.7	\$1,345.2	\$1,471.5	\$1,446.6	\$1,539.3	\$16,464.9
Northeast.....	405.0	385.8	220.8	250.1	256.3	287.4	298.2	288.2	361.1	3,657.1
North Central.....	590.5	501.4	312.8	288.6	326.4	385.8	435.2	431.0	480.0	4,834.3
South.....	414.4	457.2	379.1	341.1	320.1	339.7	386.2	389.9	354.3	4,133.0
West.....	429.8	441.0	310.4	296.9	323.9	332.4	351.9	337.5	344.0	3,840.4
New dwelling units (housekeeping only).....	1,199.7	1,136.0	743.2	702.6	729.4	830.1	881.6	905.0	920.6	9,854.5
Northeast.....	262.1	244.8	124.6	141.8	141.1	167.0	174.7	186.1	210.3	2,157.1
North Central.....	384.5	314.1	182.3	142.4	181.0	237.9	268.1	283.1	284.1	2,905.8
South.....	255.6	281.8	227.0	206.3	184.0	206.8	210.7	225.0	214.5	2,340.3
West.....	297.5	295.3	209.3	212.0	223.3	218.3	228.1	210.8	211.8	2,451.2
New nonresidential buildings.....	476.9	487.2	365.1	320.4	389.9	398.3	457.0	408.0	470.1	5,005.8
Northeast.....	107.5	107.0	73.4	86.9	93.9	96.0	96.0	74.6	117.9	1,145.5
North Central.....	163.5	142.9	107.6	74.4	117.0	117.8	126.8	110.1	154.2	1,489.2
South.....	110.1	130.8	113.7	101.1	106.5	102.6	144.1	129.5	100.6	1,363.1
West.....	95.9	106.5	70.5	58.0	72.5	82.0	89.6	93.8	97.3	1,007.9
Additions, alterations, and repairs.....	146.3	144.3	100.5	94.9	94.3	108.7	120.3	126.0	140.5	1,468.4
Northeast.....	33.6	31.7	20.4	19.6	20.2	23.4	25.7	26.1	31.8	335.9
North Central.....	39.3	42.7	22.1	20.6	23.5	28.4	37.8	36.2	39.5	404.0
South.....	39.2	36.9	32.3	31.8	26.3	29.0	29.2	32.1	36.8	391.2
West.....	34.2	33.0	25.6	22.9	24.2	28.0	27.6	31.6	32.3	337.3

¹ See table F-3, footnote 1.

² Revised

³ Includes new nonhousekeeping residential building, not shown separately.

TABLE F-5: Building permit activity: Valuation, by metropolitan-nonmetropolitan location and State¹

State and location	Valuation (in millions)									
	1955			1954						
	Mar.	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	Annual total
All States	\$1,785.5	\$1,223.1	\$1,126.8	\$1,226.7	\$1,345.2	\$1,471.5	\$1,446.6	\$1,539.3	\$1,519.2	\$16,464.9
Metropolitan areas ³	1,431.5	993.7	926.1	1,010.2	1,078.8	1,145.9	1,146.9	1,236.8	1,227.9	13,161.1
Nonmetropolitan areas	354.0	229.4	200.7	216.5	266.4	325.6	299.7	302.5	291.3	3,303.8
Alabama	15.4	14.3	9.9	7.8	12.5	14.2	12.7	13.4	12.3	135.8
Arizona	17.2	15.4	12.1	12.5	11.0	16.8	10.9	11.3	12.5	145.1
Arkansas	5.2	4.2	4.1	6.1	4.6	3.8	6.0	5.5	5.1	77.4
California	308.4	209.9	206.3	222.9	226.6	214.7	220.1	231.7	231.1	2,571.0
Colorado	25.9	18.0	23.1	24.2	17.0	26.8	22.9	26.3	23.3	245.3
Connecticut	37.8	17.3	17.1	21.4	28.2	28.2	29.9	31.5	27.4	320.4
Delaware	6.9	2.3	2.9	1.5	2.4	4.5	4.7	5.0	5.7	49.6
District of Columbia	10.0	5.0	2.3	9.5	18.6	3.2	5.3	2.1	2.9	72.7
Florida	71.3	61.2	57.2	56.7	55.9	60.7	58.1	49.9	57.1	649.7
Georgia	23.6	23.7	24.7	20.1	17.9	18.8	22.4	21.1	19.5	267.8
Idaho	3.2	1.7	.7	1.4	3.0	3.2	3.4	2.6	2.5	30.5
Illinois	118.6	63.0	49.8	70.2	83.5	87.9	89.2	95.7	98.0	985.9
Indiana	39.7	19.8	18.2	20.0	26.1	33.0	27.7	34.7	28.2	340.8
Iowa	22.0	5.9	5.5	7.8	15.2	12.0	12.9	12.0	14.5	141.3
Kansas	18.1	14.3	9.5	13.8	24.9	12.9	12.6	11.8	12.6	168.8
Kentucky	13.4	8.4	10.7	6.6	11.8	10.4	12.7	12.3	12.3	170.7
Louisiana	24.5	34.6	27.1	16.3	17.4	17.6	21.3	18.8	22.9	216.8
Maine	2.6	1.7	.5	4.7	2.7	2.7	2.5	2.7	3.0	30.2
Maryland	38.2	42.3	35.3	30.9	32.9	39.8	39.1	37.1	34.4	402.5
Massachusetts	45.2	24.3	20.4	27.7	36.6	38.6	25.5	36.0	38.5	391.8
Michigan	92.2	62.2	54.8	69.7	68.4	100.5	86.7	93.4	106.8	1,007.8
Minnesota	32.4	16.1	12.8	25.0	27.8	34.5	32.2	40.4	33.3	358.1
Mississippi	5.4	4.7	3.3	7.7	4.2	4.8	5.8	6.7	4.1	62.4
Missouri	30.9	28.1	19.0	23.5	20.6	22.6	24.9	26.6	32.7	304.6
Montana	2.9	.8	1.3	2.9	3.9	2.9	3.5	2.3	3.5	39.7
Nebraska	9.8	2.7	3.2	4.5	8.1	7.4	7.9	7.0	6.3	77.8
Nevada	7.2	7.5	6.2	8.7	6.3	9.1	4.0	5.8	4.1	82.0
New Hampshire	4.2	.8	.9	4.4	3.1	2.2	1.7	2.5	2.1	27.6
New Jersey	78.8	44.3	48.9	49.4	55.8	61.2	50.6	59.7	62.0	686.3
New Mexico	8.4	5.8	6.8	3.7	5.9	5.8	7.3	5.8	5.3	72.3
New York	126.6	81.0	98.4	101.8	100.9	97.7	111.1	155.3	161.1	1,412.8
North Carolina	26.0	19.7	15.8	12.9	11.5	12.8	16.1	19.4	14.4	181.6
North Dakota	1.2	.3	.3	1.1	2.2	3.9	3.6	2.9	3.8	29.8
Ohio	101.0	64.2	50.1	65.8	76.0	82.2	96.9	104.7	106.2	985.1
Oklahoma	17.4	11.9	10.4	8.8	12.8	11.4	11.9	14.2	10.0	137.4
Oregon	13.4	13.3	8.3	9.7	10.7	13.9	16.0	17.5	11.7	151.0
Pennsylvania	85.6	49.3	60.4	44.1	45.8	63.8	62.7	67.8	70.9	734.3
Rhode Island	4.3	1.9	3.4	2.1	3.8	3.1	2.7	3.5	3.2	44.5
South Carolina	18.7	6.0	6.1	5.9	5.4	5.1	6.3	6.4	5.3	67.3
South Dakota	2.6	1.0	1.1	1.8	3.0	2.8	2.8	6.3	2.9	32.7
Tennessee	19.0	14.3	18.9	13.2	14.5	20.5	18.5	16.7	21.9	209.9
Texas	107.9	90.0	83.8	87.5	83.3	92.6	98.3	79.7	78.5	946.4
Utah	14.6	4.2	3.1	4.9	9.0	16.7	11.1	10.9	10.2	105.1
Vermont .....	.8	.2	.2	.8	.6	.8	1.4	2.1	.8	9.3
Virginia	49.1	33.7	26.6	25.9	30.0	54.2	46.2	40.1	32.6	420.1
Washington	38.4	33.3	27.9	31.2	37.2	39.3	35.6	27.6	31.9	375.3
West Virginia	5.4	2.7	2.1	2.6	4.0	11.6	5.4	5.9	7.6	65.1
Wisconsin	33.1	35.2	14.2	23.0	29.9	35.3	33.6	44.5	40.1	401.5
Wyoming	1.5	.9	1.1	1.8	1.8	2.7	2.7	2.1	2.1	23.2

¹ See table F-3, footnote 1.² Revised.³ Comprised of 168 Standard Metropolitan Areas used in 1950 Census.

TABLE F-6: Number of new permanent nonfarm dwelling units started, by ownership and location, and construction cost¹

Period	Number of new dwelling units started								Estimated construction cost (in thousands) ³			
	Total	Privately owned	Publicly owned	Location ²					Total	Privately owned	Publicly owned	
				Metropolitan places	Nonmetropolitan places	North-east	North Central	South				West
1950 ⁴	1,396,000	1,352,200	43,800	1,021,600	374,400	(2)	(2)	(2)	(2)	\$11,788,595	\$11,418,371	\$370,224
1951	1,091,300	1,020,100	71,200	776,800	314,500	(2)	(2)	(2)	(2)	9,800,892	9,186,123	614,769
1952	1,127,000	1,068,500	58,500	794,900	332,100	(2)	(2)	(2)	(2)	10,208,983	9,706,276	502,707
1953	1,103,800	1,068,800	35,000	803,500	300,300	(2)	(2)	(2)	(2)	10,488,003	10,181,185	306,818
1954	1,220,400	1,201,700	18,700	896,900	323,500	243,100	325,800	359,700	291,800	12,478,237	12,309,200	169,037
1953: First quarter	257,100	238,100	19,000	184,400	72,700					2,346,213	2,183,710	162,503
January	72,100	68,200	3,900	51,300	20,800	(2)	(2)	(2)	(2)	641,703	610,344	31,359
February	79,200	73,800	5,400	56,300	22,900	(2)	(2)	(2)	(2)	720,234	674,399	45,835
March	105,800	96,100	9,700	76,800	29,000	(2)	(2)	(2)	(2)	984,276	898,967	85,309
Second quarter	324,300	315,000	9,300	238,100	86,200					3,083,256	3,000,120	83,136
April	111,400	107,400	4,000	80,400	31,000	(2)	(2)	(2)	(2)	1,057,899	1,022,836	35,063
May	108,300	105,600	2,700	81,100	27,200	(2)	(2)	(2)	(2)	1,027,221	1,001,693	25,528
June	104,600	102,000	2,600	76,600	28,000	(2)	(2)	(2)	(2)	998,136	975,591	22,545
Third quarter	285,000	280,700	4,300	207,800	77,200					2,777,607	2,739,288	38,339
July	96,700	96,400	300	71,500	25,200	(2)	(2)	(2)	(2)	941,943	938,871	3,072
August	93,200	92,200	1,000	67,300	25,900	(2)	(2)	(2)	(2)	911,681	902,501	9,180
September	95,100	92,100	3,000	69,000	26,100	(2)	(2)	(2)	(2)	923,983	897,896	26,087
Fourth quarter	237,400	234,500	2,900	173,200	64,200					2,280,927	2,258,087	22,840
October	90,100	90,100	(5)	63,800	26,300	(2)	(2)	(2)	(2)	883,455	882,838	617
November	81,500	79,900	1,600	59,500	22,000	(2)	(2)	(2)	(2)	777,479	764,774	12,705
December	65,800	64,500	1,300	49,900	15,900	(2)	(2)	(2)	(2)	619,993	610,475	9,518
1954: First quarter	236,800	232,200	4,600	174,300	62,500	47,400	52,700	77,600	59,100	2,240,448	2,199,446	41,002
January	66,400	65,100	1,300	49,700	16,700	13,000	13,300	22,500	17,600	618,313	605,951	12,362
February	75,200	73,900	1,300	53,500	21,700	13,300	16,200	26,100	19,600	701,934	690,760	11,174
March	95,200	93,200	2,000	71,100	24,100	21,100	23,200	29,000	21,900	920,201	902,735	17,466
Second quarter	332,700	326,500	6,200	244,000	88,700	67,300	88,400	90,900	76,100	3,454,571	3,388,898	65,673
April	107,700	106,500	1,200	79,400	28,300	21,700	31,100	29,300	25,600	1,106,809	1,095,557	11,252
May	108,500	107,400	1,100	77,100	31,400	21,600	32,900	30,000	24,000	1,137,562	1,128,751	8,811
June	116,500	112,600	3,900	87,500	29,000	24,000	34,400	31,600	26,500	1,210,200	1,174,590	35,610
Third quarter	346,000	339,300	6,700	252,800	93,200	72,500	97,800	98,900	75,800	3,590,366	3,528,471	61,895
July	116,000	112,900	3,100	87,500	28,500	25,300	33,300	32,200	25,200	1,213,311	1,182,830	30,481
August	114,300	113,000	1,300	82,600	31,700	24,800	32,600	31,700	25,200	1,186,019	1,175,766	10,253
September	115,700	113,400	2,300	82,700	33,000	22,400	31,900	36,000	25,400	1,191,036	1,169,875	21,161
Fourth quarter	304,900	303,700	1,200	225,800	79,100	55,900	76,900	91,300	80,800	3,192,852	3,182,385	10,467
October	110,700	110,500	200	80,400	30,300	21,600	30,100	31,800	27,200	1,160,300	1,158,338	1,962
November	103,600	103,300	300	75,700	27,900	19,000	26,800	31,500	26,300	1,083,449	1,080,578	2,871
December	90,600	89,900	700	69,700	20,900	15,300	20,000	28,000	27,300	949,103	943,469	5,634
1955: First quarter ⁵	294,500	291,300	3,200	220,500	74,000					3,074,324	3,043,727	30,597
January	87,600	87,300	300	68,100	19,500	16,000	15,600	30,600	25,400	892,794	880,092	2,702
February	89,900	87,900	2,000	66,900	23,000	13,500	19,700	32,400	24,300	954,570	934,585	19,985
March ⁶	117,000	116,100	900	85,500	31,500	(8)	(8)	(8)	(8)	1,226,960	1,219,050	7,910
Second quarter												
April ⁶	127,000	126,500	500	93,300	33,700	(8)	(8)	(8)	(8)	1,332,668	1,328,250	4,418
May ⁶	132,000	129,500	2,500	97,500	34,500	(8)	(8)	(8)	(8)	1,408,778	1,385,650	23,128

¹ The data shown here do not include temporary units, conversions, dormitory accommodations, trailers, or military barracks. They do include prefabricated housing, if permanent.

These estimates are based on (1) monthly building-permit reports (adjusted for lapsed permits and for lag between permit issuance and the start of construction) (2) continuous field surveys in nonpermit-issuing places, and (3) reports of public construction contract awards.

Beginning with January 1954 data, the estimating techniques for the privately owned segment of the housing starts series were revised to combine (1) a monthly reporting system expanded to include almost all building-permit-issuing localities (accounting for nearly 80 percent of total nonfarm population), with (2) a newly designed sample of counties that permits more efficient operations and a greater degree of accuracy than previously. The new series is continuous with statistics for earlier dates except that the urban and rural-nonfarm distribution shown previously is replaced by metropolitan-nonmetropolitan and regional estimates. Data on type of structure (1-family versus rental-type structures) are continued from the old to the new series, and are available on request.

The error in the total private nonfarm estimate due to sampling in the

nonpermit segment is such that for an estimate of 100,000 starts the chances are 19 out of 20 that a complete enumeration of all nonpermit areas would result in a total private nonfarm figure between 98,000 and 102,000. For metropolitan-nonmetropolitan or regional components, the relative error is somewhat larger.

² Data by urban and rural-nonfarm classification for periods before January 1954 are available upon request. Annual metropolitan-nonmetropolitan location data not available before 1950; monthly figures not available before 1953; regional data not available before January 1954.

³ Private construction costs are based on permit valuation, adjusted for understatement of costs shown on permit applications. Public construction costs are based on contract values or estimated construction costs for individual projects.

⁴ Housing peak year.

⁵ Less than 50 units.

⁶ Preliminary.

⁷ Revised.

⁸ Not yet available.

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