

# Monthly Labor Review

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5

**Strike-Control Provisions in Union Constitutions**

**Analysis of Work Stoppages During 1953**

**The Shortage of Creative Manpower**

**British Industrial Injuries Insurance System**

**Trends in Commodity Prices and Service Rates**

**UNITED STATES DEPARTMENT OF LABOR**

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# Monthly Labor Review

UNITED STATES DEPARTMENT OF LABOR • BUREAU OF LABOR STATISTICS

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LAWRENCE R. KLEIN, *Editor*

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# In the June Issue of the Review —

## Arbitration in Bethlehem Steel

In an entirely new kind of study the Bureau of Labor Statistics has reviewed and analyzed the decisions in somewhere close to 1,000 grievance arbitration cases between Bethlehem and the United Steelworkers of America. The article in the June issue is based on one of the chapters of that study and is concerned with grievances arising over the imposition of discipline in various circumstances.

## Workmen's Compensation in Ontario

A descriptive review of the operation of this often referred to and frequently debated system by the two students in the field of disability insurance who wrote the article in this issue on British experience. These two articles supplement the workmen's compensation series carried in the Review last year.

## Employee Attitudes and Output

Based on in-the-plant studies by the University of Michigan Institute for Social Research, this article examines the relationship between the factors affecting the attitudes of workers and the output of individuals and departments. The essay will later this summer appear as a chapter in a Harper & Brothers volume entitled "Manpower in the United States."

## **In Addition—**

Other articles and summaries of studies including Earnings in the Machinery Industry and The Austrian Wage-Price Agreements.

## **As in Every Issue—**

The regular Departments: The Labor Month in Review, Significant Decisions in Labor Cases, Chronology of Recent Labor Events, Developments in Industrial Relations, Book Reviews and Notes, and 50 pages of Current Labor Statistics.

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# The Labor Month in Review

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EMPLOYMENT ROSE and unemployment declined in an expected and seasonal manner in April. The quarter-of-a-million drop in unemployment brought the total down to 3.5 million, but the number out of work 15 weeks or longer showed practically no change from March and constituted nearly a third of the total, more than double the proportion in April 1953. The improvement was largely in construction, agriculture, and retail trade. Employment in manufacturing industries was down by a quarter of a million from March and 1.3 million under April 1953, mostly in durable goods. The factory workweek was 2 hours below a year ago, the equivalent of \$3.60 at the April 1954 average hourly rate.

It was perhaps the negative side of this picture plus the persistence of unfavorable conditions in particular segments of the economy which prompted direct appeals to Government by major labor organizations.

The United Mine Workers of America, on May 8, called for a program of tax relief, improved unemployment compensation, public works, currency readjustments, credit expansion, and protection from foreign competition. The CIO Textile Workers, at its biennial convention a week earlier, also called for a program of Government aid to relieve depressed conditions in the textile industry. The TWUA asked for a statutory 35-hour week with 40 hours' pay, stockpiling of military fabrics, reduced raw wool import duties but a 45-percent duty on imported fabrics, and special measures to retrain displaced textile workers and to locate new industrial plants in areas of surplus labor supply. In a much publicized luncheon meeting, the presidents of the independent United Mine Workers, the AFL Teamsters, and the CIO Steelworkers agreed to jointly seek Government action on various forms of economic assistance. There was no statement that substantially affirmed or denied the speculation over a merger of the steel and coal

unions. On May 11, the CIO, with an admonition "not to be lulled by any slight seasonal improvement," held a full employment conference in Washington. Congressional and administration speakers addressed the delegates, who adopted recommendations similar to those listed above.

CONTRACT NEGOTIATIONS during April and May were obviously affected by the general economic uncertainty and by the special problems afflicting particular industries. In textiles the situation for the unions was one of resistance to wage cuts. A number of companies in the woolen and worsted industry extended existing agreements for a brief period pending settlement of the strike by the CIO Textile Workers Union at the American Woolen Co. over a proposed 21½-cent average hourly wage cut. The strike began April 26. The Botany Mills and the TWUA concluded a new 2-year agreement which reduced the cost-of-living allowance but increased hospital benefits. One week after the signing, the company exercised a wage reopening clause and asked for a 16½-cent wage cut. The issue is expected to go to arbitration.

Local 12 of the CIO Auto Workers and the Kaiser-Willys firm in mid-April agreed to convert their method of wage payment from piecework to a flat hourly rate. The change was at first widely termed a wage cut but the union vigorously denied this interpretation. All parties agreed that the move would make the company more competitive with other segments of the industry.

Negotiations between the Steelworkers and the basic steel industry began on May 18 with U. S. Steel, with the union committed to seek wage and fringe benefit increases of unspecified values and a guaranteed annual wage. The contract expires at the end of June.

Although its major contracts do not come up for review until next spring, the CIO Auto Workers union revealed the "guaranteed employment plan" it will then seek. In brief, for any 52-week period it would provide each worker who had seniority either 40 hours of work per week or pay in lieu of work. The employer liability would be reduced by the amount of unemployment insurance paid a worker, who must register with the State employment service for available "suitable" employment (to be defined later). The employer's liability and trust fund payments would vary with the

kinds of layoffs imposed. Administration would be joint, with an impartial umpire.

The United States Chamber of Commerce, taking cognizance of the several plans already in or intended for negotiation, has suggested that employers devote "serious study" to means of stabilizing worker income and employment and that State legislatures examine the need for more adequate unemployment insurance benefits. The Chamber also advocated a closer check on unemployment insurance eligibility qualifications and consideration of several possible plans employers could institute for advancing layoff security.

TWO NORTH AMERICAN AVIATION locals of the auto union, which sustained a long strike last fall, are undergoing aggressive organizational efforts of interest. The Port Columbus, Ohio, local plant has been placed under an administratorship by the international union's executive board to strengthen it against a possible representation election for which a petition was filed with the National Labor Relations Board during the strike. The Los Angeles local is conducting a rather unique membership drive and contest. The regular \$5 initiation fee is waived. The grand prize for the member bringing in the most new members is a choice between a 1954 automobile or an all-expense air tour to Hawaii for 2, with 2 weeks' pay, new luggage for 2, and new summer clothing for both travelers.

BOTH MAJOR LABOR FEDERATIONS again took up the matter of the proposed no-raiding agreement in May. Such an agreement is almost axiomatically a prerequisite to organic unity of the two organizations. But a key affiliate of each group is disinclined to sign—the AFL Teamsters and the CIO Steelworkers.

Within the AFL a major jurisdictional dispute—between the Teamsters and Railway Clerks over railway express employees—underscored the importance of the AFL Executive Council meeting called in Chicago for mid-May. (The agenda included consideration of a 1953 convention directive to review the Federation's constitution.) The Clerks have asked for a National Mediation Board

election on a nationwide, winner-take-all basis. The Teamsters want the Federation to settle the dispute without an election.

THE AFL AUTO WORKERS UNION was without a president following the resignation on May 8 of Lester Washburn over the refusal of the union's executive board to support him in a drive to oust racketeering locals and to rid "the union of those elements that have brought it disgrace and disrespect." Washburn, a member of the original executive board of the CIO Auto Workers before a factional fight established the AFL rival group 15 years ago, had expelled 5 New York locals. He also had expelled convict John Dioguardi from membership. Anthony Doria, secretary-treasurer of the union, led the opposition to the expulsions.

Charles J. MacGowan, 67-year-old president of the International Brotherhood of Boilermakers and Blacksmiths, in a voluntary and peaceful shift of leadership, announced his resignation, effective July 1. William A. Calvin, assistant to MacGowan, succeeds him.

The Amalgamated Clothing Workers of America (CIO) in May began its 40th year, possessor of nearly 400,000 members, two banks, housing projects, medical centers, and a long record of stable employer relations. The National Child Labor Committee passed the half-century mark on April 21. This organization spearheaded many of the early legislative drives to take children of school age out of employment and to correct many of the almost forgotten abuses attendant to the employment of minors.

FURTHER DEVELOPMENTS in the inter-union struggle for control of longshoremen on the New York docks waited on results of a new representation election ordered by the NLRB for May 26. Results of a previous balloting between the AFL and independent unions had been invalidated by the Board because of threats of violence during the voting. Early in April the Supreme Court of the United States upheld the constitutionality of two major provisions of the Bi-State Waterfront Commission Compact between New York and New Jersey to control racketeering in hiring and other aspects of employment on the docks.

# Strike-Control Provisions in Union Constitutions\*

Most international union constitutions contain provisions governing the call of strikes by their affiliated local unions. These measures are essentially of two types: (a) those requiring a strike vote by local union members before calling a strike; and (b) those requiring prior approval of a proposed local union strike by the national union officers.

A strike-vote requirement is found also in a few collective bargaining agreements.<sup>1</sup> Such agreement clauses tend to differ from union constitution strike-vote provisions by defining more broadly or more precisely the group of employees eligible to participate in the strike vote or by providing for management participation, jointly with the union, in supervising the balloting and counting of votes. Commonly, strike-control provisions in collective bargaining agreements consist of either an unqualified ban on work stoppages during the term of the contract or a restriction other than absolute prohibition in the form of indicating the exceptions or outlining the specific conditions under which strikes (and lockouts) are permissible.<sup>2</sup>

The Labor-Management Relations (Taft-Hartley) Act of 1947, as amended, makes provision for a vote to determine whether employees wish to accept the final offer of settlement made by their employer in the case of "national emergency" strikes. (Sec. 209 (b).) For other types of disputes, the Director of the Federal Mediation and Conciliation Service is to "seek to induce the parties voluntarily to seek other means of settling the dispute without resort to strike . . . including submission to the employees in the bargaining unit of the employer's last offer of settlement for approval or rejection in a secret ballot." (Sec. 203 (c).)

The Railway Labor Act, which covers railroad and airline employees, includes a variety of provisions designed to forestall strikes, including, where necessary, Presidential emergency boards, but contains no provision for a strike ballot. However, a strike-vote provision was found in about one-half of the railroad and airline union constitutions analyzed.

During World War II, the War Labor Disputes (Smith-Connally) Act required that the Government be notified 30 days in advance of strikes "which threaten seriously to interrupt war production" and provided for a secret ballot of the workers, conducted by the National Labor Relations Board, "on the question whether they will permit any such interruption of war production." (Sec. 8 (a) (3).)

Laws requiring strike votes are currently in effect in 5 States (Florida, Michigan, Minnesota, Utah, and Wisconsin). In cases arising under the laws of Michigan and Minnesota, the courts have ruled them to be inapplicable to interstate commerce.

## Union Constitution Provisions

In early 1954, the Bureau of Labor Statistics analyzed the constitutions of 133 national and international unions. Constitutions or bylaws of local unions were not covered in the study.<sup>3</sup> Of the internationals, 78 required a local union strike vote and 97 required approval by the international office before a local could call a strike

\*Prepared in the Bureau's Division of Wages and Industrial Relations. This report supplements an earlier tabulation submitted by the Department of Labor in response to a request of the Senate Committee on Labor and Public Welfare. That tabulation was published in Hearings, 83d Cong., 2d sess., on Proposed Revisions of the Labor-Management Relations Act of 1947, Part 6 (p. 3006). Additional union constitutions, including those of railroad, airline, and government unions, were analyzed for this report.

<sup>1</sup> For a discussion of whether an employer may insist on a contract clause requiring a strike vote, see NLRB Case No. 8-CA-570, Allis-Chalmers Manufacturing Co. and Office Employees International Union, Local 19 (AFL), November 1, 1952.

<sup>2</sup> In this case, the NLRB trial examiner sustained the contention of the union that the company's insistence on acceptance of a strike vote clause in negotiations amounted to interference in internal union affairs. The examiner's recommendations stated that such a clause did not relate to wages or working conditions and was therefore not a matter on which a party has the duty to bargain under the Taft-Hartley Act. This issue is currently under court review.

<sup>3</sup> See Work Stoppage Provisions in Union Agreements, Monthly Labor Review, March 1952 (p. 272).

<sup>4</sup> Most of the national and international union constitutions studied were dated 1951-52 or later. (Hereafter these unions are called internationals.) No information is available on strike-vote requirements in local union constitutions where the internationals did not have such requirements.

TABLE 1.—Provisions for strike vote or control in international union constitutions<sup>1</sup>

Constitutional provision	Number of—		Percent of—	
	Unions	Members (in thousands)	Unions	Members
Total constitutions covered.....	133	15,066	100.0	100.0
Neither local strike vote nor international approval required.....	25	1,115	18.8	7.4
Local strike vote and/or international union strike approval required.....	108	13,951	81.2	92.6
Both local strike vote and international approval required.....	67	8,631	50.4	57.3
Only local strike vote required.....	11	622	8.3	4.1
Only international strike approval required.....	30	4,698	22.5	31.2
Local union strike vote—				
Not required.....	55	5,813	41.4	38.6
Required.....	78	9,253	58.6	61.4
Before and during strike.....	16	3,083	12.0	20.5
Before strike only.....	58	5,921	43.6	39.3
Timing not specified.....	4	249	3.0	1.6
International union approval—				
Not required.....	36	1,737	27.1	11.5
Required.....	97	13,329	72.9	88.5
Unqualified approval <sup>2</sup> .....	80	8,946	60.2	59.4
Approval for strike benefits and/or support.....	17	4,383	12.7	29.1

<sup>1</sup> Excludes unions whose members are employed primarily in government service.

<sup>2</sup> Includes a number of unions which also impose limitations on benefits or support if strike is undertaken without international office approval.

(table 1). The 133 unions covered by the study—62 AFL, 30 CIO, and 41 independent or unaffiliated—have a combined membership of about 15 million workers, or somewhat over 90 percent of all workers estimated to be members of American trade unions, exclusive of unions composed primarily of government employees.<sup>4</sup> Slightly more than four-fifths of all constitutions examined, covering nearly 14 million union members, provided either for a local strike vote, international union approval for a local strike, or both. One out of every two constitutions analyzed included both types of strike-approval requirements.

### Strike-Vote Provisions

A total of 78 constitutions, nearly 60 percent of those examined, covering about 9.3 million

<sup>4</sup> The 133 unions include 21 primarily confined to the railroad and airline industry but exclude unions organizing government workers primarily. The constitutions of 20 such unions were analyzed separately and the results are given later in this report. Altogether, the data included in this report cover 153 of the approximately 215 national and international unions known to the Bureau. See Directory of Labor Unions in the United States, 1953 (BLS Bulletin 1127, p. 1).

workers, required a poll of local union members for strike action (table 1). The proportion of constitutions with local strike-vote requirements was approximately the same among AFL, CIO, and unaffiliated or independent unions.

In all cases where timing was specified, voting was to precede the strike call, e. g.:

No [local] strike shall be ordered in violation of any contract between any local union and any employer. No strike shall be ordered without a two-thirds majority by secret ballot of the members.

Sixteen unions, with a membership of 3 million, not only required a strike vote before a strike could occur, but also provided that union members indicate by ballot whether they wished either to continue or to end a strike in progress.

About 2 out of every 3 constitutions requiring a vote specified the method of voting (table 2). A secret ballot, at either a regular or special local union meeting, was expressly required in 31 of the 49 constitutions which referred to the method of voting.

Generally, the voting privilege was extended to local union members in "good standing," although in some cases it was restricted to those who had been members for at least 6 months. Usually, only members who would be directly involved in a strike were permitted to vote, although 3 unions referred to the voting unit in terms of both "members and nonmembers." One union which provided for conducting the strike vote at a membership meeting also specified that ballots must be furnished to members who were unable to attend the meeting.

TABLE 2.—Method and size of strike vote prescribed in international union constitutions

Strike-vote specifications	Unions	Members
Total requiring local strike vote.....	78	9,253,000
Method of local vote:		
By "ballot" <sup>1</sup> .....	4	240,000
By secret ballot.....	31	5,539,000
By referendum.....	14	784,000
No specification.....	29	2,690,000
Size of voting majority required:		
More than half.....	19	2,279,000
Three-fifths.....	1	1,000
65 percent.....	1	15,000
Two-thirds.....	33	4,989,000
Three-fourths.....	11	1,348,000
No specification.....	13	621,000

<sup>1</sup> Constitutions did not specify "secret" or otherwise.



### Voting Majority Requirement

A two-thirds majority was required in about half of the 65 international union constitutions which specified the size of the vote necessary for strike action (table 2). A simple majority vote was specified in 19 constitutions.

In many instances, it was not clear whether approval was required by the majority of the entire local membership, of those directly affected, or of those present at the meeting where the balloting was conducted. In cases where a referendum was to be held, presumably a majority of at least the voting membership was necessary.

Constitutions which defined the majority unit most commonly specified those present at the strike-call meeting or those voting at such a meeting; some specified those "present and voting." Other definitions found in individual constitutions included: the "local"; the "members"; the "membership affected"; the "membership interested"; and the "affected members voting."

In scattered instances, a minimum voting participation was stipulated. One constitution, for example, stated that at least one-fourth of the local must be present and voting; another, at least 50 percent.

### Prior Sanction by International Union

A common prerequisite to strike action by the local union is formal approval by the international union office. Ninety-seven of the one hundred and thirty-three constitutions analyzed, covering over 13.3 million members, called for such approval either before a local strike could be called, or before international union financial support, including strike benefits or other assistance, would be extended (table 1). Most frequently, the authority to grant strike approval was vested in the international union president, the general executive board, or a similar union body.

The more stringent requirement that locals either secure international approval to strike or be subject to disciplinary action, including suspension or expulsion, was found in the constitutions of 80 unions with nearly 9 million members. Examples are the following unqualified provisions:

No strike shall be called without the approval of the International President.

\* \* \*

Neither the International Union nor any of its Local Unions or subordinate bodies, their officers or agents, shall have the power or authority to call, encourage, authorize, ratify, or engage in any strikes or concerted refusal in the course of their employment to use, manufacture, process, or otherwise handle or work on any goods, materials or commodities, or to perform any services, except as expressly authorized or ratified in writing by the International President.

In a few instances, the broad grants of disciplinary authority to the international union's executive office were supplemented by provisions for specific disciplinary action against locals which violated strike-approval requirements.

Contrasted with the unqualified constitutional proviso for strike approval was the requirement in 17 of the 97 constitutions which made financial support, including strike benefits or other international union assistance, contingent upon sanction from the national office. Typical clauses read as follows:

Any local union entering into a strike before the grievance has been submitted to the National President and Executive Board for consideration, or after the grievance has been considered insufficient cause to strike, . . . shall not be sustained or receive any support from the organization.

\* \* \*

The strike expense of any Subordinate Lodge, or any number of Subordinate Lodges within any District, shall be borne and paid by the International Brotherhood to the extent of the Defense Funds at its command. Such financial assistance, however, shall be rendered to Subordinate Lodges only when a strike shall have been ordered and approved by the Executive Council, and then only to such members who shall have signed the strike roll.

In many instances, regardless of the type of provision found, an international union officer, usually the national union president or his designated representative, is called upon to attempt to settle disputed issues between the local union and the employer with whom it bargains.

### Other International Powers Over Local Strikes

The international union office was authorized to call or to end local union strikes in 31 of the 133 international union constitutions studied. In 3,

international officers were given authority to call; in 27, to terminate a local union strike or terminate support or financial assistance; and in 1, to call and end a strike. Constitutions granting international officers the authority to end strikes or withdraw support also required local unions to conduct a prestrike vote or to obtain international union sanction. In these cases, the international could either direct the local union to call off the strike or withdraw its approval and end financial or other assistance. In the latter example, the local union could continue the strike, despite loss of the international union's support. The following provision illustrates the authority given the international union both to terminate a strike and to withdraw support:

Wherever the International Executive Board decides that it is unwise to longer continue an existing strike, it will order all members of Local Unions who have ceased work in connection therewith to resume work and thereupon and thereafter all assistance from the International Union shall cease.

The combined membership of the 4 unions vesting authority in the national office to initiate a strike was 123,000; only 1 had more than 50,000 members. In contrast, international officers possessed strike-termination powers in unions with a total of nearly 7½ million members.

### Government Employees

Strikes by Federal employees are prohibited by the Taft-Hartley Act, Section 305, which provides:

"It shall be unlawful for any individual employed by the United States or any agency thereof including wholly owned Government corporations to participate in any strike. Any individual employed by the United States or by any such agency who strikes shall be discharged immediately from his employment, and shall forfeit his civil-service status, if any, and shall not be eligible for reem-

ployment for 3 years by the United States or any such agency."

Work stoppages to obtain objectives were not advocated in any of the 20 government-employee union constitutions surveyed. These unions covered 750,000 union members. Approximately 525,000 were Federal employees; the remainder were employees of State, city, and local government agencies. Of the 20 constitutions, 11 which covered 430,000 union members specifically banned strikes; all but 3 of the 11 unions included Federal employees primarily. The 9 other constitutions contained no reference to strikes. Most of the constitutions which prohibited strikes incorporated sections dealing with union objectives and methods of attaining them, as illustrated in the following clause:

The objects of this Federation shall be to advance the social and economic welfare and education of the employees of the United States and to aid in the perfection of systems that will make for greater efficiency in the various services of the United States.

The methods for attaining these objects shall be by petition to Congress, by creating and fostering public sentiment favorable to proposed reforms, by cooperation with Government officials and employees, by legislation and other lawful means: *Provided*, that under no circumstances shall this Federation engage in or support strikes against the United States Government.

One union, not included in the group of 20 because it organized industrial workers as well as some Government workers, authorized the national president to sanction local strikes but prohibited strikes "under any circumstances" by members employed in Federal agencies.

Two of the five unions included in the study which covered non-Federal government employees advocated the use of "lawful" and "legitimate" means to achieve their objectives. These unions would, of course, be subject to existing State and local legislation which might ban strike action.

# Analysis of Work Stoppages During 1953

ANN J. HERLIHY AND DANIEL P. WILLIS, JR.\*

STRIKE ACTIVITY in 1953 was lower than in most postwar years when measured in terms of total idleness, but relatively high as measured by the number of stoppages. The number of work stoppages that began in 1953—5,091<sup>1</sup>—was exceeded only in 1952, when 5,117 were recorded. Approximately 2,400,000 workers were directly involved in disputes which started in 1953—400,000 lower than the postwar average. All stoppages in effect during the year resulted in 28,300,000 man-days of idleness—lower than in any year since World War II except 1951. Idleness in 1953 amounted to one-quarter of 1 percent of total time worked, a reduction of more than one-half compared with the previous year. (See table 1.)

Stoppages ending in 1953 lasted an average of 20.3 calendar days, compared with 19.6 days in 1952. Idleness for the average worker involved in a stoppage, however, was somewhat less (11.8 working days), than in the previous year (16.7 days).

Work stoppages in 1953 reflected economic and other factors. Prices were relatively stable despite the termination of economic controls in February, and new production records were attained in many industries. Reconversion problems which had attended the end of hostilities in World War II did not recur after the cessation of Korean hostilities. However, inflationary pressures eased and there was some uncertainty over the economic outlook, especially in the latter months of the year. Union demands and settlements were also influenced by increasing competition among manufacturers of many products; few large strikes of long duration occurred in manu-

facturing industries. Most of the prolonged large stoppages were in the construction industry, which experienced the highest level of activity, in terms of dollar expenditures and physical volume, recorded in the 39 years for which data are available.

Peaceful bargaining in the steel and automobile industries and the absence of a major stoppage in the bituminous-coal industry were generally characteristic of industrial relations. The steel companies and the United Steelworkers (CIO) in June 1953 agreed on an immediate wage increase of 8.5 cents an hour and the elimination of geographic wage differentials by mid-1954. Major automobile manufacturers and the United Automobile Workers (CIO) reached agreement on upward wage adjustments and liberalized pension plans after a reopening of their 5-year contracts, which continue until 1955. With the decline in coal production, the United Mine Workers (Ind.) deferred reopening of their contracts.

Greater stress was placed upon "free bargaining" to settle disputes, even in defense industries. Early in the year the Government did not intercede, except to offer mediation, in the 63-day strike at the Evendale, Ohio, jet aircraft engine plant of General Electric Co., or, later in the year, in the 54-day stoppage involving North American Aviation, Inc.

The emergency provisions of the Labor-Management Relations (Taft-Hartley) Act were invoked by President Eisenhower only once during 1953—in the strike involving about 30,000 longshoremen in ports from Maine to Virginia. The strike followed failure of the International Longshoremen's Association (Ind.) and the New York Shipping Association to agree on a contract to replace the one that expired on September 30. It was closely related to rivalry between this union, which had been expelled from the American Federation of Labor on September 22, and the new ILA chartered by the AFL. The Presidential

\*Of the Bureau's Division of Wages and Industrial Relations.

<sup>1</sup> This is the total number of verified strikes in 1953. It does not include 23 small disputes in which the Bureau was unable to secure information from the parties that an actual work stoppage occurred.

All known work stoppages arising out of labor-management disputes involving 6 or more workers and continuing 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 one shift or longer in establishments directly involved in these stoppages. 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.

A forthcoming bulletin will contain more complete data on stoppages during 1953.

board of inquiry on the strike reported in December that "the two most sensitive points in this dispute are those relating to hiring practices [which, earlier in the year, had been made subject to regulation under New York and New Jersey legislation designed to deal with waterfront corruption] and union representation." The longshoremen returned to work on October 6 after issuance of a court restraining order. The stoppage was not resumed at the end of the 80-day Taft-Hartley injunction, although a new contract had not been signed by that time. The results of the National Labor Relations Board representation election held in December were challenged by the AFL and were still in doubt at the year's end.<sup>2</sup>

No work stoppages of serious proportions developed in the railroad industry during the year,

<sup>2</sup> On April 1, 1954, the Board set aside the election and ordered a new one held.

although several emergency boards were created in 1953 by Executive order under the provisions of the Railway Labor Act. One of these disputes, however, received widespread attention; it involved a wage dispute between the Brotherhood of Railway Clerks (AFL) and the Railway Express Agency in Pittsburgh, Pa., Detroit, Mich., and Milwaukee, Wis. The stoppage lasted 95 days in Pittsburgh and for shorter periods in the other 2 cities, and union employees of the company in over 20 additional cities voted to take strike action before the union called off the strike after a Presidential emergency board was established on December 16.

Efforts by union leaders to curb unauthorized strike action and interunion disputes were evident in the year's developments. Except for the longshore dispute, the general level of stoppages resulting from inter- or intra-union conflicts was slightly below the 2 preceding years.

TABLE 1.—Work stoppages in the United States, 1927 to 1953<sup>1</sup>

Year	Work stoppages		Workers involved <sup>3</sup>		Man-days idle			Year	Work stoppages		Workers involved <sup>3</sup>		Man-days idle		
	Number	Average duration (calendar days) <sup>2</sup>	Number (thousands)	Percent of total employed <sup>4</sup>	Number (thousands)	Percent of estimated working time of all workers <sup>5</sup>	Per worker involved		Number	Average duration (calendar days) <sup>2</sup>	Number (thousands)	Percent of total employed <sup>4</sup>	Number (thousands)	Percent of estimated working time of all workers <sup>5</sup>	Per worker involved
1927	707	26.5	330	1.4	26,200	0.37	79.5	1941	4,288	18.3	2,360	8.4	23,000	0.32	9.8
1928	604	27.6	314	1.3	12,600	.17	40.2	1942	2,968	11.7	840	2.8	4,180	.05	5.0
1929	921	22.6	289	1.2	5,350	.07	18.5	1943	3,752	5.0	1,980	6.9	13,500	.15	6.8
1930	637	22.3	183	.8	3,320	.05	18.1	1944	4,956	5.6	2,120	7.0	8,720	.09	4.1
1931	810	18.8	342	1.6	6,890	.11	20.2	1945	4,750	9.9	3,470	12.2	38,000	.47	11.0
1932	841	19.6	324	1.8	10,500	.23	32.4	1946	4,985	24.2	4,600	14.5	116,000	1.43	25.2
1933	1,695	16.9	1,170	6.3	16,900	.36	14.4	1947	3,693	25.6	2,170	6.5	34,600	.41	15.9
1934	1,856	19.5	1,470	7.2	19,600	.38	13.4	1948	3,419	21.8	1,960	5.5	34,100	.37	17.4
1935	2,014	23.8	1,120	5.2	15,500	.29	13.8	1949	3,606	22.5	3,030	9.0	50,500	.59	16.7
1936	2,172	23.3	789	3.1	13,900	.21	17.6	1950 <sup>6</sup>	4,843	19.2	2,410	6.9	38,900	.44	16.1
1937	4,740	20.3	1,860	7.2	28,400	.43	15.3	1951	4,737	17.4	2,220	5.5	22,900	.23	10.3
1938	2,772	23.6	688	2.8	9,150	.15	13.3	1952	5,117	19.6	3,540	8.8	59,100	.57	16.7
1939	2,613	23.4	1,170	4.7	17,800	.28	15.2	1953 <sup>7</sup>	5,091	20.3	2,400	5.6	28,300	.26	11.8
1940	2,508	20.9	577	2.3	6,700	.10	11.6								

<sup>1</sup> Available information for earlier periods is contained in BLS Bulletin No. 1016, Handbook of Labor Statistics, Table E-2.

<sup>2</sup> Figures are simple averages; each stoppage is given equal weight regardless of its size.

<sup>3</sup> Workers are counted more than once in these figures if they were involved in more than one stoppage during the year. Thus, in 1949, 365,000 to 400,000 coal miners were out on 3 distinct occasions, accounting for 1,150,000 of the total of 3,030,000 workers.

<sup>4</sup> "Total employed workers" for 1927-1950 refers to all workers except those in occupations and professions in which there is little if any union organization or in which stoppages rarely if ever occur. In most industries, it includes all wage and salary workers except those in executive, managerial, or high supervisory positions, or those performing professional work the nature of which makes union organization or group action unlikely. It excludes all self-employed, domestic workers, workers on farms employing fewer than 6 persons, all Federal and State government employees, and officials, both elected and appointed, in local governments.

In 1951, the concept of "total employed workers" was changed to coincide with the Bureau's figures for nonagricultural employment, excluding Government but including workers in all occupational groups. Tests show that the percentage of total idleness computed on the basis of these new figures usually differs from that computed on the old basis by less than one-tenth

of a point while the percentage of workers idle differs by about 0.5 or 0.6 of a point. For example, the percentage of workers idle during 1950 computed on the same base as the figures for earlier years is 6.9 and the percent of idleness is 0.44 compared with 6.3 and 0.4, respectively, computed on the new base.

<sup>5</sup> For each year, "estimated working time" was computed for purposes of this table by multiplying the average number of employed workers (see footnote 4) by the number of days worked by most employees. This number excludes Saturdays when customarily not worked, Sundays, and established holidays.

<sup>6</sup> Beginning in mid-1950, a new source of strike "leads" was added through a cooperative arrangement with the Bureau of Employment Security of the U. S. Department of Labor by which local offices of State employment security agencies supply monthly reports of work stoppages coming to their attention. It is estimated that this increased the number of strikes reported in 1950 by perhaps 5 percent and in 1951 and 1952 by approximately 10 percent. However, since most of the added stoppages were small, they increased the number of workers involved and man-days of idleness by less than 2 percent in 1950 and by less than 3 percent in 1951 and 1952. Tests of the effect of this added source of information have not been made since 1952.

<sup>7</sup> The total of 5,091 strikes does not include 23 disputes involving relatively small numbers of workers for which the Bureau was unable to secure information from the parties that an actual work stoppage occurred.

The AFL established a special committee to devise machinery for the more effective settlement of jurisdictional disputes among its affiliates, and the CIO reported that its procedure for settling jurisdictional problems was functioning successfully. Late in 1953, the AFL and CIO ratified a "no-raiding" pact applying to international unions which voluntarily agree to be bound by it.

In several instances international union leadership took action to curb unauthorized or "wildcat" work stoppages. Notable among these was the action of the officials of the Bridge, Structural, and Ornamental Iron Workers (AFL) in expelling for life the business agent of a local union which carried on an unauthorized 29-day strike at a Joppa, Ill., power plant being constructed to supply power for Atomic Energy Commission facilities. In the same action, six other members of the local were expelled from the union for periods ranging from 7 to 10 years.<sup>3</sup>

A 62-day strike involving truck drivers employed by building materials dealers in New York City was terminated in early September after the international president of the Teamsters Union (AFL) intervened in the dispute. Although this stoppage involved less than 3,000 truck drivers, it indirectly idled about 100,000 construction workers in the New York metropolitan area and halted work on many projects.

### Major Issues Involved

About three-fourths of the year's idleness was caused by disputes over wages and/or other monetary matters (table 2).<sup>4</sup> Among the major stoppages in this classification were 10 in the construction industry; 2 in the communications industry (at New Jersey Bell and Southwestern Bell Telephone Co.); the 54-day strike at North American Aviation, Inc.; the 11-day stoppage that suspended publication of 6 major New York City newspapers; and a strike at American Can Co. and Continental Can Co., which began in December and continued until early January 1954.

Disputes over other working conditions, such as job security, shop conditions and policies and

workloads, accounted for over a fifth of the year's stoppages and more than a fourth of the number of workers idle. A notable example was the strike by members of the United Hatters, Cap and Millinery Workers (AFL) in support of their demand for renewal of a contract clause prohibiting further diversion of work from Norwalk, Conn., plants of the Hat Corporation of America to other areas.

TABLE 2.—Major issues involved in work stoppages, 1953

Major issues	Work stoppages beginning in 1953				Man-days idle during 1953 (all stoppages)	
	Number	Percent of total	Workers involved		Number	Percent of total
			Number	Percent of total		
All issues.....	5,091	100.0	2,400,000	100.0	28,300,000	100.0
Wages, hours, and fringe benefits <sup>1</sup> .....	2,825	55.5	1,460,000	60.8	21,800,000	77.1
Wage increase.....	1,798	35.3	836,000	34.8	14,500,000	51.5
Wage decrease.....	23	.5	9,250	.4	133,000	.5
Wage increase, hour decrease.....	89	1.7	78,200	3.3	1,060,000	3.7
Wage increase, pension and/or social insurance benefits.....	277	5.4	177,000	7.4	2,540,000	9.0
Pension and/or social insurance benefits.....	48	.9	52,600	2.2	234,000	.8
Other.....	590	11.6	307,000	12.8	3,280,000	11.6
Union organization, wages, hours, and fringe benefits <sup>1</sup> .....	202	4.0	45,200	1.9	1,250,000	4.4
Recognition, wages and/or hours.....	119	2.3	12,000	.5	317,000	1.1
Strengthening bargaining position, wages and/or hours.....	26	.5	17,100	.7	505,000	1.8
Closed or union shop, wages and/or hours.....	57	1.1	16,100	.7	424,000	1.5
Union organization.....	543	10.7	117,000	4.9	935,000	3.3
Recognition.....	361	7.1	30,500	1.3	520,000	1.8
Strengthening bargaining position.....	38	.7	6,500	.3	90,100	.3
Closed or union shop.....	89	1.7	16,700	.7	195,000	.7
Discrimination.....	10	.2	920	( <sup>2</sup> )	10,800	( <sup>2</sup> )
Other.....	45	.9	62,500	2.6	120,000	.4
Other working conditions.....	1,135	22.3	638,000	26.6	3,560,000	12.6
Job security.....	502	9.9	235,000	9.8	1,730,000	6.1
Shop conditions and policies.....	540	10.6	326,000	13.6	1,300,000	4.6
Workload.....	77	1.5	53,500	2.2	493,000	1.7
Other <sup>3</sup> .....	16	.3	23,600	1.0	35,800	.1
Interunion or intraunion matters.....	275	5.4	130,000	5.4	684,000	2.4
Sympathy.....	64	1.3	19,700	.8	107,000	.4
Union rivalry or factionalism <sup>4</sup> .....	49	1.0	50,800	2.1	234,000	.8
Jurisdiction.....	158	3.1	56,600	2.4	327,000	1.2
Union regulations.....	3	.1	900	( <sup>2</sup> )	11,000	( <sup>2</sup> )
Other.....	1	( <sup>2</sup> )	1,500	.1	4,500	( <sup>2</sup> )
Not reported.....	111	2.2	13,200	.6	45,900	.2

<sup>3</sup> The stoppage was terminated on October 13 after a restraining order was issued by a Federal court.

<sup>4</sup> Monetary issues combined with union security accounted for another 4 percent of the man-days idle—less than in other postwar years. In 1952, stoppages over these combined issues accounted for nearly half of all man-days because they included the nationwide steel strike.

<sup>1</sup> "Fringe benefits" has been added to the title only for purposes of clarification. There has been no change from previous years in definition or content of these groups.

<sup>2</sup> Less than 0.1 percent.

<sup>3</sup> This group includes protest strikes against action, or lack of action, by Government agencies.

<sup>4</sup> This group includes the 5-day strike involving 30,000 longshoremen on the East Coast in October (see p. 501).

The strike began in July and was still in effect at the end of the year.

Union security issues were dominant in about a tenth of the strikes in 1953, accounting for less than 5 percent of the workers involved and total idleness. Most of the stoppages in this group involved attempts to gain union recognition and initial contracts from their employers. Outstanding among these were the lengthy strike involving employees of Calcasieu Paper Co. and Southern Industries, Inc., in Elizabeth, La., which began in September 1952, and the 28-day stoppage of Louisiana sugarcane field workers. Both of these stoppages failed to gain union recognition. The paper strike was accompanied by violence, including dynamiting.

### Stoppages of 10,000 or More Workers

Typically, about one stoppage out of 200 involves 10,000 or more workers. This ratio was approximated again in 1953 with 28 such large stoppages recorded. (See table 3.) Most of these were relatively short, however, and none was industrywide in scope. The 650,000 workers involved and the 7,270,000 man-days of idleness in these stoppages made up only a fourth of the year's totals. These large stoppages accounted for a smaller proportion of strike idleness in 1953 than in all other postwar years except 1951. In 1952, primarily because of the steel strike, the 35 large stoppages accounted for almost two-thirds (62.6 percent) of total idleness.

Ten of the large stoppages in 1953 were in the construction industry, which is essentially local in its operations. Three of these strikes, relatively brief in their duration, did, however, affect projects of the Atomic Energy Commission. The automobile industry experienced 4 stoppages of 10,000 or more workers; steel, 3; rubber and telephones, 2 each; aircraft, shipping, food products, apparel, dairies, newspapers, and containers, 1 each.

Stoppages of construction workers in northern California and employees of North American Aviation were the largest in terms of idleness. Eleven of the major stoppages lasted less than a week; another 5 were concluded in less than 2 weeks; 4 were in effect at least 2 weeks but less than a month; and 7 continued more than a month. The longest involved employees of the New Jersey Bell Telephone Co., North American Aviation, Inc.,

TABLE 3.—*Work stoppages involving 10,000 or more workers, selected periods*

Period	Stoppages involving 10,000 or more workers					
	Number	Percent of total for period	Workers involved <sup>1</sup>		Man-days idle	
			Number (thousands)	Percent of total for period	Number (thousands)	Percent of total for period
1935-39 average	11	0.4	365	32.4	5,290	31.2
1947-49 average	18	.5	1,270	53.4	23,800	59.9
1945	42	.9	1,350	38.9	19,300	50.7
1946	31	.6	2,920	63.6	66,400	57.2
1947	15	.4	1,030	47.5	17,700	51.2
1948	20	.6	870	44.5	18,900	55.3
1949	18	.5	1,920	63.2	34,900	69.0
1950	22	.5	738	30.7	21,700	56.0
1951	19	.4	457	20.6	5,680	24.8
1952	35	.7	1,690	47.8	36,900	62.6
1953	28	.5	650	27.1	7,270	25.7

<sup>1</sup> See footnote 3, table 1.

and construction workers in 5 areas—northern California and the metropolitan areas of Philadelphia, Detroit, Kansas City, and Indianapolis. One major stoppage which began December 2 continued into January 1954. This dispute involved 30,000 employees of two major producers of paper and metal containers. Wages or related benefits were the major issues in most large strikes, as in a majority of all stoppages.

### Industries Affected

Construction was the only industry in which idleness exceeded 1 percent of total time worked during 1953. The 8,000,000 man-days idle in this industry was nearly triple the next largest total for an industry group. About half of this idleness resulted from the 10 stoppages involving 10,000 or more workers. This industry also experienced a record number of stoppages—1,039, as compared with the previous peak of 794, reached in 1952. (See table 4.)

More than 2,000,000 man-days idle were recorded in each of 3 other industry groups—machinery (except electrical); transportation equipment; and transportation, communication, and other public utilities.

In contrast to 1952, when idleness in each of 13 industry groups exceeded 1,000,000 man-days, only 9 recorded such idleness for 1953. In addition to the 4 industry groups mentioned above, idleness of more than 1,000,000 man-days occurred in fabricated metal products; electrical machinery, equipment, and supplies; food and kindred products; and trade.

TABLE 4.—Work stoppages by industry group, 1953

Industry group	Stoppages beginning in 1953		Man-days idle during 1953 (all stoppages)	
	Number	Workers involved <sup>1</sup>	Number	Percent of estimated working time of all workers <sup>2</sup>
All industries.....	5,091	2,400,000	28,300,000	0.26
MANUFACTURING.....	<sup>3</sup> 2,612	1,320,000	15,600,000	.36
Primary metal industries.....	312	202,000	1,510,000	.45
Fabricated metal products (except ordnance machinery, and transportation equipment).....	291	102,000	1,690,000	.57
Ordnance and accessories.....	23	21,400	164,000	.32
Electrical machinery, equipment, and supplies.....	137	76,600	1,620,000	.53
Machinery (except electrical).....	286	126,000	2,150,000	.50
Transportation equipment.....	179	300,000	2,730,000	.55
Lumber and wood products (except furniture).....	125	19,800	512,000	.26
Furniture and fixtures.....	134	25,100	269,000	.28
Stone, clay, and glass products.....	128	19,400	316,000	.23
Textile mill products.....	88	26,600	593,000	.19
Apparel and other finished products made from fabrics and similar materials.....	193	35,600	296,000	.09
Leather and leather products.....	48	11,900	99,100	.10
Food and kindred products.....	213	98,400	1,210,000	.30
Tobacco manufactures.....	4	480	20,800	.08
Paper and allied products.....	45	15,400	222,000	.16
Printing, publishing, and allied industries.....	44	21,300	245,000	.12
Chemicals and allied products.....	107	36,500	825,000	.43
Products of petroleum and coal.....	19	2,610	105,000	.16
Rubber products.....	102	141,000	493,000	.71
Professional, scientific, and controlling instruments; photographic and optical goods; watches and clocks.....	41	11,400	246,000	.29
Miscellaneous manufacturing industries.....	105	21,000	280,000	.22
NONMANUFACTURING.....	<sup>3</sup> 2,479	1,090,000	12,700,000	.19
Agriculture, forestry, and fishing.....	14	8,140	113,000	( <sup>4</sup> )
Mining.....	460	156,000	846,000	.40
Construction.....	1,039	574,000	8,000,000	1.22
Trade.....	408	71,200	1,050,000	.04
Finance, insurance, and real estate.....	13	950	21,600	( <sup>4</sup> )
Transportation, communication, and other public utilities.....	372	256,000	2,380,000	.22
Services—personal, business, and other.....	145	14,400	202,000	( <sup>4</sup> )
Government—administration, protection, and sanitation.....	30	6,280	53,400	( <sup>4</sup> )

<sup>1</sup> See footnote 3, table 1.

<sup>2</sup> See footnotes 4 and 5, table 1.

<sup>3</sup> This figure is less than the sum of the figures below because a few stoppages extending into two or more industry groups have been counted in this column in each industry group affected; workers involved and man-days idle were divided among the respective groups.

<sup>4</sup> Not available.

<sup>5</sup> Stoppages involving municipally operated utilities are included under "Transportation, communication, and other public utilities."

Idleness in the mining industry was lower than in any year since 1942. The 850,000 man-days of idleness was about a fifth of the 1952 total, and the 460 stoppages compared with 650 in 1952. Other industries which had fewer disputes in 1953 than in 1952 included ordnance and accessories; machinery (except electrical); transportation equipment; lumber and wood products; stone, clay and glass products; textile mill products; apparel and other finished products; leather and leather products; paper and allied products;

rubber products; and transportation, communication, and other public utilities.

### Stoppages by States

More than a million man-days of idleness were recorded in each of 9 industrialized States, as compared with 15 in 1952. The largest amount was the 3,070,000 man-days in New York, followed

TABLE 5.—Work stoppages by State, 1953

State	Work stoppages beginning in 1953			Man-days idle during 1953 (all stoppages)	
	Number	Workers involved <sup>1</sup>		Number	Percent of total for U. S.
		Number	Percent of total for U. S.		
All States.....	<sup>2</sup> 5,091	2,400,000	100.0	28,300,000	100.0
Alabama.....	110	36,200	1.5	289,000	1.0
Arizona.....	13	2,130	.1	43,500	.2
Arkansas.....	42	11,700	.5	132,000	.5
California.....	269	210,000	8.8	2,960,000	10.5
Colorado.....	34	6,550	.3	69,000	.2
Connecticut.....	86	28,800	1.2	526,000	1.9
Delaware.....	12	8,460	.4	316,000	1.1
District of Columbia.....	16	4,510	.2	23,900	.1
Florida.....	75	24,400	1.0	217,000	.8
Georgia.....	54	13,400	.6	120,000	.4
Idaho.....	13	3,430	.1	20,900	.1
Illinois.....	316	98,200	4.1	1,430,000	5.0
Indiana.....	191	139,000	5.8	1,540,000	5.5
Iowa.....	60	21,200	.9	387,000	1.4
Kansas.....	31	15,400	.6	323,000	1.1
Kentucky.....	163	85,300	3.6	422,000	1.5
Louisiana.....	70	23,000	1.0	286,000	1.0
Maine.....	16	5,090	.2	28,600	.1
Maryland.....	45	19,400	.8	191,000	.7
Massachusetts.....	176	46,100	1.9	618,000	2.2
Michigan.....	331	297,000	12.4	2,450,000	8.7
Minnesota.....	70	16,000	.7	272,000	1.0
Mississippi.....	20	2,490	.1	48,100	.2
Missouri.....	140	61,300	2.6	1,220,000	4.3
Montana.....	10	3,710	.2	98,000	.3
Nebraska.....	17	4,680	.2	87,400	.3
Nevada.....	17	3,610	.2	29,700	.1
New Hampshire.....	16	2,110	.1	21,800	.1
New Jersey.....	263	80,600	3.4	1,280,000	4.5
New Mexico.....	20	5,870	.2	41,700	.1
New York.....	585	208,000	8.7	3,070,000	10.8
North Carolina.....	25	10,100	.4	196,000	.7
North Dakota.....	10	930	( <sup>3</sup> )	13,300	( <sup>3</sup> )
Ohio.....	518	218,000	9.1	2,390,000	8.5
Oklahoma.....	53	18,400	.8	255,000	.9
Oregon.....	49	10,200	.4	129,000	.5
Pennsylvania.....	632	318,000	13.2	2,990,000	10.6
Rhode Island.....	37	11,200	.5	134,000	.5
South Carolina.....	21	25,400	1.1	114,000	.4
South Dakota.....	3	500	( <sup>3</sup> )	18,900	.1
Tennessee.....	125	65,500	2.7	605,000	2.1
Texas.....	89	58,100	2.4	668,000	2.4
Utah.....	39	23,400	1.0	246,000	.9
Vermont.....	8	2,050	.1	55,000	.2
Virginia.....	65	24,900	1.0	157,000	.6
Washington.....	66	46,000	1.9	581,000	2.1
West Virginia.....	165	49,500	2.1	347,000	1.2
Wisconsin.....	100	30,300	1.3	771,000	2.7
Wyoming.....	16	1,740	.1	21,400	.1

<sup>1</sup> See footnote 3, table 1.

<sup>2</sup> The sum of the figures in this column exceeds 5,091 because the stoppages extending across State lines have been counted in each State affected, but the workers involved and man-days idle were divided among the States.

<sup>3</sup> Less than 0.1 percent.

by 2,990,000 in Pennsylvania, 2,960,000 in California, 2,450,000 in Michigan, and 2,390,000 in Ohio. All of these figures represent significant decreases from 1952. In fact, the largest decline occurred in Pennsylvania where the 1953 total was about 75 percent under the 11,800,000 man-days of idleness recorded for 1952. The second largest decrease was for Ohio, where the trend is also influenced by developments in steel and coal, and which had 7,260,000 man-days of idleness in 1952, compared with 2,390,000 in 1953. (See table 5.)

Pennsylvania again recorded the largest number of stoppages, 632, compared with 692 in 1952. There were 585 stoppages in New York compared with 600 in 1952, and 518 in Ohio compared with 444 in 1952. In 10 other States more than 100 but fewer than 325 stoppages were recorded. In all States except South Dakota and Vermont 10 or more stoppages were recorded; in these there were 3 and 8, respectively.

### Unions Involved

Affiliates of the AFL were involved in more than half (56 percent) of the strikes, accounting for about 44 percent of the workers involved and 52 percent of the man-days of idleness of which about half occurred in the construction industry. CIO affiliates accounted for a quarter of the strikes. These involved 38 percent of all workers and 34 percent of the year's idleness. Unaffiliated unions accounted for about 15 percent of the strikes and 13 percent of the workers affected, but only 8 percent of the idleness. (See table 6.)

### Trends During the Year

The occurrence of strikes during 1953 generally followed seasonal trends of other postwar years, reaching highest levels in the second and third quarters. Strike idleness was also at its peak in these two quarters. The 28 stoppages involving the most workers were rather evenly distributed throughout the year, although the largest number (10) began in the second quarter; 7 occurred in the first 3 months, 5 in the third quarter, and 6 in the last 3 months.

The second quarter of the year was the highest in all three measures of strike activity—strikes,

workers involved, and man-days of idleness. It accounted for a third of the year's stoppages and two-fifths of the year's idleness. The number of strikes and workers involved reached lowest levels in the fourth quarter, but man-days idle in this period exceeded idleness in the first quarter. Each of the large stoppages in the first quarter lasted a week or less; several large strikes in the final quarter of the year continued more than 2 weeks, and one lasted nearly 8 weeks. Long strikes involving fewer than 10,000 workers during this period included the Railway Express stoppage referred to earlier, and a strike of employees of Pittsburgh department and furniture stores and package delivery services which began in November and continued into 1954.

TABLE 6.—Work stoppages by affiliation of unions involved, 1953

Affiliation	Stoppages beginning in 1953				Man-days idle during 1953 (all stoppages)	
	Number	Per-cent of total	Workers in-volved <sup>1</sup>		Number	Per-cent of total
			Number	Per-cent of total		
Total.....	5,091	100.0	2,400,000	100.0	28,300,000	100.0
American Federation of Labor <sup>2</sup> .....	2,861	56.2	1,060,000	44.2	14,600,000	51.6
Congress of Industrial Organizations.....	1,312	25.8	901,000	37.5	9,700,000	34.3
Unaffiliated unions.....	786	15.4	320,000	13.3	2,210,000	7.8
Single firm unions.....	20	.4	7,940	.3	42,800	.2
Different affiliations:						
Rival unions <sup>3</sup> .....	37	.7	40,500	1.7	204,000	.7
Cooperating unions <sup>4</sup> .....	18	.4	65,400	2.7	1,510,000	5.3
No union involved.....	46	.9	5,560	.2	19,400	.1
Not reported.....	11	.2	910	( <sup>5</sup> )	3,980	( <sup>5</sup> )

<sup>1</sup> See footnote 3, table 1.

<sup>2</sup> All stoppages in 1953 involving the United Brotherhood of Carpenters and Joiners of America are included in this category, although this union withdrew from the AFL from August 12 to September 8.

<sup>3</sup> Disputes between unions of different affiliations—unions which recognize no established jurisdictional lines between them and their rivals in the same field.

<sup>4</sup> The stoppage involving North American Aviation, Inc., is in this group. It involved about 32,000 workers. Approximately 200 of these workers were represented by the United Welders of America (Ind.); the rest were represented by the United Automobile Workers (CIO).

<sup>5</sup> Less than 0.1 percent.

Strikes beginning during the month rose from 341 in January to a peak of 596 in May, then decreased each month to the year's low of 145 in December. Idleness, however, was lowest in February (1,100,000 man-days), increased to a peak of 4,530,000 man-days in June, then declined to 1,700,000 in September and remained close to this level for the rest of the year. A large portion of the June idleness can be traced to stoppages in the construction trades.



# The Shortage of Creative Manpower

A Program To Meet the Urgent Need  
for Engineering, Scientific,  
and Managerial Personnel

J. DOUGLAS BROWN\*

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EDITOR'S NOTE.—*This article is the first of two chapter reprints from "Manpower in the United States: Problems and Policies," scheduled for publication this year by Harper & Brothers. The volume is a collection of 16 essays by different authors and constitutes the annual publication of the Industrial Relations Research Association. The second article will be on "Increasing Utilization Through Better Management of Human Resources," by Rensis Likert and Stanley E. Seashore.*

AS A PIONEER in the development of mass production, the United States must also pioneer in the solution of the ever changing problems which mass production creates. Among these are problems of pricing, distribution, finance, advertising, creation of replacement demand, avoidance of saturation of markets, and the rapid obsolescence of productive equipment. The steady advancement of engineering design, of standardization of parts, and of production and assembly techniques has been assumed to be an inevitable inheritance of Yankee mechanical ingenuity rather than a problem. We have lived on that inheritance for several generations, but with the arrival of the scientific age new complexities have arisen in keeping mass production effective. These complexities have been sharply accentuated by the vast application of science to war.

The new problem is that of adjusting our manpower resources to the pattern of demand required by the mass production of a rapidly changing stream of complex goods. We have come to the

painful realization that mass production of such goods places pressure upon our manpower resources not so much at the rank-and-file level of fabricators, assemblers, and distributors but, most of all, upon the far scarcer manpower which creates the ideas, designs, processes, and equipment which in turn makes thousandfold duplication desirable and possible. So long as mass-produced goods were relatively simple, like flour, cloth, washing machines, or even passenger cars, the balance of creative design to plant engineering was not too demanding upon the former. However, with the urgent need for faster planes, atomic weapons, electronic controls, and high-capacity metals and fuels, the shift of demand to the creative side of the balance in mass production has been sharp and drastic.

The functions performed in modern mass production can be divided roughly into four major stages in the development of the production of a new and complex item.

I. *The creation of ideas.* This may be a new mathematical formula which explains the conversion of mass into energy, a chemical discovery of new compounds or processes, a physical principle, the further understanding of the behavior of matter, or imaginative application of new materials or structural forms to known needs.

II. *The engineering implementation of new ideas.* Such implementation selects and applies new ideas and fits them into known technology or invents new technology which can apply them. The process of implementation overlaps at one end the creative work of the scientist. At the other, it

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reaches the borders of day-to-day understanding of plant operations. It includes the vast area of design, materials, structures, pilot-plant testing, tool design, layout, and operational standards.

III. *The initial organization of the human, financial, and technological factors for efficient production.* Here the essential idea becomes an economic reality by the combination of all the complex of complementary agents necessary to its efficient and profitable production. The creative elements at this step require a wide range of talents in human organization, motivation, control, judgment, and insight.

IV. *The maintenance of efficient repetitive production at a desired volume.* It is at this point that mass production "pays out." Because of the spectacular results of American plants producing thousands and millions of standard items at relatively low cost, this stage of the mass-production cycle has received great popular acclaim. It involves a high level of administrative arts, but it is the *end* and not the *beginning* of a creative process.

In analyzing the needs in human resources required in the mass-production cycle, it is obvious but far too little emphasized in the American mind that it is steps I to III which require the highest talents available. Further, the American industrialist, as well as the American public, has assumed too easily that the talent required in steps I to III would be available whenever needed and to the amount required to meet the demands for new products forthcoming at stage IV. This misapprehension of automaticity in the supply of high talent is now giving our manpower planners a severe case of "jitters."

Why has the United States been caught short in its supply of the creative type of manpower so needed in mass production? Several reasons may be suggested.

1. Whereas in more normal times demand for mass-produced items is determined by the millions of consumers of end products and, for new items, is subject to some extent to the manufacturer's desire for orderly and gradual change, in time of war or preparation for war the *Government* becomes the heavy demander of new and complex items in mass production. No longer is the manufacturer able to regulate through advertising or pricing the demand for radically changed designs or to limit change to the capacity of his routine

production staff. Rather the Government, under the pressure of competitive armaments, demands, and can afford to demand, more rapid improvements in existing items as well as new types of items requiring sustained activity at all stages in the mass-production cycle.

2. Rapid obsolescence has become the essence of sound military technology. Rather than stocking vast supplies of aging equipment, national security now puts a premium on the constant replacement of limited quantities of one prototype in planes, tanks, ships, rockets, and electronic devices by radically improved modes. This places a far greater pressure on the creative stages of the mass-production cycle, relative to stage IV, than occurs in normal times.

3. In times of peace, there has been a tendency for the pressure upon the creative stages of the mass-production cycle to vary with the general business cycle. Pressure has developed when an anticipated high potential of consumer demand and purchasing power is accompanied by a period of vigorous competition for sales. In such a period, manufacturers seek new or improved items to assure themselves their share of available markets. The United States is apparently in such a stage at present. Consumers are spending billions on new gadgets at the same time that the Government seeks new types of armament. Both are putting pressure on the limited resources of American science, engineering, and management to satisfy their urge for the new and the better.

4. The human resources required in the first three stages of the mass-production cycle are the most difficult to expand. Scientists, it is almost correct to say, are born, not made. Their education must continue many years past the common high-school level. Engineers of the creative type require graduate training and thorough practical experience. Designers, technicians, and tool-makers must have a high level of capacity and years of experience to be trusted with creative work. The talent for executive management which can plan and organize new plants and ventures develops largely through experience. At no time can the supply be suddenly enlarged. In all these areas we are largely limited by the scarcity of native talent as well as the time required to cultivate that talent.

5. At a time of great pressure upon these scarce human resources, our most effective institutions

for screening and developing such talent are seriously restricted by financial limitations. Universities and engineering schools are hard pressed to maintain their scientific and engineering faculties in the face of inflation and severe competition from industry. The cost of adequate laboratories and up-to-date equipment has risen sharply. The living cost of students has risen far faster than fellowship funds available to meet them. In many institutions a rapid expansion of the production of trained men can be attained only at the expense of quality. But it is the highly qualified graduate that is needed for the creative stages of mass production.

6. It is unfortunate but true that scarcity in any resource stimulates a tendency for hoarding. With adequate funds and a likelihood of continued prosperity, there is a temptation for the strongly established industrial firm to build reserves of talent against possible future needs. At the same time that industry has criticized the Armed Forces for wasting trained talent by overdemand and misassignment, some corporations have used the excuse of training requirements and necessary protection against enlarged future needs to hold graduate engineers in positions not requiring their level of education or experience.

7. It will never be possible to estimate accurately the number of creative scientists and engineers who were lost from the flow of trainees because of the interruptions and diversion of careers arising from World War II. Experience in organized military activity may contribute greatly to maturing a man's capacity in dealing with his fellows. It does not, however, offer an effective substitute for the exact, integrated, and continuous training afforded by a scientific or engineering program in a university or by intensive specialization in creative effort in industry. Interruption in the development of a scientist or research engineer, as with a medical doctor, appears to be costly in terms of quality and quantity of the end product. Too many men fail to return to their previous training programs or lose the momentum which carries them to the higher levels of attainment.

These appear to be some of the reasons for the imbalance of demand and supply of the creative types of specialized manpower needed in the support of mass-production industries at the present time. These questions are relevant: How long

will this shortage continue, and, if likely to continue, what remedial steps should be taken?

It is anyone's guess as to how long the United States will be faced with the threat of sporadic local outbreaks or a worldwide atomic-age war. The plain fact is that we are now faced by such a prospect and any lulls in military preparation or activity must be considered temporary respites. If our economy must be geared to the constant improvement of a vast military technology plus the rapid proliferation of approved prototypes should large-scale war occur, it is difficult to avoid the assumption that the creative stages of the mass-production cycle will remain under unusual pressure. Any increased acceleration of technological change, such as occurred following the Korean outbreak, will sharply increase this pressure. On the other hand, a decreased acceleration, especially if reinforced by a general business recession, would reduce the pressure drastically. It will be dangerous to misinterpret such a release of pressure as indicative of a new norm. We have already made that mistake once—in the immediate postwar period.

Since the only safe course is to assume a long-continued though variable pressure on the manpower resources needed in the creative stages of the mass-production cycle, it is important that steps be taken to compensate that pressure by adequate supplies. We are, however, dealing with human resources of high talent and keen sensitivity to motivation; with long spans of education and experience; and with a growing public apathy toward any differential treatment of individuals of high potential attainment. Public policy to enhance and conserve our supply of creative talent must, therefore, be imaginative, farsighted, and understandable. Several elements of that policy may be suggested.

1. The Government of the United States should assume clear-cut leadership in educating the American public concerning the vital need for a sustained flow of manpower into the creative fields. Such a flow is a brutally evident necessity in an economy of hot war or cold war. We learned in 1865 that economic strength was the essential basis of military victory. We relearned it in 1918 and 1945. We must keep that lesson before us when we are tempted to satisfy the political urge of treating all manpower alike when certain categories of manpower are far more

effective in the logistical support of combat than in combat itself. We are facing an opponent which disregards sentimental considerations of "equity" and assigns men to tasks on a coldly rational basis. It is training great numbers of men in science and engineering.

2. For this reason, the degree of selectivity already attained in the assignment of men to military service as opposed to uninterrupted education or training should be sustained and enhanced. If there is discrimination according to economic status, this should be remedied by assisting qualified individuals to finance their continued education rather than by interrupting the education of all.

3. To obtain the precious cream of creative talent, a far greater volume of whole milk must be processed through our education system. Talent occurs in all groups and areas of our population. Far more is lost through lack of encouragement and resources than we can afford. Even the United States cannot support free education for all at all levels. For this reason the selective process in education must be sharpened, not to exclude individuals at the lower levels but to assure inclusion of all qualified persons at the higher levels.

4. High talent requires and warrants a superior quality of education. To a discouraging degree American education has swung toward an emphasis upon the education of the average student. The contrary emphasis in Great Britain and continental Europe has produced results which are obvious to anyone acquainted with the progress of creative science and engineering in the last 50 years. It is not necessary for us to curtail the education of the average, but far greater support, both financial and political, must be given to the highest quality of advanced education. We have spent far more money on the education of those who enjoy the results of mass production than on the education of those who make it possible. We have failed to realize that, of all commodities, talent is the least susceptible to mass production.

5. Until the educational and research programs of the United States have become fully geared to the production of the creative talent we need, we should encourage in every way possible the trans-

fusion of our supply with that of the best of Free Europe. We have much to gain from the continued exchange of scientists and engineers between countries. The trading of production "know-how" for creative ideas is a profitable one for us, quite apart from rich cultural advantages to both parties to the exchange. The free nations can well afford to pool *all* their assets. It would be both arrogant and dangerous for us in the United States at this time to assume smugly that we can depend upon our own creative resources. If we had done so a generation ago, the atomic bomb might have first exploded over New York.

6. The problem of assuring the availability of adequate resources of creative manpower for effective military strength is too critical for casual treatment. It has already been proposed that the Government establish a National Scientific Personnel Board.<sup>1</sup> Such a board should have the duty to watch over all steps taken to maintain our flows of those types of scientific and engineering personnel which are required for national defense and which cannot be quickly developed in time of emergency. The board should advise the Government on the proper use of such manpower as between supporting industry and services, on the one hand, and the military services, on the other. It should likewise advise those agencies which are concerned with the training and placement of scientific and engineering personnel. If deemed necessary, it could cooperate in the development of a Scientific and Engineering Reserve Corps to organize more effectively that segment of specialized manpower that should be a mobile reserve in time of emergency.

The problem of assuring creative support for the accelerated improvement of military technology and logistics will be with us for a long time to come. We remain amateurs in the attack upon this problem. We must become truly professional—creative—thinkers, if we are to obtain solutions before it is too late. No one, the author included, needs to apologize if early efforts appear inadequate.

<sup>1</sup> Report of the Scientific Manpower Advisory Committee ("Thomas Committee"), January 12, 1951, Washington, National Security Resources Board.

# The British Industrial Injuries Insurance System

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EDITOR'S NOTE.—*In December 1953, the Monthly Labor Review completed a series of eight articles on various aspects of workmen's compensation. The series dealt exclusively with situations in the United States. The present article is the first of two which describe the systems in two foreign countries. The second will be devoted to the Ontario system. Both articles are adapted from the authors' forthcoming book entitled, "The Theory and Practice of Workmen's Compensation," scheduled for publication in September 1954 by John Wiley & Sons, Inc.*

COMPENSATION for industrial injuries in Great Britain is based primarily on the National Insurance (Industrial Injuries) Act of 1946, effective in 1948. This method represents a significant departure from the older workmen's compensation system—a break with precedent as great as that involved in the original abandonment of the common law and employers' liability systems in favor of workmen's compensation (1897). Exclusive employer liability, secured by private insurance, and enforced chiefly by legal action, has been replaced by a compulsory State insurance system, financed by contributions from employers,

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<sup>1</sup>William Beveridge, *Social Insurance and Allied Services* (Cmd. 6406), New York, Macmillan, 1942 (par. 79). For summary of Beveridge Report, see *Monthly Labor Review*, February 1943 (pp. 273-276). For an appraisal of these criticisms in terms of American experience by an authority on casualty insurance, see *The Beveridge Report and Workmen's Compensation*, by Ralph H. Blanchard, in *International Association of Industrial Accident Boards and Commissions, Proceedings, 1943* (Bureau of Labor Standards Bull. 68, follows p. 10).

workers, and the State. This system is administered by the Ministry of National Insurance which is also responsible for other social insurance programs.

## Shortcomings of Previous System

The forces which led to overhauling the British program of compensation for industrial injuries were, in good part, the same as those which prompted adoption of the whole revised social security system. Following the ordeals and upheavals of World War II, the British people determined to secure for themselves a more comprehensive, efficient, and equitable system than the old patchwork of separate, sometimes conflicting programs, which had been pieced together under pressure of numerous emergencies over the previous half-century.

In addition, there were a number of specific indictments leveled against the workmen's compensation system as it had developed from 1897 to 1945. Dissatisfaction with its operations led, in 1938, to appointment of a Royal Commission on Workmen's Compensation. War conditions and employer noncooperation forced suspension of its activities in 1940, but the following year, the Beveridge Committee, appointed to survey all existing social insurance programs, including workmen's compensation, took over where the Royal Commission left off. Lord Beveridge's Report, published in 1942, advocated abolition of the separate workmen's compensation scheme based on the legal liability of the individual employer.

Among the major shortcomings of the earlier system pointed out by Sir William,<sup>1</sup> the following are especially significant:

The system "rests in the last resort upon the threat or practice of litigation: a misfortune which is often not in any sense the fault of the employer and which he could not have prevented, is treated by methods applicable to fault." The hope of the fathers of the 1897 law that it would provide an "inexpensive . . . simple, immediate and effective" method of settling such disputes as might arise was completely frustrated. On the contrary, workmen's compensation became a highly contentious and specialized branch of the law, so prolific

in litigation that it developed its own set of law reports which, by 1950, had grown to 47 volumes.<sup>2</sup>

"No machinery is provided for assisting the employee in presenting his claim. . . . He feels often, rightly or wrongly, that he is being subjected to improper pressure. . . ."

"No complete security is afforded for the payment of compensation." Except in the mining industry, insurance was not compulsory nor were self-insurers subject to financial requirements.

"The system fails to secure maintenance of necessary income." The original benefit formula, providing a maximum of 50 percent of previous earnings with a £1 weekly limit was amended so often (notably in 1923, 1940, and 1943) to liberalize one or another element in the formula and to add dependents' allowances that the final result was full of anomalies, a patchwork compromise between the principle of basing compensation upon previous earnings and that of basing it upon need. There was no compensation for injury as such, only for the loss of earning capacity. Most serious of all was the prevalence and great abuse of the provision for lump-sum settlements. In death cases, all settlements were on this basis.

"The costs of administration are higher . . . than they need be or than they are in compulsory social insurance." By "costs of administration," Sir William meant the expenses of insurance carriers which, he reported, varied from 7 percent for some of the mutual indemnity associations in coal mining, to 45 percent for companies in the Accident Office Association (equivalent to U. S. stock companies). Administrative costs of mutual companies, he found, averaged about 20 percent of premiums. "Even this figure is substantially higher than the administrative costs of any form of compulsory State insurance."<sup>3</sup> In addition to the costs of insurance, Beveridge found the costs of

<sup>2</sup> National Insurance (Industrial Injuries), by Douglas Potter and D. H. Stansfeld, London, Butterworth, 1950 (pp. 7-8). This comprehensive volume contains the annotated texts of both National Insurance (Industrial Injuries) Acts, 1946 and 1948, as well as the texts of all major administrative regulations.

<sup>3</sup> Potter and Stansfeld pointed out, as did Beveridge, that "these high costs do not reflect on the efficiency of the insurance companies, but on the system with which they had to deal." (Ibid, p. 7.)

<sup>4</sup> "Money, time and professional skill have for nearly half a century been squandered in a scandalously wasteful manner in settling these claims. The fundamental reason is that, instead of a claim for compensation being determined on grounds of public interest, it is opposed and obstructed at every stage by the adverse interest of the employer and his insurance company." (William A. Robson, in *Justice and Administrative Law*, London, 1947, pp. 196-197.)

<sup>5</sup> Beveridge, in William A. Robson, *Social Security*, London, Allen & Unwin, 1948 (pp. 420-421),

settlement through litigation "needlessly expensive as compared with procedure for determining claims by administrative authority."<sup>4</sup>

"The inclusion of certain industrial diseases . . . makes the fixing of liability on individual employers particularly inappropriate."

The system "has contributed little or nothing to . . . restoration of the injured employee to the greatest possible degree of production and earnings as soon as possible."

### The Beveridge Proposals

To overcome these defects, Beveridge recommended supersession of the separate workmen's compensation scheme and inclusion of provisions for industrial accident and disease benefits within the unified social insurance program. But he added two special provisos, both compromises with strict social insurance principles, designed to preserve the best of the accumulated workmen's compensation experience and tradition. One dealt with benefits, the other with allocation of costs. He described the compromise with regard to benefits, as follows:<sup>5</sup>

The report recognized that in a scheme based upon subsistence needs the presumption was in favor of treating all equal needs equally; a workman disabled by an accident would have the same needs, whether the accident occurred in a factory or just outside it. On the other hand, the report concluded that there were good reasons for adopting a contrary view, at least in regard to those who suffered lasting incapacity or death through industrial accident. The strongest of these reasons for differentiation was that the risk for industrial injury varies greatly from one industry to another; since the dangerous industries, notably coal mining, building, shipping, are important industries to which adequate supplies of men must be attracted, it was fair to compensate for the additional risk by making specially favorable provision for industrial injury.

Moved on the one hand by the desire to treat all needs equally, and on the other hand by the argument for making special provision for industrial injury, the report proposed a compromise which would have made the benefit for all temporary injuries the same as for sickness and unemployment, but for any lasting injury would have provided a pension on a more generous scale and related to the wages which had been lost. This would have meant that in 90 percent of all cases of accident there would have been no need to determine whether the accident was due to industrial injury or not, and no need to inquire as to the wages formerly earned. The 10 percent of cases in which such determinations would become necessary would be those of greatest importance to the workman.

With regard to allocation of costs, the report proposed another basic compromise between merit rating and a flat contribution rate.<sup>6</sup> "About two-thirds was to be met by social insurance contributions from employers, employees, and the State, raised equally from all industries and individuals; about one-third was to be raised by a levy on employers in industries specified as hazardous. In each of these industries, moreover, there was to be a statutory association of employers and workpeople specially concerned with safety, and having the power of distributing by a system of merit rating among individual employers the total levy for which the industry was responsible. The object was, in every dangerous industry, to enlist the financial interest of employers, individually and collectively, in pushing safety methods to the utmost."

The Coalition Government's White Paper, containing its Proposals for an Industrial Injury Insurance Scheme,<sup>7</sup> accepted Beveridge's recommendation that provision for industrial injuries be included in a unified social insurance program with tripartite contributions. It rejected his proposal to establish a uniform benefit rate for all temporary disabilities, whatever their cause, and also the levy on dangerous industries with its modified merit rating. It made an entirely new departure in proposing that industrial injury benefits, in addition to being higher than for any other form of disability, should not depend in any way upon lost earnings. For total disability, the White Paper proposed a flat rate of 35 shillings a week for a single man or woman, rising to 40 shillings after 13 weeks. For anything less than total disability, the benefit should be a proportion of this amount, determined by the actual physical injury irrespective of its effect on earnings, the same method used in assessing compensation for war casualties.<sup>8</sup>

### Major Provisions of 1946 Act

The Labor Government followed substantially the White Paper proposals but with an even greater differentiation between industrial injury benefits and those due to other misfortunes. Industrial injuries were dealt with in one National Insurance (Industrial Injuries) Act which became effective just a month (July 1948) before the other

National Insurance Act dealing with Sickness, Unemployment, Old Age, etc. Both systems are under the Ministry of National Insurance, but with separate insurance funds and separate advisory committees. All elements of the industrial injury benefit formulas are more generous than those for other benefits. The major provisions of the Industrial Injuries Act follow:

*Coverage.* Present coverage is much broader than under the old compensation system. Virtually all civilian employees in Great Britain, including farm workers, are insured. Eight minor categories of "exempted employment" include public employees already provided for, family employees, and certain types of casual labor.

Both traumatic accidents and occupational diseases are covered. The schedule of prescribed occupational diseases is contained in an administrative regulation, but the Ministry can add additional diseases. The requirement that the injury must arise "out of and in the course of the employment" was retained. The act specifies, however, that an accident arising "in the course of" an insured person's employment shall be deemed, in the absence of evidence to the contrary, also to have arisen "out of" that employment.

*Benefits.* There are three major benefit categories:

1. Injury benefits are payable for not more than 26 weeks at a flat rate of 55 shillings a week, somewhat less if the beneficiary is under 18.

2. Disablement benefits may be either a disablement pension or a disablement gratuity. A disablement pension is payable where the injured worker continues to be disabled after 26 weeks or where, after he is able to resume work, he still retains a substantial (20 percent or more) impair-

<sup>6</sup> Both labor and employers disagreed among themselves on the question. The Trades Union Congress supported merit rating as did most employers, while the powerful Mineworkers' Federation and the employers' Shipping Federation opposed it. (Social Insurance and Allied Services, par. 93-94.)

<sup>7</sup> Social Insurance, Part II (Cmd. 6551), London, H. M. Stationery Office, 1944.

<sup>8</sup> Beveridge called the recommendation for a purely physical assessment of disability "the most original contribution in either of the Coalition White Papers." Although aware of its difficulties, he appears to have been persuaded of its essential soundness at least for prolonged disability. "To make the rate of compensation vary inversely with actual earnings is a kind of means test, with all the discouraging effects on the individual that are inherent in every means test." The new proposal meant that the sooner the worker "could get over his physical loss—whether of a finger or a hand or a limb—and earn, the better for him; he could keep his compensation undiminished and enjoy his earnings." (Beveridge, in Robson, Social Security, p. 423.)

ment. The weekly rate varies from 9 to 55 shillings (less if under 18). A gratuity is payable where the injury causes a minor disablement amounting to less than 20 percent and is settled on the basis of a lump sum (which may be paid in installments) not to exceed £150. Principles for assessing disability and a basic schedule relating various common impairments to percentage disabilities are contained in an administrative regulation.

3. Death benefits, in the form of lifetime pensions, are payable to the widow unless she remarries (in which case she gets a lump-sum marriage gratuity) at the rate of 20 to 30 shillings a week, depending on her age, health, and number of dependents.

In addition to these basic benefits, supplementary benefits are payable as follows: (1) unemployability, 20 shillings a week for adults; (2) special hardship, maximum of 20 shillings a week for adults;<sup>9</sup> (3) constant attendant, maximum of 20 shillings a week for adults (except in unusually severe cases); (4) hospital treatment; (5) child dependents, a single supplement of 7 shillings 6 pence weekly;<sup>10</sup> (6) adult dependents, 16 shillings a week; and (7) a worker entitled to a disablement benefit (i. e., one still disabled at the

end of 26 weeks) and incapable of work is also entitled to sickness benefits of 32 shillings 6 pence a week, plus additions for wife and children, provided he is a qualified contributor to the general insurance fund.

With regard to the importance of these various supplementary benefits, a British expert commented: "It is these *additional* benefits for those who have been disabled for some time, i. e., after the injury benefit period of 26 weeks—that give a measure of security to the injured."<sup>11</sup>

Lump-sum settlements are abolished altogether except in case of marriage and disablement gratuities. All medical costs are paid through the National Health Service.

*Financing.* Employers and workers pay equal and flat weekly contributions as follows: 5d. for men over 18 years of age, and 3d. for those under 18; 4d. for women over 18 and 2½d. for those under 18. In addition, the Treasury pays into the Industrial Injuries Fund an amount equal to one-fifth of the aggregate amount of the contributions paid by employers and workers.

*Administration.* Claims are initially processed at a local office of the Ministry of National Insurance. Appeals from the local insurance officer's decision may be made to a local appeal tribunal, thence to a newly created officer known as the Industrial Injuries Commissioner, appointed by the Queen. His ruling is final.<sup>12</sup> Specified "special questions," e. g., those dealing with children which involve the Family Allowances Act, may be appealed directly to the Minister; and "disablement questions," e. g., assessment of degree of disability, are determined by special medical boards and medical appeal tribunals.

*Supplementary Schemes.* The act also provides that employers and workers in any industry may voluntarily agree on a scheme to supplement benefits. The only industry which has done so to date is coal mining.

The National Coal Board and the National Union of Mineworkers have agreed to contribute to a fund—4d. per week by each workman and 4d. per week by the NCB in respect of each person employed. Out of this fund, workers are paid an additional £1 per week for the first 26 weeks of disability and a third of the disablement

<sup>9</sup> The special hardship supplement was designed primarily to correct the occasional inequities involved in the purely physical assessment of disability. Thus, the loss of a finger to a violinist would entitle him to an additional supplement as compared to a worker whose similar loss would not require him to give up his regular occupation.

<sup>10</sup> The act makes no provision for additional children since these are already provided for by the Family Allowance Act of 1945.

<sup>11</sup> Harold J. Finch, M. P., formerly compensation secretary for the South Wales Miners' Federation, *Memo* for the authors, May 1, 1953. Mr. Finch provides an example of the effect of supplementation on the total benefit: A worker, totally disabled over 26 weeks and married with one child, may receive:

	L	s.	d.
Disablement benefit.....	2	15	0
Sickness benefit.....	1	12	6
Addition for wife.....	1	1	6
Addition for child.....	0	10	6
Total benefit.....	5	19	6

If he is not entitled to sickness benefits because of insufficient credits, he can still receive an unemployability allowance but with no addition for dependents. If this worker is bedridden, he can also obtain the constant attendant allowance.

<sup>12</sup> Dean Arthur Larson claims that, contrary to the belief in some quarters, lack of judicial review has resulted in a narrowing of claimants' rights and tightening of compensation rules. He also points out that, since rulings of each of the dozen or so medical review boards are unreviewable, "you can theoretically get a dozen different doctrines standing side by side with no way of resolving the disagreement. This is quite serious, as long as there are many everyday medical questions on which the doctors sharply disagree." (Letter to authors, Dec. 2, 1953.) See also his *Myth of Administrative Generosity, A Lesson from British Experience*, in *American Bar Association Journal*, March 1954.



pension thereafter. There are also additional benefits for widows.

### Rehabilitation

Under the Disabled Persons (Employment) Act of 1944, primary responsibility for vocational rehabilitation of disabled workers, as of disabled military personnel and all others eligible for rehabilitation, was assigned to the Ministry of Labor and National Service. This act also imposed an obligation on employers of 20 or more to employ specified quotas of the disabled.

The Industrial Injuries Act enabled the Minister of National Insurance to make special arrangements with the Minister of Labor for vocational rehabilitation of injured workers, including payment of maintenance allowances. It further authorized him to require workers either to undertake rehabilitation wherever appropriate or to forfeit their cash benefits.

### Additional Remedy Under Employers' Liability

The British compensation system has always differed from the American system in that workmen's compensation was never considered the worker's exclusive remedy if employer negligence was indicated. Before 1948, the injured worker or his survivors had to elect between compensation and the alternative remedy of a damage suit against the employer. Since the Law Reform (Personal Injuries) Act of 1948, the right to suit has become an *additional*, rather than an *alternative*, remedy.<sup>13</sup> The worker obtains his normal compensation benefits in any event, whether his suit is upheld or fails. If he wins, the law provides that in assessing damages the court shall take into account, against any actual or probable loss of earnings, one-half the value of rights to industrial injury or sickness benefits for 5 years. The value of medical care available under the National Health Service Act is disregarded. No deduction applies where the action is brought by survivors under the Fatal Accidents Acts. Furthermore, the common law doctrine of common employment (fellow servant) is repealed. Contributory negligence had been abolished under the Law Reform (Contributory Negligence) Act of 1945.

Summarizing the trend of British law in the forties, one English legal authority said: "Modern

case law, especially in the House of Lords has been as much in favor of the workman as the case law of the early nineteenth century was against him."<sup>14</sup> But 3 years later, another Englishman suggested that a reaction had set in: "Public opinion always appears to be in favor of the underdog and while in the last century the workman occupied this position, today, with increased social legislation and with strong trade unions, the employer is often more deserving of sympathy. The courts had shown the way towards an interpretation of the law more favorable to workmen; now they are to be found leading the retreat. . . . It appears then that fears which have been expressed that social insurance legislation would unduly weight the scales in the employees' favor, have been groundless. Our flexible common law system has restored the balance between an 'injured's law' and an 'injurer's law' without undue difficulty."<sup>15</sup>

### Prevention: Industrial Safety and Health

The Industrial Injuries Act empowers the Minister of National Insurance to promote research into the causes of, as well as methods of preventing, accidents and industrial diseases. Promulgation and enforcement of safety and health codes and rules are the responsibility of the Ministry of Labor under authority of the Factory and Coal Mines Acts.

In case of proved violation, employers are subject to fine. Also, as noted above, in case of accident, they may be sued for negligence over and above their liability for workmen's compensation.<sup>16</sup>

<sup>13</sup> Several years of study preceded adoption of this act. Lord Beveridge briefly examined the possible provisions that could be made for dealing with the problem of alternative remedies (Social Insurance and Allied Services, pars. 81, 98, 258-264) but made no recommendations. A special committee, headed by Sir Walter Monckton, considered the relation of workmen's compensation to alternative remedies and made two Interim Reports (Cmds. 6580 and 6642) in 1945 as a result of which contributory negligence was abolished in the Law Reform Act of 1945. Its final report (Cmd. 6860) in 1946 became the basis for the Law Reform Act of 1948. For an appraisal of the act in conjunction with workmen's compensation developments, see W. F. Frank, *Employers' Liability in Great Britain*, in *Law and Contemporary Problems*, Duke University School of Law, Summer 1953 (pp. 320-349).

<sup>14</sup> John H. Munkman, *Employer's Liability at Common Law*, London, Butterworth, 1950, quoted in 11 *NACCA Law Journal*, May 1953 (p. 314).

<sup>15</sup> W. F. Frank, in *Law and Contemporary Problems*, Summer 1953, pp. 348-349 (documentation omitted).

<sup>16</sup> For historical survey of British industrial safety and health provisions and practices, see *Fifty Years of Progress in British Factories*, in *Labor and Industry in Britain*, London, September 1953, pp. 111-140 (reprinted from *Annual Report of the Chief Inspector of Factories, 1953*).

# Trend Contrasts in Commodity Prices and Service Rates

DORIS P. ROTHWELL\*

PRICES of commodities and fees for services paid by consumers generally exhibit markedly different behavior. In the last 3 years, commodity prices have fluctuated over a narrow range, whereas service rates have risen steadily. Historically also, these groups have shown different trends. As a rule, services have not shared in major deflations to the same extent as commodities, nor have they risen as rapidly during periods of inflation. The contrasts in behavior follow a fairly clear-cut pattern. Characteristically, service rates change slowly and lag behind general trends in prices of commodities. Usually, service prices do not exhibit the short-run fluctuations typical of many commodities, especially those of a highly competitive nature, and those where the source of supply has been interrupted.

## Factors in Differential Price Movements

Although retail trade, with its many separate establishments, is generally considered highly competitive, many commodities are centrally manufactured, nationally advertised, or distributed to retailers for sale at uniform prices. Others, manufactured by smaller and less centralized firms, nevertheless call upon common sources for raw materials. As a result, cost changes in production or distribution processes quickly affect retail price movements for many commodities.

On the other hand, rates for many services, such as railroad fares and utilities, are regulated by public bodies, and therefore cannot move freely in response to changes in costs. Further,

price regulation for such items is on a completely local basis. Thus, the New York subway fare was raised from 10 cents to 15 cents in July 1953, and transportation fare increases were not granted until later in the year in other cities. Among many service trades also—beauty and barber shops, shoe repairers, auto repair shops, cleaning and dyeing establishments, furniture repair shops, and the like—establishments are small, competition and price determinations are usually purely local, and services rendered are not of uniform quality. Nor do all such establishments typically change their prices simultaneously; a rise in service charges in a particular beauty shop, for example, frequently follows a period of gradual cutting of corners on services rendered and costs of doing business. Similarly, rent increases vary considerably by city, depending upon control status. Other service charges, such as physicians' fees or rates for domestic service, tend to be fixed by tradition. These likewise respond slowly to cost changes and other economic factors, and, being charges for services rendered by individuals, are not subject to simultaneous price change. For example, an individual physician tends to maintain his standard fees over a long period of time and to raise them when he finds that the margin between his income and the cost of carrying on his profession has become too narrow. Finally, price-lining, so typical of apparel commodities, is also characteristic of many services.

None of the numerous historical studies of price behavior relate precisely to the subject of this article, although many indirectly support the general observations made. Thus, the Government's National Resources Committee, in "Structure of the American Economy,"<sup>1</sup> classifies markets with respect to price determination into two types, flexible price or "free," and inflexible or "administered," referring particularly to industrial commodity markets. The Committee describes these as the two main processes and points up striking contrasts in their price behavior, such as in the depression of the 1930's. By inference, some of the conclusions of this study are valid for purposes of the present analysis, since the commodities and services groups likewise display

\* Of the Bureau's Division of Prices and Cost of Living.

<sup>1</sup> Part I.—Basic Characteristics, A Report Prepared by the Industrial Section Under the Direction of Gardiner C. Means, Washington, 1939.

opposing tendencies in comparable periods. In the earlier study, all government-operated services to consumers, e. g., postal services and water supply, as well as locally operated utilities, e. g., electricity, gas, telephone, local transportation, and railroads, are included in the group of administered prices. The report refers to the existence of many other types of markets and mentions fees for services as fixed by custom. In this field of administered prices, competition, if present, is much more likely to be manifest in subtle changes in quality than in outright price changes, whereas in "free" markets, notably food, adjustments are made through price change. The former phenomenon is also observed for some commodities during periods of price control.

### Classification of Commodities and Services

Records of the Bureau of Labor Statistics on retail prices of items included in the Consumer Price Index are used for the present analysis of relative price movements of commodities and services. The separation of commodities and services presents some difficulties of classification, and the Bureau's published series of retail price indexes<sup>2</sup> for such special groupings have had slightly different coverage at different times. Rents, though more like services than commodities, are considered separately,<sup>3</sup> since they have at times exhibited distinctive price movements in response to their regulatory history, and at others have tended to move much the same as other services. For this analysis, commodities include principally tangible goods which carry an actual price tag and which are displayed at a place of sale. Services include utilities, all items other than tangible commodities, and items for which the seller's labor is a primary factor in the total

<sup>2</sup> Indexes for commodity and service groups, 1935-50, and indexes for individual items, 1935-52, published quarterly in Bureau of Labor Statistics reports entitled "Indexes of Retail Prices of Apparel, Housefurnishings, and Services and Miscellaneous Goods to Moderate-Income Families in Large Cities of the United States."

<sup>3</sup> See also *The Effects of Decontrol Actions on Residential Rents*, Monthly Labor Review, February 1954 (p. 134).

<sup>4</sup> Commodities include food, apparel, solid fuels and fuel oil, ice, housefurnishings, radio and television sets, prescriptions and drugs, toilet goods, automobiles, tires, gasoline and motor oil, tobacco products, paper products, toys and sporting goods, and alcoholic beverages.

Services include gas and electricity, dry cleaning and laundry, shoe repairs, telephone, public transportation, medical services, group hospitalization, beauty and barber shop services, domestic service, auto repairs, auto insurance and registration, water rent, postage, movie admissions, newspapers, and television repairs.

price.<sup>4</sup> Many items naturally have both commodity and service elements; auto repair service, for example, includes the cost of parts.

### Price Changes, 1951-53

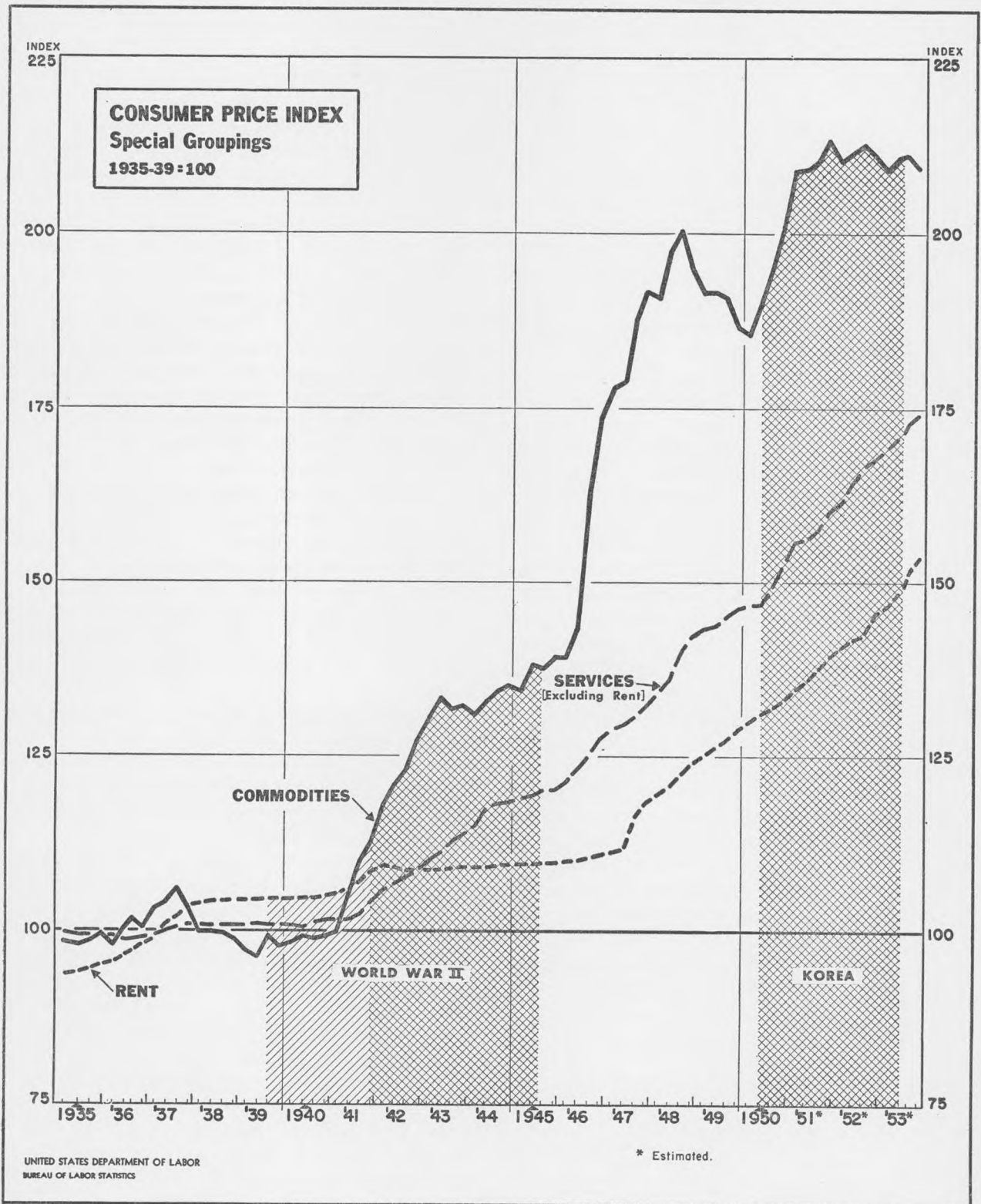
Wholesale prices reached their peak in early 1951 and have declined fairly steadily since that time. Retail prices, on the other hand, edged up throughout 1951 and were generally stable in 1952 and 1953. While the CPI reached an all-time high of 115.4 (1947-49=100) in October 1953, it was then only 2 percent above its January 1952 level and had declined slightly by the end of 1953. The slight rise in retail prices in 1952 and 1953 was due in large part to the persistent advances in charges for rent and services, almost uninterrupted since early 1940. (See chart.) Currently, these items represent roughly 25 percent of the expenditure weights for the Consumer Price Index. Rents, at all-time highs in the last few months, were up 10 percent from the end of 1951 and services had risen 9 percent. On the other hand, retail commodity prices as a group were very nearly stable during this period, having declined 2 percent from the peak in December 1951. This stability of commodity prices reflects in part temporary Federal controls over prices in 1951 and 1952 and in part equilibrium of market forces.

During 1952, charges for service items increased by an average of 5 percent; almost without exception, individual items moved up in a continuing response to the longtime upward trend. In contrast, prices for some individual commodities moved up, while others went down.

Among the services, motion-picture admissions, gas and electricity rates, and charges for auto repairs rose, on the average, 1 to 3 percent in 1952; rents, laundry, telephone, domestic service, and physicians' and hospital services advanced 4 to 5 percent; and local transit fares, newspapers, and men's haircuts went up about 8 percent, while auto insurance rates jumped about 20 percent.

Among the commodity groups, on the other hand, food, apparel, and housefurnishings declined, on the average, 1 to 2 percent during 1952, although a number of individual commodities increased in price. The general decreases reflected market weakness, largely an excess of supply in relation to demand for certain commodities.

Price Trends for Commodities, Services, and Rent, 1935-53



Among the items which rose in price were new cars, coal and fuel oil, gasoline, tobacco, dairy products, canned and dried fruits and vegetables, chickens, and sugar and sweets. For new cars, the increase was due largely to higher service ("handling") charges.

Price trends in 1953 were not unlike those in the previous year; rent and services continued their persistent rise and commodity prices fluctuated. The end of Federal rent control on July 31 brought only a slight quickening in the rate of advance for rents. Rents were up 5 percent; services, 4 percent; and commodities as a group registered a decrease of about 1 percent.

Almost without exception, charges for service items increased in price over the year. Those which rose more than 8 percent in price included postage, streetcar and bus fares, movies, television repairs, and dental extractions. Prices increased between 5 and 8 percent for auto repairs, beauty parlor services, physicians' office visits, and hospital rates, and from 3 to 5 percent for domestic service, telephone services, dental fillings, and group hospitalization.

In the commodity field, food and housefurnishings prices declined 1.3 percent and 0.1 percent, respectively, in 1953. The apparel index rose very slightly (0.2 percent) over the year.

Foods for which prices fell included beef and veal, which dropped nearly 20 percent; fresh vegetables, over 16 percent; lamb and poultry, more than 8 percent; and fish, butter, and milk, 1 to 3 percent. Other commodities for which price decreases of more than 5 percent were reported included used cars, sheets and cotton rugs, women's rayon blouses, diapers, penicillin, and toys.

Pork prices were up over 16 percent; lard, over 50 percent; coffee, cola drinks, and hydrogenated shortening, more than 5 percent. Prices also rose for such items as vacuum cleaners, gasoline and motor oil, cigarettes, beer, women's rayon suits, women's and girls' cotton dresses, and home permanent waves.

### Historical Price Comparisons

Viewed in historical perspective, the recent behavior of prices of the commodity and services groups is not unusual. During World War I, the level of consumer prices approximately dou-

bled, reaching a peak in mid-1920 and dropping sharply to early 1922. BLS records of retail prices for years prior to 1935 have not been summarized in such a way as to permit comparisons of commodities and services on the same basis as those already presented. However, they do show that the postwar decline was mainly in food, clothing, and housefurnishings. Rent and the "miscellaneous" component of the CPI, which included the bulk of the service items, did not share in the immediate postwar slump.

In the severe depression of the early 1930's, the miscellaneous group in the CPI maintained a remarkable stability in the face of sharp declines in prices of strictly commodity groups and in rents, which had had a wartime rise much greater than other service items. Similarly, the contrast between "the violent drop in prices of market-dominated commodities" between 1929 and 1932 and "the very small drop or no drop at all for the bulk of prices which are subject to extensive administrative control" was pointed out by the National Resources Committee in its study of the period. The Committee also noted that this resulted in a serious distortion of price relationships.<sup>5</sup>

A study by the University of Vermont and State Agricultural College also provides an interesting analogy for the War of 1812 and World War I, although for a different group of items.<sup>6</sup> A sharp price increase (about 30 percent) in prices paid by Vermont farmers for commodities between 1811 and 1814 was followed by a long and steep decline of 67 percent to 1852. During those 40 years, rates for services—which included physicians' fees, sawing lumber, taxes, tapping shoes, horseshoeing, farm fire insurance rates, and railroad fares—remained almost steady and did not share in the deflationary movement of the period. During World War I, Vermont prices both of commodities and services moved up abruptly, with commodities leading slightly, but services continued to rise to 1940, whereas commodities dropped sharply and nearly to prewar levels.

Since 1935, BLS data show that the trend of prices for commodities has been upward, but there have been significant short-run fluctuations. Serv-

<sup>5</sup> *Ibid.* (p. 149).

<sup>6</sup> Bulletin No. 507, *Prices Paid by Vermont Farmers for Goods and Services and Received by Them for Farm Products, 1790-1940.*

ice rates, in contrast, have moved up steadily, and for a good part of this period their movement has been paralleled by rent.

During the years 1935-37, prices continued their mild recovery from depression levels. A noticeable rise is evident both for commodities and rents, but prices of services, less affected by the depression, were relatively stable. Referring to group indexes, food, clothing, and housefurnishings shared in the general recovery, whereas the miscellaneous index rose only slightly. Again, this is analogous to the differential behavior of "market-dominated" and "administration-dominated" prices from 1932 to 1937, which eliminated "much of the distortion" of the depression period previously referred to.

The moderate price recession in late 1937, 1938, and early 1939 was most apparent for commodities. Commodity prices dropped about 9 percent, on the average, as prices for individual items, almost without exception, moved downward. Both rents and services, however, remained at about the 1937 levels. Among the services, prices increased for certain items, including hospital rates, physicians' fees, newspapers, gas rates, auto insurance, local transit fares, and railroad fares. Certain other services—for example, movies and beauty and barber shop services—were affected by the recession but not as much as commodities.

Commodity prices shot up sharply from the outset of World War II until early 1943, when the "hold-the-line" order<sup>7</sup> brought commodities, particularly food, under stricter price controls. Although services increased in 1941 and 1942 at a faster rate than before, the rise was less than for commodities, due in part to the existence of Federal or local controls. Rents had been brought under Federal control even before commodities, and were held at early 1942 levels throughout the war. Among the major groups of the index, it was food, apparel, and housefurnishings, which led the wartime rise, with the miscellaneous group of commodities and services following more slowly and somewhat later.

Following World War II, there was no sharp deflationary movement, either for commodities or services, such as occurred after World War I. The end of price controls in June 1946 brought another precipitous rise in prices of commodities

but had little effect on the average rate of advance for services, a number of which remained under control of Federal or local agencies. Thus, gas, electricity, telephone, and railroad fares were scarcely affected, whereas apparel and housefurnishings jumped 12 percent or more in 6 months. A general increase, authorized in June 1947 under the Housing and Rent Act of 1947, brought a sudden rise for rents—the first since the beginning of the war—after which rents continued to advance at about the same rate as services. Commodity prices continued up until September 1948.

In the period from the postwar peak in commodity prices (September 1948) to the pre-Korea low (March 1950), commodity prices decreased over 7 percent, but on the average services and rents continued up at about the same rate as before. (See chart.)

Period	Percent change in retail prices <sup>1</sup>		
	Commodities	Services, excluding rent	Rent
Sept. 1948-Mar. 1950.....	-7.3	4.6	5.9
Dec. 1951-Dec. 1952.....	-1.0	4.9	4.4
Dec. 1951-Dec. 1953.....	-1.8	9.0	10.3
Sept. 1948-Dec. 1953.....	4.5	24.2	25.3

<sup>1</sup> The figures are based on changes in prices of items included in the Consumer Price Index for the sample of cities priced in March, June, September, and December. Prior to December 1952, items were combined with average 34-city weights of the adjusted index; after December 1952, with average 46-city weights. For classification of items, see footnote 4, p. 517.

For rents particularly, the rise reflected local conditions, as one city after another was decontrolled, beginning in 1949, and as more and more new housing exempt from control was offered at higher rentals in given areas. Food prices were down 8.6 percent on the average; apparel, 7.9 percent; housefurnishings, 6.5 percent; and many commodities in the miscellaneous group also decreased. Individual commodities or groups of commodities naturally decreased more than the general averages, while others actually increased. Prices of bedsheets, for example, dropped nearly 15 percent; laundry soap, over 20 percent; nylon hose, 13 percent; and toilet goods, 8 percent. New cars rose in price, as did prescriptions and drugs and tobacco products. In contrast to the variations in commodities, almost all service items advanced, although by different amounts. Even railroad fares, local transportation, and telephone service, virtually unaffected by the end of OPA

<sup>7</sup> Executive order 9328, April 8, 1943.

controls, were granted considerable increases by the regulatory authorities.

The outbreak of hostilities in Korea in June 1950 brought another upsurge in commodity prices which lasted until early 1951, but the average rate of advance for services and rents was not appreciably affected.

This contrast between the price history of commodities and services goes far to explain the great disparity between the December 1953 and the pre-World War II price relationships for commodity groups in the Consumer Price Index. Prices of groups which are predominantly commodities—food, apparel, solid fuels and fuel oil, and housefurnishings—were at least twice as high as in 1939, but many of these items recently have been leveling off or declining. Transportation, personal care, and reading and recreation, which contain both commodity and service items, were 70 to 90 percent above prewar levels and generally are continuing up. Medical care and household operation, which are chiefly services, were roughly 70 percent higher. At the end of 1953, rent was less than 50 percent higher but still rising.

Gas and electricity rates, almost uniquely among the service items, have remained comparatively unchanged for a long period, being more closely and more continuously regulated. The combined index for gas and electricity in December 1953 was 7 percent higher than the average for the years 1947–49 and less than 2 percent above pre-World War II. Average rates for electricity actually went down in the late 1930's and throughout World War II; gas rates also declined during the latter period. At the same time, utilities were able to realize reasonable returns on investment. This enviable record was made possible by a tremendous expansion in output and the consequent reduction in unit costs of distribution.

Before and during the war, natural gas was replacing manufactured gas as the chief type used by residential consumers. Accompanying this development, average rates for natural gas decreased more than those for manufactured gas or declined when manufactured gas rates rose. In addition, there has been a great increase in residential gas consumption, particularly for space heating in the last few years. Currently, gas rates are about 15 percent above their low point in late

1946 and about 10 percent above the average for the years 1947–49.

In the case of electricity, the amount generated by publicly owned facilities increased from less than 7 percent of the total in 1936, when rates started down, to almost 20 percent in 1950.<sup>8</sup> Residential consumption of electricity has increased tenfold since 1920 and fivefold since 1932, and the average expenditure per residential customer has risen from \$33.70 in 1932 to \$59.85 in 1952.<sup>9</sup> Residential rates currently are up about 5 percent from their low point in mid-1947, but they are very much lower than in the 1920's. Reflecting increased consumption per customer and lower rates for higher consumption, the average cost per kilowatt-hour dropped to a low of 2.76 cents in 1952, compared with 3.09 cents in 1947 and 7.45 cents in 1920.

### Outlook for 1954

Retail prices turned down moderately after October 1953 and this trend was continuing into the early months of 1954. A relatively stable or slightly declining price level is generally expected for the near future. If past experience is repeated, such declines as occur are likely to be largely in commodities, and it is not unreasonable to anticipate a continuation of slowly rising charges for rents and various services even in the face of declining commodity prices. Only if the general price level should fall more steeply or for a longer period than expected, would we anticipate any interruption of the long and persistent rise in service rates. Similarly, the service components of the gross national product have been relatively insensitive to general business trends. A number of services, as well as rent, are contractual and therefore lag considerably behind changes in general levels of activity. Others, such as medical care, public transportation, and personal services, have become virtual necessities, and demand for them is not likely to be affected greatly by a decline in the level of activity of the order indicated by preliminary estimates of gross national product for the first quarter 1954.

<sup>8</sup> *Electrical World*, New York, Annual Statistical Issue, Jan. 29, 1951. (Data cited were supplied by Edison Electric Institute.)

<sup>9</sup> *Ibid.* and subsequent issues.

# Summaries of Studies and Reports

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## Wage Trends in Power Laundries, 1945 to 1953

STRAIGHT-TIME HOURLY EARNINGS of power laundry workers in a group of large cities were 60 percent higher on the average in mid-1953 than in July 1945.<sup>1</sup> This average increase is based on data for a group of plant occupations in 27 areas employing an estimated two-fifths of all power laundry workers. The increase in straight-time average hourly earnings of laundry workers was below the 76-percent rise in average hourly earnings (excluding premium overtime pay and inter-industry shifts in employment) for factory wage earners during the same period.

Over the entire period, 1945 to 1953, the annual rise in straight-time hourly earnings of laundry workers averaged 6.1 percent. As in industry generally, the rate of increase during the first 3 years was distinctly greater than during the last 5. Between 1945 and 1948, the pay of laundry workers rose by 9.5 percent a year in contrast to an annual rate of 4.1 percent between 1948 and 1953. Increases to factory workers averaged 7.4 percent a year between 1945 and 1953, with average annual increases of 11.1 and 5.2 percent for the 3- and 5-year periods, respectively. One factor that may have contributed to the slower rate of pay increases for laundry workers is that laundry employment has not kept pace with the upward trend in most industries, or with population growth in recent years. This lag is apparently traceable at least in part to the development of "laundromats" and the greater use of modern home laundry equipment.<sup>2</sup>

### Variations by Community

The increase in earnings of laundry workers between 1945 and 1953 varied widely among cities. Differences in wage levels and wage trends among areas appear to be rooted in the local character

of the market for laundry service and the highly localized nature of its labor supply. Among the factors that vary among areas are extent and type of collective bargaining, statutory minimum wage rates, wage levels in other industries, and the number of unskilled women workers seeking employment.

In a majority of the cities studied, bargaining in the industry is conducted chiefly through associations of laundry employers; in a few Northern cities, bargaining is on an individual-company basis. Laundry workers in the Southern and Border cities, except Birmingham, are, for the most part, unorganized. The principal union functioning in the industry is the Laundry Workers' International Union (AFL). The Amalgamated Clothing Workers (CIO) has some agreements in the industry, principally in New York City.

Laundry workers' pay tends to be highest in the high-wage sections of the country. However, the labor force in the industry is probably less mobile among labor markets than that in many other industries; even in areas where earnings in most industries are relatively high, the presence of a large supply of unskilled women workers may depress laundry wage levels or retard increases in pay.

Because of the high proportion of unskilled women workers and the relatively low wages

<sup>1</sup> General wage changes, merit increases in pay, and any variations in incentive earnings are reflected in these postwar adjustments. The information also includes the effect on earnings of any shifts in employment among laundries within a city and changes in the ratio of time and incentive workers on the same job. It excludes the effect on year-to-year changes of any alteration in occupational composition (e. g., in the relative proportion of washers and flatwork ironers), and of shifts in employment among cities. The basic hourly earnings data on which the indexes presented here are based exclude premium payments for overtime and late-shift work.

<sup>2</sup> An article published in *Starchroom Laundry Journal*, New York City, October 1953 (p. 9) stated that since 1947 the potential working population had increased by 6½ million, but laundries had added less than 2 million customers. The American Institute of Laundering, Joliet, Ill., in its Special Report No. 205, stated that in 1949, 39 percent of all urban families used commercial laundries, while in 1953, the proportion had fallen to 35 percent. The proportion sending out all laundry (except lingerie, hose, and similar items) fell from 10 to 7 percent. Laundry industry publications also mention technological changes in the industry.



prevailing in the industry,<sup>3</sup> as compared with other industries, statutory minimum wage rates are likely, in some periods, to have more effect on wages in this than in most other industries. The effects of changes in statutory minimum wage rates on laundries are also more localized than in manufacturing and some nonmanufacturing industries. The direct effects of the Fair Labor Standards Act are limited to communities in which a high proportion of laundry service crosses State lines. Most laundry workers who are covered by minimum-wage legislation are affected by State rather than Federal legislation, and minimum rates vary among those States that have any minimum-wage orders in effect for the industry. More than half the areas studied were in States which have minimum-wage orders for women laundry workers and most of these minima were increased between 1945 and 1953. In all cases except in California, New York, and the District of Columbia, the minima in effect in mid-1953 were below the 75-cent rate established under the Fair Labor Standards Act in January 1950, for employees engaged in interstate commerce.

In most areas in recent years, such factors as degree of unionization, earnings in other industries within an area, and the upward trend of wages generally appear to have affected wages in power laundries to a greater extent than changes in statutory minimum wages.<sup>4</sup>

<sup>3</sup> In 1945, average hourly earnings of women flatwork finishers varied among communities studied from 25 cents in Birmingham to 65 cents in San Francisco. In 1953, the averages ranged from 41 cents in Atlanta to \$1.10 in San Francisco.

<sup>4</sup> In New York State, a minimum wage of 57½ cents was set in October 1947 for women laundry workers in cities of over 10,000 population. About 14 percent of those studied in Buffalo in June 1947 were receiving less than that amount and were thus directly affected by the new minimum; in New York City, virtually none were affected. The 1953 change to 75 cents an hour apparently affected none of those studied in Buffalo or in New York City.

The New Jersey State minimum was raised from 33 to 50 cents in October 1946. Of the women studied in Newark, in the period prior to this change, about 15 percent were earning less than 50 cents.

Relatively few women workers studied in Milwaukee were affected by the February 1947 revision of the State minimum from 22½ to 45 cents; in 1945, only about 4 percent were earning less than the latter amount.

In California, a 65-cent minimum was set in June 1947; 2 years earlier, in July 1945, four-fifths of the women laundry workers studied in Los Angeles, and more than a third in San Francisco, were paid less than this amount. The 1952 revision of the California rate to 75 cents appeared, however, to have little if any direct effect on women workers studied in the two areas.

Portland, Oreg., laundry workers were apparently not directly affected by either the 50-cent minimum set in February 1947 or the 60-cent rate fixed in August 1950.

In the District of Columbia, presumably only a small proportion of women laundry workers were affected by the 50-cent minimum set in July 1946. However, 5 months prior to the 75-cent minimum effective on August 22, 1951, about a fifth were earning less than this new minimum.

The increase in earnings of power laundry workers between 1945 and 1953 ranged, among the cities studied, from less than 40 to more than 90 percent, although in about three-fifths of these cities it was between 55 and 70 percent (see table). The rise in Minneapolis was the largest registered, with the rise in St. Louis next; the smallest increase was reported in Cleveland. This variation in amounts of increase in laundry pay—from less than 40 to more than 90 percent—was concentrated within the group of midwestern cities. In 1945, laundry workers' earnings in Cleveland were the highest for the cities surveyed in the region. By contrast, earnings in Minneapolis and St. Louis were below the earnings in most of the other cities. From 1945 to 1953, however, earnings advanced 94.0 in Minneapolis, and 90.4 percent in St. Louis as compared with a rise of 36.5 percent in Cleveland. By 1953, the absolute level of earnings in Cleveland continued to be somewhat above the level in St. Louis, but had fallen below the Minneapolis level.

In Minneapolis, where the industry is widely organized, a series of negotiated adjustments during the postwar period increased wages substantially over the relatively low rates which prevailed in 1945. The majority of workers in St. Louis laundries were not covered by a labor-management contract until December 1945, when a 6-year agreement was negotiated. The initial contract provided a definite wage scale and, between early 1945 and 1947, straight-time average hourly earnings went up 7 cents. A 10-cent-an-hour increase in December 1947 was followed by subsequent adjustments which, over the period 1945-53, resulted in a proportionate increase in earnings almost as large as in Minneapolis. Adjustments for laundry workers in Cleveland, who were not as extensively covered by the terms of a labor-management contract, varied from year to year. They were markedly below those effected in other cities immediately after the war's end and again in 1948-49. Since 1951, however, the increases in Cleveland have averaged slightly above those for all cities combined.

Most of the communities surveyed in the Middle Atlantic States showed percentage increases in laundry wage rates that were above the average for the country as a whole. For New York City

laundries, the increase, measured in percentage terms, was slightly below the national average but laundry wage levels in this city ranked relatively high both in 1945 and in 1953.

Levels of pay in West Coast laundries were high compared with other areas in 1945 and post-war percentage increases in pay in these cities were as high as, or higher than, the average for all

<sup>5</sup> By 1953, virtually all women laundry workers studied in West Coast areas were earning at least 90 cents an hour. In Los Angeles, only about 6 percent of all men and women laundry workers studied earned 80 but less than 90 cents an hour, and in Portland, Oreg., and San Francisco, 98 percent of the workers studied earned at least \$1.05 an hour. These and similar data for the other areas studied are from the Bureau's occupational wage survey bulletins.

<sup>6</sup> More than nine-tenths of the women workers studied in Southeastern cities as a group earned less than 75 cents an hour in 1953. In Memphis and Birmingham, almost three-fourths were paid less than 55 cents. In Dallas and Houston, almost three-fourths of the women were paid less than 65 cents an hour.

In Atlanta and Baltimore, the lag behind the national increase was slight.

cities studied. Consequently, their relative positions compared with most other cities were maintained or improved during this period.<sup>5</sup> Southeastern and Southwestern cities not only had low pay levels at the beginning of the period, but the percentage increase in pay in each of these areas lagged behind the national average increase.<sup>6</sup>

### Differences by Occupation and Sex

Because the great majority of laundry workers are women, the 63-percent increase in their average earnings closely paralleled the average change for all such workers studied from 1945 to 1953. The gain for men's occupations in power laundries averaged 52 percent. Their cents-per-hour increase, however, was greater than for wom-

Indexes and percent changes in straight-time average hourly earnings in power laundries in selected areas and occupations, July 1945 to April-August 1953<sup>1</sup>

Item	Indexes (1947-49=100)							Percent change from <sup>2</sup> —						
	July 1945	July 1947	July 1948	June 1949	April-June 1951	June 1952	April-August 1953	July 1945 to April-August 1953	July 1945 to July 1947	July 1947 to July 1948	July 1948 to June 1949	June 1949 to April-June 1951	April-June 1951 to June 1952	June 1952 to April-August 1953
<i>Area</i>														
All areas combined.....	76.8	94.6	100.8	104.7	114.5	118.2	122.9	60.1	23.1	6.6	3.9	9.4	3.2	4.0
Atlanta.....	72.9	96.6	100.2	103.2	108.9	111.6	115.9	59.0	32.5	3.8	3.0	5.5	2.5	3.8
Baltimore.....	77.3	97.1	100.8	102.1	115.7	118.5	122.2	58.0	25.5	3.9	1.3	13.3	2.4	3.1
Birmingham.....	75.3	93.7	103.4	103.0	109.9	112.1	112.2	49.1	24.4	10.4	-4	6.8	2.0	1.1
Boston.....	77.6	91.6	103.5	104.9	114.1	124.9	126.9	63.5	18.0	13.0	1.3	8.9	9.4	1.6
Buffalo.....	77.5	94.9	100.1	104.9	120.9	118.0	130.2	67.9	22.5	5.5	4.8	15.2	-2.3	10.3
Chicago.....	75.3	94.8	100.3	104.9	115.4	113.0	117.3	55.7	25.9	5.7	4.6	10.0	-2.1	3.8
Cincinnati.....	78.4	88.7	102.9	108.4	116.8	120.4	127.1	62.2	13.3	15.9	5.3	7.8	3.1	5.6
Cleveland.....	89.3	94.1	102.4	103.5	109.7	117.0	121.9	36.5	5.4	8.9	1.0	6.0	6.7	4.2
Dallas.....	81.5	97.1	100.9	102.0	109.9	116.4	119.7	46.9	19.1	4.0	1.0	7.8	5.9	2.9
Denver.....	77.2	95.9	100.0	104.2	114.6	125.4	131.4	70.2	24.2	4.3	4.2	10.0	9.4	4.8
Detroit.....	72.7	98.1	101.9	100.0	108.6	112.1	115.2	58.5	35.0	3.9	-1.9	8.6	3.2	2.8
Houston.....	75.7	94.2	101.7	104.1	108.2	109.6	118.3	56.4	24.5	8.0	2.3	4.0	1.3	7.9
Indianapolis.....	81.5	90.5	104.0	105.5	118.8	117.8	( <sup>3</sup> )	( <sup>3</sup> )	11.0	14.9	1.5	12.6	-8	( <sup>3</sup> )
Jacksonville.....	87.7	95.4	99.9	104.7	114.0	111.7	( <sup>3</sup> )	( <sup>3</sup> )	8.8	4.7	4.8	8.9	-2.0	( <sup>3</sup> )
Kansas City.....	81.7	99.7	100.3	100.0	118.3	126.9	( <sup>3</sup> )	( <sup>3</sup> )	22.0	.6	-2	18.2	7.3	( <sup>3</sup> )
Los Angeles.....	70.5	91.7	103.6	104.7	109.2	113.7	117.0	66.0	30.1	13.0	1.0	4.3	4.1	3.0
Louisville.....	75.9	96.4	101.0	102.6	111.6	113.8	122.9	62.0	27.1	4.7	1.6	8.7	2.1	8.0
Memphis.....	76.1	94.4	99.9	105.8	114.1	113.8	117.9	54.9	24.0	5.8	6.0	7.9	-3	3.6
Milwaukee.....	81.0	91.5	102.2	106.3	121.6	128.1	134.9	66.6	13.0	11.7	4.0	14.5	5.3	5.4
Minneapolis.....	69.4	94.1	99.0	106.9	113.3	122.5	134.7	94.0	35.6	5.2	8.0	6.0	8.1	10.0
Newark-Jersey City.....	77.8	94.5	101.7	103.8	112.4	117.3	121.0	55.6	21.5	7.7	2.0	8.3	4.3	3.2
New York City.....	78.9	96.6	97.7	105.7	116.1	122.0	123.3	56.4	22.5	1.2	8.1	9.9	5.1	1.1
Philadelphia-Camden.....	77.9	91.1	103.1	105.8	118.6	118.1	129.3	65.9	16.9	13.2	2.6	12.1	-4	9.5
Pittsburgh.....	71.8	91.4	100.3	108.3	119.7	123.2	128.4	78.9	27.2	9.8	8.0	10.5	2.9	4.3
Portland, Oreg.....	70.2	95.0	102.0	103.0	113.8	114.0	119.3	70.1	35.4	7.4	.9	10.5	.2	4.7
Providence.....	71.1	94.7	100.2	105.1	115.2	116.7	119.4	68.0	33.2	5.9	4.9	9.6	1.3	2.3
Richmond.....	76.0	95.5	101.5	103.0	105.4	112.0	111.6	46.9	25.7	6.2	1.5	2.3	6.3	-4
St. Louis.....	74.9	86.5	106.1	107.4	118.1	134.0	142.6	90.4	15.5	22.7	1.2	10.0	13.5	6.5
San Francisco.....	74.1	93.7	98.7	107.6	108.3	114.4	118.9	60.5	26.5	5.3	9.0	.7	5.7	4.0
Seattle.....	71.0	96.5	99.5	104.0	109.5	115.0	( <sup>3</sup> )	( <sup>3</sup> )	35.9	3.2	4.6	5.3	5.0	( <sup>3</sup> )
Washington, D. C.....	82.2	96.8	100.1	103.1	119.4	120.1	122.9	49.5	17.8	3.3	3.1	15.8	.6	2.4
<i>Occupation</i>														
Washers, machine (men).....	79.6	95.9	99.5	104.5	110.3	114.7	118.2	48.6	20.6	3.8	5.0	5.5	4.0	3.1
Finishers, machine, flatwork (women).....	75.6	94.3	100.9	104.8	115.7	120.0	123.6	63.6	24.8	7.0	3.9	10.3	3.8	3.0
All women's occupations combined.....	75.9	94.3	101.0	104.7	115.3	119.1	123.9	63.2	24.2	7.1	3.7	10.1	3.3	4.0

<sup>1</sup> Metropolitan areas, as defined by the Bureau of the Budget, were studied, with the following exceptions:

Chicago (Cook Co. only);

New York City (Bronx, Kings, New York, Queens, and Richmond Cos., N. Y.);

Newark-Jersey City, although part of the New York Metropolitan Area, was studied separately; and Philadelphia, Pa.-Camden, N. J. (Philadelphia and Delaware Cos., Pa. and Camden Co., N. J.).

<sup>2</sup> Unless otherwise indicated, all are increases.

<sup>3</sup> This area was not surveyed in 1953.

en laundry workers. Straight-time hourly earnings of men in the jobs studied in which substantial numbers of men were employed averaged about 30 cents more than earnings of women in the jobs in which they were employed.

Women operators of flatwork finishing machines comprised the largest occupational group surveyed. Earnings of these workers, some of whom are paid on an incentive basis, rose more than 30 cents an hour, or 63.6 percent, between 1945 and 1953. Average hourly earnings of men washing-machine operators, the highest-paid job studied, advanced by slightly more than 40 cents, or 48.6 percent. Pay of men extractor operators, who earned less than machine washers, increased about 32 cents, or 46.6 percent.

### Scope and Method

Data for the indexes presented in this article were obtained from the Bureau's occupational wage surveys. These surveys were made by visits of the Bureau's field agents to a representative group of power laundries in each area studied. Only laundries with 21 or more employees (8 or more in 1945 and 1947) were covered.

The indexes are based on earnings of occupational groups accounting for about two-fifths of all plant workers (excluding driver salesmen) in power laundries in the cities studied. The groups included in all periods were men extractor operators, machine washers, and firemen (stationary boiler); women retail receiving clerks, machine flatwork finishers, machine shirt pressers, and bundle wrappers. Women markers were added in 1949 and identifiers in 1951. The addition of these two occupations had no appreciable effect on the continuity of the series.

Data for the periods from 1945 to 1952 are based on all 31 cities listed in the table; for 1952 to 1953, they were based on 27 cities, since 4 communities were not surveyed in 1953. Except for New York, the indexes refer to earnings changes within metropolitan areas,<sup>7</sup> rather than to earnings changes within city limits.

As indicated earlier, the indexes presented here reflect, in addition to general wage changes, merit increases in pay, any variation in incentive earnings, the effect of any shifts in employment

among laundries within a city, and changes in the ratio of time and incentive workers on the same job. However, the effects of year-to-year changes of any alteration in occupational composition and of shifts in employment among cities are excluded.

Over longer periods, the effects of shifts in occupational composition or in relative employment among cities were minimized by the chain method of index construction. For each year in a pair covered by consecutive wage surveys (1945-47, 1947-48, etc.), the straight-time hourly earnings for each occupation within a city were weighted by the number employed in that occupation in the latter of the two years, to obtain an overall city average for the year. First, the percentage change between the resulting city averages for 1945 and 1947 was expressed as a relative (or index) with 1945 as one hundred. Then the percentage relationship between the city averages for the next pair of years—1947-48—was computed in a similar fashion and the index for the earlier of these two years (1947) was multiplied by this percentage relationship. These indexes based on 1945 were converted to a 1947-49 base by dividing by the average of the indexes for 1947, 1948, and 1949.

The same techniques were used in computing the index for all cities combined. Average hourly earnings for all occupations in each city, computed in the manner just described, were weighted by the total laundry employment in the city in the latter year for each 2-year period, to obtain overall averages for the entire group of cities.

These methods completely exclude the effect of shifts in employment among occupations and areas from the computation of the change in earnings from one year to the next. However, since the employment weights differ for each pair of years, the weight of the percent change for any occupation or area may vary from period to period. Thus, if the ratio of flatwork finishers to extractor operators increased from 1947 to 1948, the increase in earnings of flatwork finishers would have greater weight in computing the overall increase in earnings from 1947 to 1948 than from 1945 to 1947.

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<sup>7</sup> See footnote 1 on table.

## Engineering Personnel Employed in Metalworking Industries<sup>1</sup>

SHORTAGES OF ENGINEERS and other scientists during the current mobilization period have focused attention on the need for more adequate information on employment in these professions. At present, the decennial Census of Population is the only source of comprehensive statistics on employment by occupation.

The need for current estimates of employment in these key occupations prompted the Bureau of Labor Statistics to attempt the collection of such information by mail questionnaires addressed to employers—a method which has long been used in preparing the Bureau's monthly employment estimates for different industries. Opportunity for this pilot study was provided by a schedule which had been sent quarterly during 1951 and 1952 to employers in metalworking industries, to obtain manpower information needed for defense planning. In October 1952, a question was added to the schedule inquiring as to the numbers of "professional engineers" employed. In addition, to determine the extent to which industry was utilizing less highly trained workers to supplement their professional engineering staffs, questions were added on the employment of "engineering aids" and "draftsmen."<sup>2</sup>

This article presents employment estimates for engineering personnel in selected metalworking industries, based on this pilot survey.<sup>3</sup> Four

major industry groups were covered by the statistics—fabricated metal products; machinery (except electrical); electrical machinery; and transportation equipment (except motor vehicles and motor-vehicle equipment). Motor-vehicle manufacturers were also included in the survey mailing list, but the response was not sufficient to yield statistically reliable estimates for that industry. The concluding section of this article briefly discusses the scope and method of the survey, the reliability of the estimates of engineering employment arrived at, and the problems and potentialities of this method of obtaining employment estimates for selected occupations.

### Employment of Engineers

*By Industry.* In October 1952, approximately 103,800 engineers were employed in the metalworking industries covered by the study. This number is believed to represent about one-fifth of all professional engineers in the United States, although no satisfactory overall estimate of total engineering employment is available.

Nearly three-fifths of the engineers in the industry groups surveyed were employed in three of the component industries. The largest number, 27,800, were in the aircraft industry; the communication equipment industry came second, with 19,500 engineers; and the electrical generating, transmission, distribution, and industrial apparatus industry was third, with about 10,000. Other industries with relatively large numbers of engineers (somewhat fewer than 5,000 each) were fabricated structural metal products, general industrial machinery, and metalworking machinery. (See table 1.)

The ratio of engineers to total employment varied greatly among industries. It ranged from a low of 4 engineers per 1,000 employees in the tin can and other tinware industry, to 39 per 1,000 in communication equipment, and to 41 per 1,000 in aircraft. Other industries averaging 25 or more engineers per 1,000 employees were electric lamps, electrical generating and related apparatus, and office and store machines. In addition to tin cans and other tinware, industries that averaged less than 8 engineers per 1,000 were miscellaneous transportation equipment, cutlery and hardware, and fabricated wire products. For the most part,

<sup>1</sup> Prepared in the Bureau's Division of Manpower and Employment Statistics.

<sup>2</sup> The following definitions were used in compiling the data:

Professional engineers: Individuals employed in engineering work at a level that requires a knowledge of the engineering, physical, and mathematical sciences equivalent at least to that acquired through completion of a 4-year professional engineering course. Trainee engineers and all managerial, supervisory, technical sales, and other personnel whose work requires the technical knowledge and skill described above are included in the definition. However, personnel engaged in nontechnical work not requiring a knowledge of engineering principles are not included, even though they possess an engineering degree.

Engineering aids: Semiprofessional engineering assistants except draftsmen, who assist professional engineers. Such assistants must have a knowledge of the engineering, physical, and mathematical sciences equivalent to that acquired through completion of 2 years of post-high-school training in a technical institute or junior college, or other formal training.

Draftsmen: Individuals working as draftsmen at all levels of responsibility below the professional.

<sup>3</sup> See also *Metalworking Employment in Small and Large Firms*, Monthly Labor Review, April 1954 (p. 412), and forthcoming Summary Volume: *Employment in Metalworking Industries, by Size of Firm*, July 1, 1951-July 1, 1953.

the industries that use relatively few engineers appear to be those manufacturing mainly standardized products which change but little in design from year to year. The factors responsible for the high employment of engineers in the aircraft and electrical machinery industries undoubtedly include the complexity of the products and technology of these industries and their extremely large research and development programs.<sup>4</sup>

*By Size of Establishment.* More than three-fifths of the engineers in the surveyed industries were in establishments with a total employment of 1,000 or more. The concentration of engineers in large plants was marked in the transportation equipment industries, where 85 percent of the engineers worked in establishments with 1,000 or more employees. It was also high in the electrical machinery industries, in which 66 percent of the engineers worked in plants in this largest size

<sup>4</sup> See Scientific Research and Development in American Industry—A Study of Manpower and Costs. Bureau of Labor Statistics Bulletin No. 1148, prepared in cooperation with the U. S. Department of Defense, 1953 (p. 22).

<sup>5</sup> *Ibid.* (p. 7).

group. However, in the machinery (except electrical) industries, less than half of the engineers, and in fabricated metal products less than a fourth, worked for the largest establishments. (See table 2.)

In all the surveyed metalworking industries taken together, the average ratio of engineers to total employment was considerably greater in large than in small establishments. Plants with a work force of 1,000 or more averaged 29 engineers per 1,000 employees, compared with averages of 18 or less per 1,000 for establishments in the smaller size categories. This overall finding is largely a reflection of the situation in the aircraft and electrical machinery industries. As previously noted, these industries employ large numbers of engineers in connection with their research programs, and there is a marked concentration of research activities in large companies.<sup>5</sup> No consistent relationship was found between size of establishment and the ratio of engineers to total employment in the individual industries which comprised the machinery (except electrical) group and fabricated metal products group.

TABLE 1.—Estimated number of engineers, engineering aids, and draftsmen employed in selected metalworking industries, October 1952

Industry and industry group	Engineers		Engineering aids		Draftsmen	
	Number	Average per 1,000 employees	Number	Average per 100 engineers	Number	Average per 100 engineers
Selected metalworking industries: Total.....	103,790	22	57,460	55	67,350	65
Fabricated metal products.....	11,220	10	7,670	68	13,110	117
Tin cans and other tinware.....	240	4	160	67	80	33
Cutlery, handtools, and hardware.....	1,010	7	760	75	740	73
Heating apparatus.....	1,390	9	1,330	96	1,210	87
Fabricated structural metal products.....	4,790	18	2,790	58	8,330	174
Metal stamping, coating, and engraving.....	1,860	9	1,250	67	1,450	78
Lighting fixtures.....	480	10	300	63	310	65
Fabricated wire products.....	340	5	330	97	260	76
Miscellaneous fabricated metal products.....	1,110	8	750	68	730	66
Machinery (except electrical).....	28,150	18	18,020	64	24,340	86
Engines and turbines.....	1,450	17	680	47	1,650	114
Agricultural machinery and tractors.....	2,460	16	1,440	59	1,110	45
Construction and mining machinery.....	2,290	18	1,110	48	2,030	89
Metalworking machinery.....	4,630	17	3,040	66	4,740	102
Special-industry machinery.....	3,430	18	2,650	77	3,650	106
General industrial machinery.....	4,750	21	3,180	67	4,980	105
Office and store machines.....	3,000	27	1,580	53	1,210	40
Service-industry and household machinery.....	3,020	16	2,260	75	2,530	84
Miscellaneous machinery parts.....	3,120	13	2,080	67	2,440	78
Electrical machinery.....	33,940	30	15,900	47	16,070	47
Electrical generating, transmission, distribution, and industrial apparatus.....	10,080	27	4,850	48	8,100	80
Electrical appliances.....	780	13	310	40	280	36
Insulated wire and cable.....	260	8	250	96	90	35
Electrical equipment for vehicles.....	1,910	24	1,240	65	990	52
Electric lamps.....	680	29	180	26	80	12
Communication equipment.....	19,500	39	8,650	44	6,270	32
Miscellaneous electrical equipment.....	730	15	420	58	260	36
Transportation equipment (except motor vehicles and motor-vehicle equipment).....	30,480	33	15,870	52	13,830	45
Aircraft and parts.....	27,810	41	13,630	49	10,410	37
Ship and boat building and repairing.....	1,310	8	1,350	103	2,370	181
Railroad equipment.....	1,260	17	820	65	1,000	79
Miscellaneous transportation equipment.....	100	7	70	70	50	50

## Engineering Aids and Draftsmen

In addition to 103,800 professional engineers, the engineering staffs of the metalworking industries represented in the study included 57,500 engineering aids and 67,400 draftsmen in October 1952. Thus, for every 100 engineers there were, on the average, 120 supporting technicians—55 aids and 65 draftsmen.

The wide variation in extent of utilization of technicians in different industries is shown in table 1. Ship and boat building and repairing was the industry with the highest ratio of technicians to engineers—an average of 103 engineering aids and 181 draftsmen per 100 professional engineers. Most industries in the fabricated metal products and machinery (except electrical) groups also employed relatively large numbers of technicians. The industries which employed the fewest, relative to the number of engineers on the payroll, were electric lamps, communication equipment, electrical generating and related apparatus, aircraft, and electrical appliances.

When the establishments were classified by size, further variations in the ratio of technicians to engineers were found. In all the surveyed industries combined, large plants (with 1,000 or more employees) had an average of 48 engineering aids and 50 draftsmen per 100 engineers, far below the average ratios for smaller establishments (table 2). The statistics for different industries, however, do not show a consistent pattern of relationship between plant size and the extent of utilization of supporting personnel.

An industry-by-industry comparison of the ratio of technicians to engineers with that of engineers to total employment also yields varying results. The 6 industries which employed the most engineers relative to their total work force (aircraft, 4 of the electrical machinery industries, and office and store machines) were all comparatively small employers of technicians. On the other hand, there were some industries which employed relatively large numbers of technicians as well as of engineers, and still others which had relatively few employees of either type. Among the factors responsible for these differences were undoubtedly the diversity of the industries' products and processes and the varying size of their research programs. There were probably many other contrib-

TABLE 2.—Estimated number of engineers, engineering aids, and draftsmen employed in selected metalworking industries, by size of establishment, October 1952

Industry group and size of establishment <sup>1</sup>	Engineers		Engineering aids		Draftsmen	
	Number	Average per 1,000 employees	Number	Average per 100 engineers	Number	Average per 100 engineers
<b>Selected metalworking industries: Total</b> .....	103,790	22	57,460	55	67,350	65
1-99 employees.....	11,360	15	7,840	69	9,950	88
100-499 employees.....	17,840	16	11,770	66	16,810	94
500-999 employees.....	11,180	18	7,290	65	8,620	77
1,000 or more employees.....	63,410	29	30,560	48	31,970	50
<b>Fabricated metal products</b> .....	11,220	10	7,670	68	13,110	117
1-99 employees.....	3,380	11	2,110	66	3,450	108
100-499 employees.....	3,520	9	2,580	73	4,630	132
500-999 employees.....	1,820	10	1,360	75	2,110	116
1,000 or more employees.....	2,700	12	1,620	60	2,920	108
<b>Machinery (except electrical)</b> .....	28,150	18	18,020	64	24,340	86
1-99 employees.....	4,810	17	3,080	64	4,320	90
100-499 employees.....	7,060	17	4,830	68	8,070	114
500-999 employees.....	4,010	17	2,660	66	3,820	95
1,000 or more employees.....	12,270	18	7,450	61	8,130	66
<b>Electrical machinery</b> .....	33,940	30	15,900	47	16,070	47
1-99 employees.....	2,480	19	1,960	79	1,890	76
100-499 employees.....	5,430	20	3,550	65	2,970	55
500-999 employees.....	3,520	23	1,940	55	1,660	47
1,000 or more employees.....	22,510	40	8,450	38	9,550	42
<b>Transportation equipment (except motor vehicles and motor-vehicle equipment)</b> .....	30,480	33	15,870	52	13,830	45
1-99 employees.....	890	22	690	78	290	33
100-499 employees.....	1,830	23	810	44	1,140	62
500-999 employees.....	1,830	28	1,330	73	1,030	56
1,000 or more employees.....	25,930	35	13,040	50	11,370	44

<sup>1</sup> Size of establishment is based upon total plant employment.

uting factors—such as variations in staffing patterns and hiring practices and local differences in the supply-and-demand situation in professional engineering and technician occupations.

## Collection and Estimating Procedures

The survey represents a new procedure for the collection of occupational data. Therefore, the methods of arriving at the estimates, the reliability of these estimates, and the potentialities of the new procedure are discussed below.

Since the survey which yielded these data on engineering employment had, as its primary purpose, the collection of manpower information for use by defense agencies, its coverage was determined by these agencies' needs. For this reason, coverage was limited to selected metal-using industries—primarily the fabricated metal products, machinery (except electrical), electrical machinery, and transportation-equipment industry

groups. Defense-agency specifications were also responsible for the decision to include in the mailing list all establishments in the covered industries having 100 or more employees and, in a few industries with a high rate of metal consumption, all those having 50 or more employees. A few smaller establishments were included for special reasons.

The total number of establishments on the mailing list was 7,590. Of these, approximately 7,200 responded, but many replies either failed to supply any usable information or arrived too late for inclusion in the survey. Another group (453) did not furnish information on engineering employment, although they supplied data on one or more other items covered by the schedule. Nevertheless, 5,645 establishments, or 74 percent of the total number on the mailing list, supplied usable information on engineering employment. This was considered a good response rate, especially in view of the fact that the schedule called for other items of information, some difficult to supply.

Despite this high overall response rate, in one industry, motor vehicles, the nonresponse was so great as to preclude the development of estimates. For this reason, the motor-vehicle industry has been excluded from the estimates of engineering employment presented in this article.

Altogether, the establishments that reported engineering personnel in industries covered by the tabulations had a total employment of 2,736,570. Table 3 shows the number of employees on the payrolls of the reporting establishments in each industry and the proportion these employees represented of total employment in the given industry in October 1952.

In deriving overall estimates of engineering employment from the figures supplied by the respondents, the first step was to classify the returns by detailed industry and four size groups (1-99 employees, 100-499 employees, 500-999 employees, and 1,000 or more employees). For each of these industry-size groups, totals were obtained on employment of engineers and total employment in October 1952, for all companies reporting both items of information. These

aggregates were derived primarily from data supplied by plants reporting both these items on their schedules for that month. However, in order to obtain more inclusive data for certain industry-size cells, the October 1952 returns were supplemented by estimates for some plants derived from a July 1951 survey of engineering employment. Ratios of engineering employment to total employment were then computed for each industry-size group, and these were multiplied by estimates of total employees for the given groups prepared by the Bureau.<sup>6</sup> The resulting estimates of engineering employment for industry-size groups were then summed, to yield the estimates presented in the first column of tables 1 and 2 in this article.

The procedure used in estimating employment of engineering aids and draftsmen involved, first, the computation of ratios of "aids to engineers"

TABLE 3.—Number of employees in metalworking plants reporting engineering personnel and percent of total employment in the industry, October 1952

Industry and industry group	Employees in reporting establishments	
	Number <sup>1</sup>	Percent of total employment in the industry
Selected metalworking industries: Total.....	2, 737, 000	58
Fabricated metal products.....	566, 000	52
Tin cans and other tinware.....	45, 000	77
Cutlery, handtools, and hardware.....	83, 000	55
Heating apparatus.....	94, 000	61
Fabricated structural metal products.....	125, 000	48
Metal stamping, coating, and engraving.....	99, 000	47
Lighting fixtures.....	14, 000	30
Fabricated wire products.....	37, 000	55
Miscellaneous fabricated metal products.....	69, 000	50
Machinery (except electrical).....	921, 000	57
Engines and turbines.....	63, 000	73
Agricultural machinery and tractors.....	111, 000	71
Construction and mining machinery.....	84, 000	64
Metalworking machinery.....	134, 000	48
Special-industry machinery.....	115, 000	62
General industrial machinery.....	136, 000	60
Office and store machines.....	80, 000	72
Service-industry and household machinery.....	99, 000	51
Miscellaneous machinery parts.....	99, 000	41
Electrical machinery.....	672, 000	60
Electrical generating, transmission, distribution, and industrial apparatus.....	255, 000	69
Electrical appliances.....	37, 000	61
Insulated wire and cable.....	13, 000	40
Electrical equipment for vehicles.....	22, 000	27
Electric lamps.....	18, 000	77
Communication equipment.....	297, 000	59
Miscellaneous electrical equipment.....	30, 000	60
Transportation equipment (except motor vehicles and motor-vehicle equipment).....	578, 000	62
Aircraft and parts.....	398, 000	58
Ship and boat building and repairing.....	115, 000	74
Railroad equipment.....	58, 000	77
Miscellaneous transportation equipment.....	7, 000	49

<sup>1</sup> Figures are rounded to the nearest 1,000.

<sup>6</sup> See Bureau of Labor Statistics forthcoming Summary Volume: Employment in Metalworking Industries by Size of Firm, July 1, 1951-July 1, 1953.

and "draftsmen to engineers" for the reporting establishments in each industry-size group. These ratios were then multiplied by the estimates of engineering employment, already derived by the methods outlined in the preceding paragraph, and summed to provide the statistics presented in columns 3 and 5 of tables 1 and 2.

In considering the sampling error which may be involved in these estimates, it is important to bear in mind that the establishments canvassed in the survey were not chosen by random methods and that sampling theory is, therefore, not directly applicable to the assessment of survey results. With this important qualification, an estimate was made of the sampling error that might have arisen from this survey if it had had a probability design. This somewhat unusual practice was adopted in the light of the following considerations. The sample design used by the Bureau in estimating total employment for size classes<sup>7</sup> is a stratified probability sample. With the exception of establishments in the smallest size group (1-99 employees), the design is identical with that used in the survey of engineering employment. The identical part of the two sampling designs covers approximately 6,000 of the 9,000 establishments and 97 percent of the total employment in the probability sample. Actual response, however, was considerably better in the survey of total employment than in that of engineering personnel. The overlap of the two samples in terms of number of employees in the reporting establishments was 60 percent. The overall employment survey furnished reliable estimates of variance of the total employment figures, while the same design, adjusted for size of sample but not for possible bias of nonresponse, was used in calculating the sampling error of the ratio of engineers to employment.

For a typical individual industry, there is a 67-percent probability that the sampling error is less than 8 percent. For the estimate for all metalworking industries combined, there is a 67-percent probability that the sampling error is less than 2½ percent and a 95-percent probability that it is less than 5 percent. The potential errors indicated are those that might arise from sampling as contrasted with a complete survey

<sup>7</sup> Ibid.

and do not include other possible sources of inadequacy such as reporting errors and the bias of nonresponse.

In planning the study, it was recognized that precisely comparable figures on engineering employment would be difficult to obtain from the various reporting establishments, in view of the known divergencies among companies in job titles and occupational organization. Unfortunately, resources did not permit a field check on companies' interpretations of the occupational definitions supplied on the questionnaire. That differences in personnel classification could have a great effect on the employment estimates is indicated by a comparison of the results of the October 1952 survey with figures on engineering employment derived from a July 1951 questionnaire.

The earlier schedule, which was one of the same series utilized in October 1952, carried a question on employment of engineers only and made no mention of engineering aids or draftsmen. Though an identical definition of the occupation of engineer was given on the two schedules, many establishments reported fewer engineers in 1952 than in 1951, despite a rise in their total work force—strongly suggesting that some personnel were included in the 1951 figures on engineers who, in the later survey, were reported as engineering aids or draftsmen. This supposition was confirmed by correspondence with a few establishments and, therefore, it was decided not to publish any comparative figures from the earlier survey.

Although by no means conclusive, this experience suggests that more accurate information on employment by occupation can be obtained when data are requested for a group of associated occupations than when the request is limited to one isolated field of work. It also underlines the importance of providing for followup visits to a sample of respondents in a future survey of this type.

Further experimentation and testing is obviously required before the use of mail schedules addressed to employers can be regarded as a fully tested and perfected method of obtaining data for estimates of employment by occupation. In general, however, the experience with the October 1952 survey suggests that this technique can be an effective and economical means of obtaining data for such estimates.



## Paid Rest-Period Provisions in Union Agreements, 1952-53

PAID REST PERIODS during regular working hours were provided by nearly one-fourth (417) of a total of 1,842 collective bargaining agreements analyzed in a recent Bureau of Labor Statistics study. About 6.3 million workers were covered by the agreements analyzed; the agreements with paid rest-period provisions covered approximately 1.6 million workers, but many agreements limited the practice to specific categories within the bargaining unit.<sup>1</sup>

The benefits derived from granting paid rest periods to workers gained recognition during World War I. Many employers found that a rest period, breaking the monotony of repetitive operations, counteracted production-line fatigue and actually resulted in a higher volume and quality of total daily output and in reducing spoilage. Experience with paid rest-period provisions, during World War I and subsequently, led to their wider adoption. In recent years, paid rest periods have increasingly become a subject for collective bargaining.

Several factors contribute to the formalization of rest periods—primarily the psychological and physical demands of modern industry upon workers and the requirements of plant operation or discipline. Unrelieved fatigue, whether physical or mental, may adversely affect safety and the quality and quantity of output. From the psychological standpoint, monotony and routine tend to dull alertness; for physical health, a "break" from work is required by employees engaged in heavy manual labor and by those whose work pace is determined by the machine. The health and safety factors are also important in other kinds of jobs, for example, in the case of painters working in closed spaces where fresh air is not available.

The choice between allowing workers to take a rest period when and as long as they require it and formally setting aside a fixed period for that purpose depends largely upon requirements of plant operation or discipline in preventing abuses. Adoption of formal provisions often permits more efficient scheduling of plant operations, particu-

larly where constant attendance at machines and work stations is required. The need for formalizing the practice tends to grow correspondingly with increased size of establishment. The incorporation of a rest-period provision into a collective bargaining agreement is an act of formalization that also places some responsibility upon union officials to prevent abuses. Moreover, the development of provisions outlining the duration, scheduling, and other conditions of such time allowances tends to minimize disputes over these working conditions.

Even in plants covered by collective bargaining contracts, absence of a specific paid rest-period provision does not necessarily mean that this practice is not observed. Often, company policy permits rest pauses, but these practices may not be written into the agreement. Often, too, the nature of the work permits intermittent breaks for rest and relief—"coffee breaks," timeout, smoking breaks, "spellout"—either on a formal or informal basis.

Actually, rest or relief periods without loss of pay are more common in American industry than is indicated by the Bureau's findings based on analysis of union contracts. The Bureau's study, for example, did not include "personal allowance" or "relief" time generally provided under wage-incentive systems in determining time or production standards. Many of the agreements which provided for rest periods specifically indicated, with respect to piece-rate or incentive workers, that time allowances for this purpose were included in calculating time standards or incentive rates.

Women must be given a rest period under the laws or minimum-wage orders effective in 8 States—Arizona, California, Colorado, Nevada, Oregon, Utah, Washington, and Wyoming. Most of these provide for a 10-minute rest period within a half-day's work.<sup>2</sup>

<sup>1</sup> The agreements in the study, current as of August 1952 or later, were selected from the Bureau's current file of union contracts on the basis of industry, union, and regional representation. Agreements for the airline and railroad industries (except for the Railway Express Agency) are not collected by the Bureau and therefore are not included. No agreement negotiated in the fall of 1953 or later was included in this study.

For seasonal industries, the number of workers covered generally includes short-term workers employed at the peak of the season, in addition to regular, year-round employees.

This survey does not include rest periods occurring or provided during nonregular or overtime hours.

<sup>2</sup> Summary of State Labor Laws for Women, 1953. Publication D-66. Women's Bureau, U. S. Department of Labor (processed, July 1, 1953, p. 3).

TABLE 1.—Proportion of collective bargaining agreements containing paid rest-period provisions, and workers covered, 1952-53,<sup>1</sup> by industry group

Industry group	Agreements studied		Percent with paid rest-period provisions <sup>2</sup>	
	Number	Workers covered (in thousands)	Agreements	Workers covered <sup>3</sup>
All industries.....	1,842	6,268.4	22.6	25.4
MANUFACTURING.....	1,345	4,169.0	24.4	24.8
Food and kindred products.....	131	321.8	52.7	72.1
Tobacco.....	15	28.3	20.0	8.5
Textile-mill products.....	133	183.7	7.5	4.4
Apparel and other finished textile products.....	61	390.7	4.9	.3
Lumber and timber basic products.....	32	16.1	21.9	25.2
Furniture and finished wood products.....	42	63.3	47.6	20.3
Paper and allied products.....	56	88.2	21.4	32.8
Printing and publishing.....	52	47.2	1.9	.8
Chemicals and allied products.....	73	84.1	32.9	34.5
Petroleum and coal products.....	25	64.2	8.0	2.7
Rubber products.....	19	127.9	31.6	21.2
Leather and leather products.....	32	48.2	21.9	7.9
Stone, clay, and glass products.....	53	98.5	22.6	26.3
Primary metal industries.....	97	551.8	12.4	31.7
Fabricated metal products.....	110	176.1	34.5	39.1
Machinery (except electrical).....	160	334.1	16.9	22.6
Electrical machinery.....	75	350.7	32.0	18.7
Transportation equipment.....	105	1,110.9	26.7	22.6
Professional and scientific instruments.....	26	44.5	23.1	11.0
Miscellaneous manufacturing.....	48	38.7	35.4	34.7
NONMANUFACTURING.....	497	2,099.4	17.9	26.6
Mining, crude petroleum, and natural gas production.....	36	512.9	2.8	( <sup>4</sup> ) 7.0
Transportation <sup>5</sup> .....	104	301.0	9.6	
Communications.....	64	521.6	56.3	69.5
Utilities; electric and gas.....	57	145.6	1.8	2.4
Wholesale and retail trade.....	95	127.1	14.7	19.3
Hotels and restaurants.....	22	98.1	27.3	78.0
Services.....	65	119.1	27.7	42.9
Construction.....	47	252.0	6.4	7.1
Miscellaneous nonmanufacturing.....	7	22.0		

<sup>1</sup> See footnote 1 to text.

<sup>2</sup> For number of agreements with paid rest-period provisions, and number of workers covered by those agreements, see table 5.

<sup>3</sup> Includes total number of workers in bargaining units covered by the agreements providing paid rest periods. Many contracts, however, restrict these provisions to women, particular occupational groups, specific workers or departments, etc.

<sup>4</sup> Less than 0.1 percent.

<sup>5</sup> Excludes railroads (except for Railway Express Agency) and airline industries.

### Prevalence of Paid Rest Periods, by Industry

In a comparison by industry group, manufacturing industries accounted for almost four-fifths of the 417 agreements with paid rest periods. Nearly a fourth of the manufacturing agreements studied, and slightly less than a fifth of the non-manufacturing agreements, contained such provisions (table 1).

Paid rest periods were provided in more than half of the agreements in the food and kindred products and communications industries. Meat-packing agreements accounted for the preponderance of such clauses in the food industry group.

The prevalence of rest-period provisions in communications could be attributed to the large proportion of women employed and the service requirements of that industry.

Between 30 and 50 percent of the agreements in six other industry groups—all in manufacturing—provided paid rest periods: furniture and finished wood products; chemicals and allied products; rubber products; fabricated metal products; electrical machinery; and the miscellaneous group.

### Types of Employees Covered

Although the 417 agreements with paid rest periods covered about 1.6 million workers, not all benefited by such allowances. A total of 371 of these agreements indicated the extent to which paid rest periods were to be given to all employees, to women only, or to employees in certain jobs or occupations only. Of these 371, a fourth restricted rest periods to women only or to employees in specific occupations or departments (table 2). Eleven percent of the agreements did not specifically define the employees covered by the clause; most of these stated only that present practices regarding rest periods would be continued during the term of the contract.

The specific occupations granted rest periods generally were on continuous operations requiring relief workers to tend machines or work stations, "highly fatiguing," or "continuous repetitive" jobs, painting in closed spaces, etc. Illustrative clauses follow:

TABLE 2.—Paid rest-period provisions in collective bargaining agreements, 1952-53, by type of workers covered

Types of workers covered	Number of—		Percent of—	
	Agreements	Workers (in thousands) <sup>1</sup>	Agreements	Workers <sup>1</sup>
Total with paid rest-period provisions.....	417	1,589.8	100.0	100.0
Type of workers indicated.....	371	1,212.9	89.0	76.3
All employees in bargaining unit.....	278	866.2	66.7	54.5
Women only.....	53	189.5	12.7	11.9
Specific occupations or departments.....	40	157.2	9.6	9.9
Type of workers not indicated.....	46	376.9	11.0	23.7
Present practices continued.....	33	297.4	7.9	18.7
Other provisions.....	13	79.5	3.1	5.0

<sup>1</sup> Total number of workers covered by agreements providing paid rest periods.

There shall be two 10-minute rest periods per turn on machine- and conveyor-paced operations, one on each half-turn.

\* \* \*

The Company shall continue its present practice of granting two 10-minute rest periods during a regular 8-hour shift on highly fatiguing operations.

\* \* \*

The principle of rest periods for all female employees will be recognized by the Company on all continuous, repetitive-type jobs.

Under several laundry agreements, rest periods were granted during the summer months only.

### Duration, Number, and Timing of Rest Periods

The total time allowance for rest periods was from 20 to 30 minutes per day or full shift in slightly over 60 percent of the 417 agreements with such provisions (table 3). This pattern was equally prevalent in manufacturing and nonmanufacturing industries.

Almost one-fifth of the agreements which contained references to rest periods gave no details as to the length of the period. A few varied the length of the rest period for different classifications of workers, or specified the duration of such periods, but in amounts which did not fall into common patterns.

TABLE 3.—Total time allowance for paid rest periods per workday in collective bargaining agreements, 1952-53

Total time allowance <sup>1</sup>	Number of—		Percent of—	
	Agreements	Workers (in thousands) <sup>2</sup>	Agreements	Workers <sup>2</sup>
Total with paid rest-period provisions.	417	1,589.8	100.0	100.0
Less than 10 minutes.....	1	.1	.2	( <sup>3</sup> ) 4.3
10 minutes.....	37	67.8	8.9	
More than 10, but less than 15 minutes.....	2	1.5	.5	.1
15 to less than 20 minutes.....	25	30.3	6.0	1.9
20 minutes.....	156	377.2	37.4	23.7
More than 20, but less than 30 minutes.....	19	58.4	4.6	3.7
30 minutes.....	80	379.5	19.2	23.9
Over 30 minutes.....	3	15.3	.7	1.0
Varies by occupation.....	13	142.2	3.1	8.9
Other <sup>4</sup> .....	81	517.5	19.4	32.5

<sup>1</sup> Indicates the total time allowance granted for rest periods during the workday or full shift.

<sup>2</sup> Total number of workers covered by agreements providing paid rest periods.

<sup>3</sup> Less than 0.1 percent.

<sup>4</sup> Includes agreements which specify the number of paid rest periods, but do not indicate the time allowance; agreements which merely state that present practices will be continued; that rest periods will be granted in accordance with the law or that reasonable or equitable rest periods will be granted; and agreements which refer to rest periods but give no details.

TABLE 4.—Number and frequency of paid rest periods per workday provided in collective bargaining agreements, 1952-53

Number and frequency of rest periods	Number of—	
	Agreements	Workers (in thousands) <sup>1</sup>
Total with paid rest-period provisions.....	417	1,589.8
Agreements specifying number of rest periods.....	337	1,108.4
One rest period.....	49	89.7
1st half-shift.....	28	37.0
2d half-shift.....	4	13.9
Timing not indicated.....	17	38.8
Two rest periods.....	280	978.1
1st and 2d half-shifts.....	230	809.6
Timing not indicated.....	50	168.5
Rest periods after specified number of hours worked.....	8	40.6
After every hour.....	2	9.5
After every 2 hours.....	4	9.6
After every 2½ hours.....	1	18.0
After every 3 hours.....	1	3.5
Agreements not specifying number of rest periods <sup>2</sup> .....	80	481.4

<sup>1</sup> Total number of workers covered by agreements providing paid rest periods.

<sup>2</sup> Includes agreements which vary the number of rest periods for different classifications or according to work schedules; those which specify total time allowance but not frequency; and agreements which merely state that present practices will be continued or refer to rest periods but give no details.

The most prevalent practice was to provide two rest periods per full shift. Over four-fifths of the agreements which specified the number of rest periods contained such a provision. About four-fifths of the 280 clauses specifying 2 rest periods made explicit provision for scheduling a rest period in each half-shift. The others mentioned two periods but did not indicate their timing (table 4).

Occasionally, rest periods were to be provided at set intervals: every hour, or, in some cases, every 2, 2½, or 3 hours, as in the following clause:

The practice of giving 5-minute rest periods out of every 2 hours shall continue wherever this is in effect in the plant at the present time.

Usually, the morning and afternoon rest periods were of equal length. In some cases, however, they were of unequal length, the shorter rest period occurring in the afternoon in nearly all such instances.

Employees working not more than 8 hours a day shall have a 15-minute rest period in the morning and a 10-minute rest period in the afternoon . . .

In cases where only one formal rest period was granted, over half of the agreements scheduled it for the first half-shift; a few specified the second work period; and the others failed to indicate the timing.

Ten-minute rest periods were most common, appearing in 55 percent of the agreements specifying the length of the rest period (329). Such periods were specified in about 1 out of every 2 manufacturing agreements providing paid rest periods, and 1 out of every 6 nonmanufacturing agreements (table 5). The proportions were reversed with respect to 15-minute rest periods for nonmanufacturing and manufacturing. The transportation and communications industries, particularly, made use of 15-minute rest periods.

### Rest Period Scheduling

Scheduling of rest periods was discussed in about half of the agreements. Most commonly,

the rest-period time was to be set by the company, although some agreements provided for scheduling by joint decision of company and union. A few listed the specific time of the rest periods.

A number of agreements included provisions apparently designed to schedule the rest periods so as to break up the workday at relatively equal intervals. Some, for example, specified that rest periods were to be scheduled as nearly as possible midway in the half-shift. Others required that these time breaks occur not later than from 2½ to 3½ hours after start of the work period, or not earlier than from three-quarters of an hour to 2½ hours after the start. A few provided for staggering of rest periods, in order to prevent disruption of production or overburdening of cafeteria facilities. Illustrative provisions follow:

TABLE 5.—Duration and number of paid rest periods provided in collective bargaining agreements, 1952-53, by industry group

Industry group	Number with paid rest-period provisions		Distribution of agreements and workers according to rest-period provision												Other	
			5 minutes each				10 minutes each				15 minutes each					
	Agreements	Workers (in thousands)	1 rest period		2 rest periods		1 rest period		2 rest periods		1 rest period		2 rest periods		Agreements	Workers (in thousands)
			Agreements	Workers (in thousands)	Agreements	Workers (in thousands)	Agreements	Workers (in thousands)	Agreements	Workers (in thousands)	Agreements	Workers (in thousands)	Agreements	Workers (in thousands)		
All industries.....	417	1,589.8	1	0.6	10	30.2	27	37.3	153	373.8	17	23.3	79	373.7	130	750.9
MANUFACTURING.....	328	1,032.1	1	.6	10	30.2	25	25.9	139	343.6	14	10.6	39	123.9	100	497.3
Food and kindred products.....	69	232.1														
Tobacco.....	3	2.4			3	2.4	1	.2	28	128.4	1	.9	14	19.2	25	83.4
Textile-mill products.....	10	8.1							4	2.8			1	1.3	5	4.0
Apparel and other finished textile products.....	3	1.4					1	.6	2	.8						
Lumber and timber basic products.....	7	4.0					1	.8	4	2.1					2	1.1
Furniture and finished wood products.....	20	12.9					5	3.9	6	3.9	3	1.1			6	4.0
Paper and allied products.....	12	28.9					1	.2	3	13.9	2	3.1	2	2.0	4	9.7
Printing and publishing.....	1	.4													1	.4
Chemicals and allied products.....	24	29.0			1	.7	1	.2	11	13.8			10	13.3	1	1.0
Petroleum and coal products.....	2	1.8							2	1.8						
Rubber products.....	6	27.1							2	3.2			1	.9	3	23.0
Leather and leather products.....	7	3.8					2	.7	2	.9	1	.3			2	1.9
Stone, clay, and glass products.....	12	25.9							7	4.0					5	21.9
Primary metal industries.....	12	175.1					1	1.0	2	2.1	2	1.4			7	170.6
Fabricated metal products.....	38	68.9	1	.6	1	.3	2	2.0	17	13.5	2	1.3	4	32.0	11	19.2
Machinery (except electrical).....	27	75.6			2	1.2	2	1.4	9	12.8			5	18.5	9	41.7
Electrical machinery.....	24	65.4			2	1.2	4	10.9	16	52.7			2	36.7	6	11.5
Transportation equipment.....	28	251.0			2	25.3	2	10.9	9	75.8					11	102.3
Professional and scientific instruments.....	6	4.9					1	.3	3	2.5	1	1.1			1	1.0
Miscellaneous manufacturing.....	17	13.4			1	.3	1	2.5	12	8.6	2	1.4			1	.6
NONMANUFACTURING.....	89	557.7					2	11.4	14	30.2	3	12.7	40	249.8	30	253.6
Mining, crude petroleum, and natural gas production.....	1	.4					1	.4								
Transportation <sup>1</sup> .....	10	21.1							2	1.6			6	16.5	2	3.0
Communications.....	36	362.7							1	3.5			28	229.4	7	129.8
Utilities: electric and gas.....	1	3.5													1	3.5
Wholesale and retail trade.....	14	24.6							5	10.8	1	.7	1	1.8	7	11.3
Hotels and restaurants.....	6	76.5											1	.5	5	76.0
Services.....	18	51.1					1	11.0	5	6.8	2	12.0	4	1.6	6	19.7
Construction.....	3	17.8							1	7.5					2	10.3
Miscellaneous nonmanufacturing.....																

<sup>1</sup> Includes total number of workers in bargaining units covered by the agreements providing paid rest periods.

<sup>2</sup> Includes 55 agreements which refer to rest periods, but with insufficient or no details, and 33 which merely state that present practices will be continued. In the remaining 42 agreements the length of each rest period varies

as between morning and afternoon; or the length of each rest period is other than 5, 10, or 15 minutes; or the length of the rest period varies for different job classifications or categories of workers; etc.

<sup>3</sup> Excludes railroads (except for Railway Express Agency) and airline industries.

All employees coming under this Agreement shall be given a 10-minute rest and smoking period during the first half and second half of each shift. Each period to be taken at a time agreed upon by the Company and the Grievance Committee.

\* \* \*

Such rest periods may be staggered so as to cause a minimum interference with the operations of the plant, but no employee shall be required to take such rest period earlier than 1½ hours after the start of the shift or later than 1 hour before the lunch period.

Relatively few agreements required that employees work a specified number of continuous hours—varying from 1½ to 4 hours per half-shift or from 5 to 8 hours per shift—in order to qualify for the rest-period allowances. For example:

(a) A rest period of 10 minutes shall be allowed in the forenoon providing the employee is required to work 3½ hours or longer before the lunch period.

(b) A rest period of 10 minutes shall be allowed in the afternoon providing the employee is required to work 3½ hours or longer after the lunch period.

When employees are required to work hours less than those stated above no spellout or rest period shall be granted.

### Rest-Period Regulations

Rules designed to secure compliance with the time limits set for rest periods, or to maintain order and discipline so as to minimize interruptions to production, or general statements cautioning against abuse, were prescribed in about three-fourths of the agreements with paid rest-period provisions.

To insure against employees overstaying their rest period, some agreements required them to return to their workplaces within the time set. Signals designating the start and end of the rest period were occasionally mentioned. Other agreements, without referring to such mechanical details, included statements that rest-period privileges were not to be abused. If abuses were shown, rest periods could be discontinued, according to some contracts; in some, however, only if the abuse continued after the union had been apprised of the abuse or of possible cancellation of the rest period. Specific reference to discipline for exceeding the time limits or for violating other rest-period conditions was included in a few agree-

ments. Pay deductions for exceeding the designated time allowance were specified in two agreements—in one case amounting to slightly more, and in the other, slightly less, than the amount of pay for the length of the rest period. The instructions were in these words:

These rest periods may be discontinued at any time the employees may abuse the privilege, but before discontinuing them, the Company will consult with the Union.

\* \* \*

Employees shall be given a 10-minute rest period each day commencing at 9:30 a. m., ending at 9:40 a. m. Employees will stay on their jobs until a signal is sounded announcing the beginning of the period. During such rest period the employees shall be free to leave their workplace, smoke in the areas designated in the plant rules, and eat their lunch. A signal shall be sounded 2 minutes prior to the expiration of the period and employees shall be at their places of work when the final signal is sounded. The provisions for a rest period as herein set out are agreed to by the Company upon the understanding that the employees assume responsibility for return to their places of work by the expiration of the specified rest period, and if such privilege is abused by the employees to such extent that the same cannot be enforced by individual discipline the Company will call the matter to the attention of the Union, and if such abuses continue after the Union has received such notice the Company may discontinue rest periods.

To prevent undue crowding, confusion, or interference with other employees, or to avoid fire hazards, the following types of conditions often were specified: specific smoking or eating areas were designated; employees were required to remain on the premises, in their department, or on their floor (in one instance, this was limited to custodial employees); workers were barred from entering any department where other employees were at work; or a general restriction on unduly congregating or holding meetings was included. Two agreements required that employees refrain from interfering with or discouraging any employee who wished to work during the rest period. Several others provided that exceptions to the formal rest-period practices could be made by mutual agreement in individual cases.

—ABRAHAM WEISS AND ROSE THEODORE  
Division of Wages and Industrial Relation

## Earnings in Miscellaneous Textile Industries, October 1953

AVERAGE straight-time hourly earnings of production and related workers in a group of eight miscellaneous textile industries ranged from \$1.10 to \$1.60 in October 1953, according to a study conducted by the Bureau of Labor Statistics.<sup>1</sup> The industries differ considerably in terms of product, equipment, and other characteristics. Variations in labor-force skill composition account in part for differences in the level of earnings among the industries. Similarly, differences in levels of earnings for men and women reflect, at least in part, the fact that women tend to be employed in the less skilled or arduous occupations.

Average hourly earnings for all production workers, for men, and for women are given below for each of the industries studied:

	Average hourly earnings of—		
	All workers	Men	Women
Felt goods.....	\$1.55	\$1.60	\$1.27
Lace goods.....	1.56	1.93	1.16
Paddings and upholstery filling.....	1.42	1.45	1.34
Processed waste.....	1.10	1.21	.91
Coated fabrics.....	1.60	1.63	1.30
Linen goods.....	1.26	1.39	1.19
Jute goods.....	1.32	1.37	1.22
Cordage and twine.....	1.28	1.37	1.13

To make the study more useful, each industry is discussed separately because of the marked differences in the wage structures and in most industry characteristics. Percent distributions of production workers by average straight-time hourly earnings for certain regions are given in the accompanying table for each industry studied.

### Felt Goods

Establishments in the felt goods industry manufacture primarily insulating and automotive felts, under-rug mats, and other felt goods (except woven felt, felt hats, and haircloth) from wool, hair, and jute, by means of heat, moisture, and pressure or by the needle-loom process. Three-fourths of the workers in this industry were employed in the New England and Middle West regions. The majority of plants producing felt goods each employed fewer than 100 workers.

The value of the goods shipped by the industry in 1951 amounted to \$105 million.<sup>2</sup>

Straight-time hourly earnings of production workers averaged \$1.55 in October 1953. Individual earnings for 25 percent of the workers ranged from \$1.25 to \$1.50; an additional 40 percent earned from \$1.50 to \$1.75. About 5 percent received \$2 or more an hour and less than 1 percent earned below \$1. Men accounted for 85 percent of the plant labor force and averaged \$1.60 an hour.

Regional earnings varied only 1 or 2 cents from the national average. New England and the Middle West, the two leading regions in the production of felt goods, recorded averages of \$1.56 and \$1.54, respectively.

### Lace Goods

The lace goods industry includes establishments primarily engaged in the manufacture of Leavers lace, bobbinet, Nottingham lace (curtain nets, curtains, bedspreads, table covers), and Barmen lace. The bulk of the production in the industry is Leavers lace, so called after the designer of a weaving machine by that name.

Lace is a decorative, openwork fabric formed by looping, interlacing, braiding, or twisting threads or various fibers and is considered one of the highest forms of textile artistry and skill. The industry in the United States is comparatively new and was slow in developing due to difficulties encountered in obtaining Leavers lace machines from England. Output of Leavers lace was relatively insignificant until 1909, when there were only about 100 Leavers machines in this country. By 1953, however, over 800 machines were in operation. The industry did an annual

<sup>1</sup> Data for the study were collected by mail questionnaire and were limited to earnings of production and related workers, which for purposes of this study are defined as follows: "Includes working foremen and all nonsupervisory workers (including lead men and trainees) engaged in fabricating, processing, assembling, inspection, receiving, storage, handling, packing, warehousing, shipping, maintenance, repair, janitorial, watchman services, products development, auxiliary production for plant's own use (e. g., power plant), and record-keeping and other services closely associated with the above production operations."

The group of industries studied, which are generally characterized by small plants in terms of employment, employed approximately 49,000 workers. They are located, for the most part, in metropolitan areas each having a population of 100,000 or more. Establishments employing 10 or more workers were included in the study. The wage data presented exclude premium pay for overtime and night work but include incentive earnings. More detailed information on the study is available in BLS Report No. 56.

<sup>2</sup> U. S. Department of Commerce, 1951 Annual Survey of Manufactures.

business of approximately \$30 million in 1950.<sup>3</sup> Today there is little, if any, handmade lace produced commercially in the United States.

The manufacture of lace goods provides employment to about 8,000 workers in the United States and is concentrated almost entirely in the New England and the Middle Atlantic States, each region accounting for half of the total employment. Small-size plants (less than 100 workers) are predominant in this industry. The work force was about equally divided between men and women.

Hourly earnings of all production workers in the lace goods industry averaged \$1.56 in October 1953. Partly because of the large number of highly skilled weavers—typically a man's job—men averaged 77 cents an hour more than women, \$1.93 compared with \$1.16.

Almost 60 percent of the men had earnings of at least \$1.50; half of them earned \$2.50 or more an hour. Women's earnings were concentrated between \$1 and \$1.25, 45 percent receiving earnings within this range. Slightly more than a fourth of the women earned less than \$1 an hour, in contrast to only 7 percent of the men.

Earnings in the New England lace industry averaged \$1.61, compared with \$1.53 in the Middle Atlantic States. The regional positions of men's and women's earnings, however, did not conform to this relationship. Men in New England averaged 28 cents more than men in the Middle Atlantic States (\$2.09 compared with \$1.81); but women in New England averaged 9 cents less than their counterparts in the Middle Atlantic region (\$1.12 as against \$1.21).

### **Paddings and Upholstery Filling**

The production of paddings and upholstery filling includes establishments primarily engaged in manufacturing batting, padding, wadding, and upholstery filling from curled hair, cotton, moss, hemp tow, flax tow, kapok, and related materials. Forty percent of the approximately 6,000 workers in this industry were employed in the Middle West; the Far West and Middle Atlantic regions each accounted for 20 percent and the South for 10 percent. Men outnumbered women in the industry's labor force by 3 to 1. Although there

are a number of plants employing from 250 to 1,000 workers, the average plant in the industry, as studied, had about 90 workers.

Production workers in the padding and upholstery filling industry averaged \$1.42 an hour in October 1953. The \$1.45 average for men was 11 cents higher than that for women (\$1.34). Earnings of about the same proportions of men and women fell within the 25-cent ranges of \$1.25 to \$1.50 and \$1.50 to \$1.75—35 and 25 percent, respectively. Slightly less than 10 percent of all production workers earned under \$1 an hour and only 3 percent received \$2 or more.

Earnings in the Middle West averaged \$1.48 an hour. This was 9 cents below the Far West average, but 7 and 48 cents higher than the respective averages for the Middle Atlantic States and the South. Regional earnings of men exceeded those of women by amounts varying from 12 to 23 cents an hour.

### **Processed Waste**

The study of the processed waste industry included establishments primarily engaged in processing textile-mill waste for spinning and other uses, and in recovering cotton, wool, rayon, silk, and other fibers from clippings and rags. Since waste-processing plants obtain a substantial proportion of their raw materials from the spinning and weaving divisions of the textile industry, many of the establishments are located in or near textile centers in the South, the Middle Atlantic States, and New England. The Middle West is also an important region, accounting for about a fifth of the industry's total employment. The typical waste-processing plant is comparatively small; about three-fourths of the plants studied each employed fewer than 50 workers. Three of every 5 workers in the industry were men.

Earnings of production workers in the processing of waste textiles averaged \$1.10 an hour in October 1953—the lowest level of earnings of the eight industries studied. Men's earnings exceeded the average for all workers by 11 cents, but women's earnings fell short of this level by 19 cents—a total difference of 30 cents.

A substantial proportion of the workers in this industry—70 percent of the women and nearly 25 percent of the men—earned less than \$1 an hour. Earnings of \$1.50 or more were received by about

<sup>3</sup> Leavers lace handbook of the American Leavers Lace Industry, July 1948.

10 percent of the men and less than 1 percent of the women.

Regional earnings averaged highest in New England (\$1.19) and lowest in the South (91 cents). The level of earnings in the Middle Atlantic region approximated that of New England; the average for the Middle West matched the national average of \$1.10. Average earnings of women ranged from 81 cents in the South to 98 cents in the Middle Atlantic region.

### Coated Fabrics

Establishments in this industry manufacture primarily artificial leather, oilcloth, and other coated and impregnated fabrics. Virtually all of its employment was concentrated in three regions—42 percent in the Middle West, 35 percent in the Middle Atlantic States, and 22 percent in New England. The value of products shipped by this industry in 1951 was \$278 million.<sup>4</sup>

Production workers in the coated fabrics industry earned \$1.60 an hour in October 1953—the highest average among the group of industries studied. This industry also reported the greatest proportion of men—92 percent—in its plant labor force. Their earnings averaged \$1.63 an hour. Individual earnings for nearly 30 percent of the workers (men and women combined) ranged from \$1.25 to \$1.50 an hour; 55 percent earned from \$1.50 to \$2. Only 1 percent were paid less than \$1 an hour.

The Middle West reported the highest regional earnings—an average of \$1.71 an hour. Averages in the other leading regions were \$1.61 in the Middle Atlantic States and \$1.42 in New England.

### Linen Goods

The linen goods industry includes establishments primarily engaged in manufacturing flax

<sup>4</sup> Dept. of Commerce, op. cit. (p. 3).

Percent distribution of production workers in miscellaneous textile industries, by average straight-time hourly earnings,<sup>1</sup> United States and specified regions, October 1953

Average hourly earnings (in cents)	Felt goods					Paddings and upholstery filling					Processed waste				
	United States <sup>2</sup>	New England	Middle Atlantic	Middle West	Far West	United States <sup>2</sup>	Middle Atlantic	South	Middle West	Far West	United States <sup>2</sup>	New England	Middle Atlantic	South	Middle West
Under 75.....															
75 and under 80.....	(3)	0.1				0.4		3.7			12.5	4.2	1.7	37.1	5.4
80 and under 85.....						1.3	0.9	4.9			5.3	3.0	1.4	12.7	4.3
85 and under 90.....	0.1	.1	1.0			1.2	1.5	8.6			12.0	2.1	11.6	15.6	16.8
90 and under 95.....						.9		6.9	(3)		5.3	3.2	5.9	9.1	2.0
95 and under 100.....	(3)	.2				5.5		46.6	0.7		5.8	3.4	6.9	6.7	5.7
100 and under 105.....	6.7	1.4	1.7	13.1	0.5	2.4	1.0	7.8	1.8		4.2	4.7	5.3	3.1	3.9
105 and under 110.....	.8	1.0		1.0	.3	1.7	.2	3.1	2.6		6.0	3.1	6.3	3.4	12.0
110 and under 115.....	1.5	.6	2.3	2.2	.3	1.4	.5	2.7	1.5		12.5	20.7	10.0	2.7	17.1
115 and under 120.....	1.2	1.1	1.0	1.6		4.8	10.9	3.0	4.3		5.3	9.0	3.0	1.4	11.0
120 and under 125.....	.8	.9		.8	1.8	4.9	6.8	2.1	1.8	11.2	4.4	10.8	4.3	.2	4.3
125 and under 130.....	4.5	2.1	12.1	4.4	2.3	10.1	6.9	3.3	14.5	10.5	4.2	4.5	4.8	1.4	7.0
130 and under 135.....	3.2	2.8	4.9	2.7	4.6	7.8	12.5	1.8	8.3	5.6	7.7	6.7	19.6	.5	1.2
135 and under 140.....	4.0	1.8	14.7	1.7	6.6	7.4	17.5	.6	4.6	3.0	4.3	9.7	6.0	.6	1.3
140 and under 145.....	4.7	7.1	3.4	3.0	6.2	5.3	9.6	1.5	2.6	9.3	2.4	5.6	3.2	.4	.9
145 and under 150.....	9.5	14.7	4.8	4.5	22.5	6.1	6.9	.3	8.8	2.5	1.2	2.0	1.5	.3	.9
150 and under 155.....	11.7	20.2	7.9	7.9	6.4	4.2	4.3	.7	5.5	4.1	1.2	1.2	1.7	.7	.7
155 and under 160.....	10.3	12.4	1.0	9.1	20.9	4.3	2.1		5.9	4.7	.6	.8	1.2	.2	.2
160 and under 165.....	10.0	7.3	2.7	14.2	8.9	5.0	1.9	.1	5.2	11.2	.9	.8	1.0	.6	1.3
165 and under 170.....	6.1	6.2	10.7	5.4	2.8	5.9	1.5		8.9	8.9	.7	1.9	.4	.5	.3
170 and under 175.....	3.7	4.6	4.8	3.0	2.6	6.1	6.7	.9	7.1	7.9	.6	.4	.6	.3	.8
175 and under 180.....	6.4	4.8	6.5	8.3	2.6	1.8	1.4	.7	2.0	3.1	.5	.3	.8	.3	.2
180 and under 185.....	3.5	2.9	4.2	4.3	.3	5.8	1.5		10.8	3.8	.2		.3	.2	1.1
185 and under 190.....	2.9	2.3	3.4	3.6	.8	1.8	1.8		.6	6.0	.4	.4	.7	.1	.1
190 and under 195.....	1.8	1.4	2.3	2.1	.8	.7	.7	.6	.9	.5	.1	.2	.3		
195 and under 200.....	1.5	.9	2.3	1.0	4.4	.4	.1		.2	1.6	(3)			.1	
200 and under 205.....	1.2	.3	4.2	1.1	.5	.8	1.2		.4	1.6	.5	.5	.3	.4	.5
205 and under 210.....	.8	.2	1.3	.9	1.3	.5	.1		.2	1.5	(3)				
210 and under 215.....	.8	.3	1.0	.9	1.8	.3	.3		.2	.7	.2	.2		.6	.2
215 and under 220.....	.4	.7	.4	.3	.5	.1			.3	.1	.1		.1	.1	.2
220 and under 225.....	.2	.2	.2	.2	.3	.3	.9		.2	.2	.1		.1		.3
225 and under 230.....	.5	.3		1.0		.1			(3)	.2	.1		.1	.3	
230 and under 235.....	.1	.1		.1		.1			.1	.1	.1		.1		.2
235 and under 240.....	.6	.4		1.0		.2			.1	1.0	.1		.1	.1	.1
240 and under 245.....	(3)	.1	.2								.1		.1		.1
245 and under 250.....	.1			.3							(3)		.2		
250 and over.....	.4	.5	1.0	.3		.4	.3	.1	.3	.5	.4	.3	.4	.3	.9
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers.....	4,004	1,259	526	1,829	390	6,067	1,171	669	2,604	1,180	6,065	1,126	1,894	1,628	1,271
Average hourly earnings.....	\$1.55	\$1.56	\$1.57	\$1.54	\$1.56	\$1.42	\$1.41	\$1.00	\$1.48	\$1.57	\$1.10	\$1.19	\$1.18	\$0.91	\$1.10

See footnotes at end of table.



yarn and thread, and fabrics of linen and linen and cotton mixtures. A substantial proportion of the linen goods sold in the United States is imported. The domestic industry, as studied, employed 1,100 workers, three-fourths of whom were concentrated in a few large plants that had from 250 to 500 workers each. The industry is primarily located in the regions comprising the eastern half of the country. In contrast with the other industries surveyed, women outnumbered men in the labor force by a ratio of almost 2 to 1.

Production workers in the linen goods industry averaged \$1.26 an hour in October 1953. Women earned \$1.19 an hour, compared with \$1.39 for men. Nearly 60 percent of the women received earnings between \$1 and \$1.25, and about 25 percent between \$1.25 and \$1.50 an hour; the respective proportions of men with earnings in these intervals were approximately 30 and 40 percent. Ten percent of the women and 1 percent of the men earned less than \$1 an hour.

## Jute Goods

Establishments in this industry are primarily engaged in manufacturing jute yarn and jute goods such as fabrics, bagging, and webbing. The industry consists primarily of a few large plants, located principally in the Middle Atlantic States and in the South. The production worker employment was slightly under 4,000, of whom 70 percent were men.

Earnings of production workers in the jute goods industry averaged \$1.32 an hour in October 1953. Men averaged \$1.37 an hour compared with \$1.22 for women. A third of the men and two-thirds of the women earned between \$1 and \$1.50. Another third of the men and a tenth of the women had earnings ranging from \$1.50 to \$1.75.

Average earnings in the Middle Atlantic region were higher than in the South. The differences amounted to 39 cents an hour for all production workers, 46 cents for men, and 26 cents for women.

Percent distribution of production workers in miscellaneous textile industries, by average straight-time hourly earnings,<sup>1</sup> United States and specified regions, October 1953—Continued

Average hourly earnings (in cents)	Lace goods			Coated fabrics				Linen goods	Jute goods				Cordage and twine			
	United States <sup>2</sup>	New Eng- land	Middle Atlan- tic	United States <sup>2</sup>	New Eng- land	Middle Atlan- tic	Middle West	United States	United States <sup>2</sup>	Middle Atlan- tic	South	United States <sup>2</sup>	New Eng- land	Middle Atlan- tic	South	
Under 75.....	0.1	0.1	0.1													
75 and under 80.....	.8	.8	.8	0.1	0.1			2.5	4.1		11.6	2.4	0.9	1.6	5.1	
80 and under 85.....	1.5	1.9	.9	.1	.2		0.2	.9	1.5		4.2	.8	.5	.9	1.1	
85 and under 90.....	3.7	3.1	4.4	.2	.2	0.3		.5	1.8		5.0	1.3	2.1	.8	1.8	
90 and under 95.....	5.4	5.7	5.1	.3	.6			.2	.2	10.7	30.2	2.2	2.0	1.1	2.8	
95 and under 100.....	4.9	5.6	4.4	.6	1.2			.4	2.3	4.4	12.2	4.6	2.8	3.8	8.3	
100 and under 105.....	8.1	8.4	7.7	1.5	2.8	.3		3.3	1.6	0.8	3.3	7.5	5.5	7.8	10.8	
105 and under 110.....	5.9	7.7	3.9	.9	2.7	.4		6.7	2.8	4.7	1.4	7.0	15.6	2.8	8.7	
110 and under 115.....	7.0	7.6	5.7	1.4	4.6	.7		1.1	10.3	5.1	8.2	2.8	7.5	5.8	3.6	
115 and under 120.....	6.1	4.9	7.2	1.9	3.1	2.6	.7	11.1	3.8	6.2	2.0	7.7	4.3	4.0	14.1	
120 and under 125.....	5.3	5.2	5.5	1.7	5.2	.9	.5	17.6	6.3	10.3	2.9	6.7	4.6	6.2	7.8	
125 and under 130.....	4.9	5.4	4.5	5.2	11.9	5.0	2.2	13.0	5.3	6.4	3.2	7.0	8.6	8.2	3.4	
130 and under 135.....	3.3	2.5	4.2	4.0	10.1	2.5	2.0	7.5	5.4	4.8	4.7	10.4	10.0	11.0	8.9	
135 and under 140.....	4.0	2.6	5.5	4.5	9.4	3.0	3.3	6.0	5.2	5.0	3.4	7.6	7.5	9.2	3.0	
140 and under 145.....	2.7	2.9	2.6	6.7	8.9	9.8	3.3	3.5	5.0	5.7	2.6	4.6	5.1	5.7	2.5	
145 and under 150.....	1.7	.9	2.6	7.5	4.9	9.8	7.2	2.0	3.2	3.3	1.4	4.6	5.3	5.8	2.7	
150 and under 155.....	2.4	2.0	2.6	10.5	7.2	11.0	12.6	2.6	3.3	3.0	1.6	2.9	3.5	4.2	1.2	
155 and under 160.....	1.5	1.2	1.8	5.3	5.1	5.8	5.0	1.7	7.4	11.6	1.1	3.0	4.6	4.2	.9	
160 and under 165.....	1.2	.9	1.5	8.8	6.9	11.8	7.8	2.4	5.3	7.3	.8	2.2	2.4	3.5	.3	
165 and under 170.....	1.4	.8	1.9	4.4	4.2	2.6	6.1	1.3	3.6	4.9	1.3	2.0	2.2	3.3	.6	
170 and under 175.....	1.3	.7	1.7	3.7	2.0	2.6	5.8	.9	5.7	7.3	1.0	1.7	1.6	2.8	.4	
175 and under 180.....	1.0	.8	1.2	4.5	1.6	5.4	5.5	.7	2.2	1.8	1.3	2.3	1.3	3.6	1.5	
180 and under 185.....	1.0	.6	1.4	7.4	2.0	13.9	5.3	1.0	1.8	2.2	.5	.8	.8	1.1	.2	
185 and under 190.....	.9	.8	1.5	4.1	1.3	2.8	6.7	.6	1.1	1.7		.8	1.0	1.2	.3	
190 and under 195.....	.9	.7	1.1	3.6	.4	1.5	7.1	.2	.9	1.3	.2	.6	.6	.8	.1	
195 and under 200.....	.9	.7	1.2	2.3	.6	1.8	3.6	.2	1.0	1.5	.2	.4	.3	.7	( <sup>3</sup> )	
200 and under 205.....	1.0	.9	1.1	1.7	.6	1.7	2.2	.2	.4	.3	.2	.3	.1	.6	.1	
205 and under 210.....	1.0	.5	1.6	1.1	.2	1.4	1.2	.1	.1	.2	.2	.2	.1	.4	( <sup>3</sup> )	
210 and under 215.....	.6	.6	.7	1.2	.4	.2	2.4	.1	.2	.3	.2	.2	.1	.3	( <sup>3</sup> )	
215 and under 220.....	.4	.4	.3	1.2	.3	.4	2.4		.2	.4		.2	.1	.3	( <sup>3</sup> )	
220 and under 225.....	.3	.4	.3	.9	.6	.3	1.5	.1	( <sup>3</sup> )		.1	.1	.1	.1		
225 and under 230.....	.6	.7	.6	.8	.3	.3	1.3		.1	.2	.1	.1	.4	.1		
230 and under 235.....	.7	.9	.5	.5	.2	.2	.9	.1	.1	.1	.1	.1	.1	.1		
235 and under 240.....	.4	.3	.5	.5	.2	.2	.4		.1	.1	.2	.1	.2	.1		
240 and under 245.....	1.2	.6	1.9	.2		( <sup>3</sup> )	.4	.2	( <sup>3</sup> )		.1	.1	.2	.1		
245 and under 250.....	.4	.4	.5	.1		.1	.2		( <sup>3</sup> )		( <sup>3</sup> )		( <sup>3</sup> )	.1	( <sup>3</sup> )	
250 and over.....	15.3	19.8	10.8	.6	.2	.5	.9	.2	.3	.4	.2	.1		.1	( <sup>3</sup> )	
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Number of workers.....	6,970	3,362	3,430	5,859	1,270	2,025	2,448	1,043	3,763	1,888	1,333	9,295	1,882	3,518	2,894	
Average hourly earnings.....	\$1.56	\$1.61	\$1.53	\$1.60	\$1.42	\$1.61	\$1.71	\$1.26	\$1.32	\$1.45	\$1.06	\$1.28	\$1.29	\$1.36	\$1.16	

<sup>1</sup> Excludes premium pay for overtime and late-shift work.

<sup>2</sup> Includes data for regions not shown separately.

<sup>3</sup> Less than 0.05 percent.

Nearly two-thirds of the workers in the South earned less than \$1 an hour; earnings below this level were not reported for any of the workers in the Middle Atlantic States.

### Cordage and Twine

Rope, cable, cordage, twine, and related goods, manufactured from hemp, jute, cotton, paper, flax, and other fibers are the primary products manufactured by establishments in the cordage and twine industry. Comprised of separate hard and soft fiber divisions, this industry utilizes different kinds of special equipment in the manufacturing processes because of the distinctive physical properties of the fibers used. However, the data available for the Bureau's study did not permit separate presentation. In October 1953, the industry employed about 9,000 workers of whom 60 percent were men. The largest concentrations are in the Middle Atlantic States and in the South; there is also a smaller, but significant segment, in New England. Cordage and twine shipped by the industry in 1951 was valued at \$235 million.<sup>5</sup> Of this amount, \$121 million was for hard fiber; \$79 million, for cotton; and \$35 million, for cordage and twine produced from other types of soft fibers.

Hourly earnings of production workers in the cordage and twine industry averaged \$1.28 in October 1953. The average for men was \$1.37 and for women, \$1.13. Almost 45 percent of the men and 20 percent of the women had earnings ranging between \$1.25 and \$1.50. About equal proportions of men (25 percent) fell in two broad earnings intervals—\$1 to \$1.25, and \$1.50 or more. More than half of the women earned between \$1 and \$1.25. Slightly over 20 percent of the women and 5 percent of the men earned less than \$1 an hour.

Average earnings of \$1.36 in the Middle Atlantic region, where about 40 percent of the workers were employed, were 7 and 20 cents an hour higher than the respective averages in New England and in the South. Regional differences in the hourly earnings of men and women varied sharply—15 cents an hour in the South, 25 cents in the Middle Atlantic States, and 34 cents in New England.

—JAMES P. COPKERY

Division of Wages and Industrial Relations

<sup>5</sup>Ibid.

## Injury Rates in the Canning and Preserving Industry, 1952

DURING 1952, workmen in the canning and preserving industry experienced 25.4 disabling injuries per million hours worked,<sup>1</sup> nearly 80 percent more than manufacturing workers generally. In addition, each injured worker in the industry lost, on an average, 56 days of work because of his injury.

Injury rates for the canning and preserving industry have been compiled by the Bureau of Labor Statistics since 1936. The industry rates have been consistently unfavorable in comparison with the average for all manufacturing industries, although they have, in general, shown the same trend. However, the year-to-year changes in the canning and preserving rate have been, usually, more precipitous. A comparison of the two rates follows:

	All manu- facturing rate	Canning and preserving	
		Rate	Index (all manufactur- ing=100)
1936.....	17.1	24.5	143
1937.....	16.8	28.5	170
1938.....	15.1	27.3	181
1939.....	14.9	26.5	178
1940.....	15.3	30.0	196
1941.....	18.1	30.0	162
1942.....	19.9	33.0	166
1943.....	20.0	25.3	127
1944.....	18.4	28.9	157
1945.....	18.6	27.2	146
1946.....	19.9	30.7	154
1947.....	18.8	27.3	145
1948.....	17.2	21.1	123
1949.....	14.5	20.8	143
1950.....	14.7	22.8	155
1951.....	15.5	25.6	165
1952.....	14.3	25.4	178

Other manufacturers of food products generally had favorable injury-frequency rates but adverse severity records compared with canners and preservers in 1952. Only 2 of the 13 industries—beet sugar and bottled soft drinks—in the food products

<sup>1</sup> The frequency rate for canning and preserving plants within the continental United States and which is comparable to the published all-manufacturing rate. For this special survey, 65 canning and preserving plants from the Territories of Alaska, Hawaii, and Puerto Rico were included. The injury frequency rate for the combined group of plants was slightly better, 23.5. Similarly, there were small differences in the average number of days lost and the severity rate based on the two surveys, e. g., 56 vs. 57 days lost per injury.

group had injury-frequency rates greater than that for canning and preserving. However, the average number of days lost in the food products group was about 20 percent greater than in the industry.

The frequency rate represents 1 disabling injury for every 22 workers in the canning and preserving industry. It is estimated that 10,100 workers in the industry suffered disabling injuries during 1952. Approximately 20 of these workmen died as the result of their injuries and 310 others were permanently disabled by the loss of, or loss of use of, some body part or function. The other 9,770 suffered no permanent ill effects.

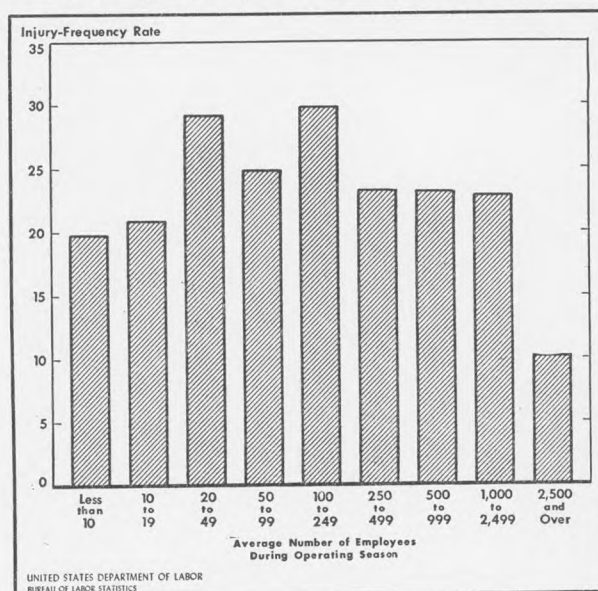
Actual time lost during 1952 because of these injuries was nearly 152,000 man-days and accounted for a wage loss of approximately \$1,125,000 on the basis of average earnings of production workers in the industry (\$51.88 per week).<sup>2</sup> But time lost during 1952 does not adequately measure the total loss resulting from those injuries. If allowance is made for future losses—i. e., earnings which fatally injured workers would have received and reduced earning ability for many of the permanently injured workers—the total economic time-loss resulting from 1952 injuries would exceed 575,000 man-days. The total wage loss, based on 1952 earnings, would be about \$4,250,000. In part, this loss is financed through workmen's compensation payments by employers. But these payments are seldom equivalent to full wages. The injured workers and their dependents must, therefore, bear a considerable portion of the loss themselves.

Medical and hospital expenses, as well as many indirect losses, add to the costs of industrial accidents. Among the indirect costs are such items as damage to materials and equipment; the cost of training replacement workers; time lost by employees who offer assistance at the time of the accident; and supervisory time spent caring for the injured, investigating the accident, and reorganizing operations after the accident. Indirect costs are seldom recorded, but one study indicates that for manufacturing generally the indirect costs of injury-producing accidents average about 4 times the combined amounts of workmen's compensation, hospital, and medical payments.<sup>3</sup> On

<sup>2</sup> See p. 592 of this issue. Production workers accounted for nearly 90 percent of the industry's employees in 1952.

<sup>3</sup> *Industrial Accident Prevention*, by H. W. Heinrich, New York, McGraw Hill Book Co., Third Edition, 1950.

### Work-Injury Frequency Rates in the Canning and Preserving Industry Classified by Size of Plant



this assumption, the estimated indirect cost of injury-producing accidents in the canning and preserving industry during 1952 amounted to nearly \$12,000,000 and the total cost including medical expenses amounted to nearly \$17,000,000.

### Industry Characteristics

The canning and preserving industry includes all plants engaged primarily in the preservation of fruits, vegetables, and seafoods by canning; curing, such as smoking or salting; dehydrating or drying; freezing; and pickling. Most of these plants limit their activities to one type of processing and, in many instances, to one product. Plants of the latter type operate only during the harvest season for the specified crop; plants with diversified products, however, may operate throughout the entire year. Nearly all sections of the country have a few plants within the industry, but it is heavily concentrated in food-producing areas. Plants range in size from a few employees to several thousands.

These characteristics directly influence the level of injury rates within individual plants, but their effect is not readily discernible from industrywide figures which are available from the Bureau's annual injury surveys. Therefore, the Bureau substantially expanded and revised its regular survey of industrial injuries in the canning

and preserving industry for the year 1952. Participating plants were requested to report their injury experience by operating departments as well as in the customary summary form. Detailed reports were received from 1,802 canning and preserving plants, more than 3 times the number included in recent annual surveys. The cooperating plants employed nearly 133,000 workers, approximately 61 percent of the industry's average employment during 1952. These data were then classified into various subgroups to show the differences in injury experience prevailing within the industry.

### Size of Plant Comparisons

In this survey, as in studies of other industries, injuries were most frequent in the medium-sized plants and small and large plants had better-than-average frequency rates. A plant-size analysis of the canning and preserving industry indicates that there are 4 general levels of injury-frequency rates—2 below industry average, 1 approximately average, and 1 considerably above average. The best group average, 10.1 disabling injuries per million employee-hours worked, was achieved by plants employing more than 2,500 employees during their operating season. Plants employing less than 20 workmen had the second lowest average frequency rate, 20.6. For plants with average operating-employments ranging from 250 to 2,499, the average injury-frequency rate,

23.1, was nearly identical with the industry average. The medium-sized plants, 20 to 249 employees, had a combined injury-frequency rate of 28.4.

The better-than-average injury-frequency rate achieved by the small plants appears to be attributable to the presence of the owner or manager during plant operations. Under his immediate supervision, hazardous working conditions and unsafe actions can be corrected as they develop. As operations increase, however, the owner or manager must devote more of his time to administrative work. As a result, much of the direct supervision of operations must be delegated to others—i. e., foremen or supervisors. Unfortunately, these supervisors rarely have any training in safety and seldom realize the effects of accidents on production. Consequently, injuries increase as attention to safety decreases.

The better-than-average injury-frequency rate in the larger plants results from special attention to safety, which is made possible by the high level of production. The safety programs may include special training for foremen and supervisors, the formation of safety committees, and, in the very large plants, by the employment of full-time safety directors. In addition, large plants find it economical to equip and maintain first-aid rooms. While these first-aid rooms do not, in themselves, prevent accidents, they may indirectly reduce the number of disabling injuries through adequate first-aid treatment.

TABLE 1.—Work-injury rates in the canning and preserving industry, classified by division, 1952

Division	Number of establishments	Number of employees	Frequency rates <sup>1</sup>				Severity		
			Total	Deaths	Permanent-partial disabilities	Temporary-total disabilities	Average number of days lost or charged per—		Severity rate <sup>2</sup>
							Disabling injury	Temporary-total disability	
Total <sup>3</sup> .....	1,802	132,517	23.5	(4)	0.7	22.8	57	15	1.4
Canned seafood.....	187	10,662	33.2	0.1	.4	32.7	46	17	1.5
Dried and dehydrated fruits and vegetables.....	50	3,186	30.5	.2	.3	30.0	53	16	1.6
Frozen fruits, vegetables, and seafoods.....	163	10,062	25.8	-----	1.2	24.6	70	15	1.8
Preserves, jams, and jellies.....	101	2,863	23.3	-----	.7	22.6	39	16	.9
Canned fruits, vegetables, and soups.....	974	88,976	22.9	(4)	.8	22.1	58	15	1.4
Cured fish.....	59	1,513	21.8	-----	-----	21.8	18	18	.3
Pickled fruits and vegetables.....	244	13,531	18.9	(4)	.5	18.4	62	15	1.1

<sup>1</sup> The injury-frequency rate is the average number of disabling work-injuries for each million employee-hours worked. A disabling work-injury is an injury arising out of and in the course of employment which results in death, or any degree of permanent impairment, or makes the injured worker unable to perform a regularly established job, open and available to him, throughout the hours corresponding to his regular shift on any one or more days (including Sundays, days off, and plant shut downs) after the day of injury.

<sup>2</sup> The severity rate is the average number of days lost or charged for each thousand employee-hours worked. The standard time-loss ratings for fatalities and permanent disabilities are given in Method of Compiling Industrial Injury Rates, approved by the American Standards Association, 1945.

<sup>3</sup> Totals include figures not shown separately because of insufficient information.

<sup>4</sup> Less than 0.05.

Large plants also have other advantages. Generally, activities are more specialized and workmen may become particularly adept at a limited number of operations. In addition, service personnel may be employed to maintain equipment in good working order and to provide clean working areas.

Group averages, however, tend to conceal wide variations in injury-frequency rates. Actually, 50 percent of the reporting plants had injury-free years. Most of these were small or operated only part of the year, but employees in one plant worked more than 700,000 hours during the year without an injury. Another plant reported 550,000 employee-hours worked without an injury. In addition, 3 plants, each with more than a million hours worked, achieved injury-frequency rates of less than 5. One of these, with a frequency-rate of 4.6, reported more than 12,000,000 hours, and another achieved a rate of less than 2.

At the other extreme, 23 plants had rates over 250, and 77 others had rates in excess of 100. At

this adverse end of the scale, 12 percent of the plants, employing less than 7 percent of the workmen, experienced 29 percent of the disabling injuries and 21 percent of the total lost time.

**Division Comparisons**

Average injury-frequency rates for the 7 major divisions of the industry ranged from 18.9 for plants pickling fruits and vegetables to 33.2 for plants canning seafood (table 1). Only one other group—plants drying or dehydrating fruits and vegetables, with an average frequency rate of 30.5—had a rate which varied more than 10 percent from the industry average.

Cooperating plants in 4 of the divisions reported some fatalities, and all but one division reported some permanent disabilities. The frequency of fatalities, however, was very low, averaging less than 1 per 20 million hours worked in the industry. Permanent disabilities were most frequent in freezing plants, 1.2 per million hours. As a result,

TABLE 2.—Work-injury rates in the canning and preserving industry, classified by departments, 1952

Departments	Number of units reporting	Employee hours worked (thousands)	Frequency rates <sup>1</sup>				Severity		
			Total	Death	Perma- nent-par- tial dis- abilities	Tempo- rary-total disabilities	Average number of days lost or charged per—		Severity rate <sup>2</sup>
							Disabling injury	Tempo- rary-total disability	
Total <sup>3</sup> .....	4 1,802	260,400	23.5	( <sup>4</sup> )	0.7	22.8	57	15	1.4
Production departments: Total <sup>3</sup> .....	6,423	101,002	26.5	( <sup>5</sup> )	.8	25.7	49	15	1.3
Receiving.....	914	7,821	44.8		.1	43.5	59	13	2.6
Vining.....	45	807	33.5			31.0	41	20	1.4
Soaking and washing.....	362	1,488	21.5			20.8	16	6	1.3
Scaling and eviscerating.....	102	1,977	31.4			30.9	60	22	1.9
Corn husking and cutting.....	46	831	40.9			37.3	37	12	1.5
Peeling and coring.....	377	10,939	15.2			14.8	65	14	1.0
Miscellaneous cutting and trimming.....	65	1,646	26.1			26.1	10	10	1.2
Sorting and grading.....	701	14,808	21.1			20.4	37	14	1.0
Juice extracting.....	138	1,236	25.9			25.1	74	14	2.6
Cooking.....	651	6,385	34.8	.2		32.9	27	14	1.6
Filling.....	867	16,725	20.5			19.8	27	14	1.7
Sealing.....	634	2,043	18.1			16.6	95	15	1.6
Processing (can goods).....	533	11,216	35.8			34.7	36	16	1.3
Cooling.....	310	1,043	32.6			31.6	32	11	1.1
Freezing.....	54	1,393	38.1			36.7	48	8	1.8
Warehousing and shipping departments: Total <sup>3</sup> .....	2,776	30,104	28.9	.1		28.1	55	14	1.6
Warehousing.....	755	9,981	38.8			37.8	43	14	1.7
Labeling.....	695	8,009	17.2			17.0	19	13	.3
Casing.....	561	3,996	26.5			26.0	45	11	1.2
Shipping.....	714	6,690	29.9	.3		28.9	97	17	2.9
Service and maintenance departments: Total <sup>3</sup> .....	3,220	34,370	17.5	.1		16.6	109	20	1.9
Office.....	1,054	12,890	2.4			2.3	67	29	.2
Laboratory.....	304	1,541	13.6			13.0	21	7	.3
Maintenance.....	745	11,315	34.5	.4		32.5	143	18	4.9
Cleaning (janitors).....	407	3,523	22.4			21.8	36	25	.8
Plant protection (watchmen).....	371	1,539	9.7			9.7	37	37	.4
Can making and supply.....	47	1,762	17.0			14.2	102	32	1.7

<sup>1</sup> The injury-frequency rate is the average number of disabling work-injuries for each million employee-hours worked. A disabling work-injury is an injury arising out of and in the course of employment which results in death, or any degree of permanent impairment, or makes the injured worker unable to perform a regularly established job, open and available to him, throughout the hours corresponding to his regular shift on any one or more days (including Sundays, days off, and plant shut-downs) after the day of injury.

<sup>2</sup> The severity rate is the average number of days lost or charged for each thousand employee-hours worked. The standard time-loss ratings for fatalities and permanent disabilities are given in Method of Compiling Industrial Injury Rates, approved by the American Standards Association, 1945.

<sup>3</sup> Totals include figures not shown separately because of insufficient information.

<sup>4</sup> Number of establishments reporting.

<sup>5</sup> Less than 0.05.

the most unfavorable severity averages among the industry's divisions were reported for those plants—70 days lost time per injury and 1.8 days lost per thousand hours worked. In contrast, none of the 60 disabling injuries reported by plants smoking, salting, and drying fish produced serious disability. Consequently, their severity records were the best achieved, 18 days lost per injury and 0.3 days lost per thousand hours worked.

Nearly two-thirds of the industry's employees work in plants which can fruits, vegetables, or soups. Due to this weighting, the industry rates were very close to the division's averages: 22.9 disabling injuries per million hours worked, 58 days lost per injury, and 1.4 days lost per thousand hours worked.

### Departmental Comparisons

Because of differences in internal organization, many plants were unable to furnish injury data according to a standardized pattern of departments. In addition, variations of operations within the different divisions of the industry made departmental reporting difficult. More than two-thirds of the plants, however, reported their injury experience in some departmental detail. The departments were classified, for analysis, into 3 major groupings: Production departments, warehousing and shipping departments, and service and maintenance departments.

*Production departments.* Employees in these departments accounted for approximately 60 percent of the total hours worked in plants which supplied departmental injury data. However, that group of workers reported 63 percent of the disabling injuries. Their injury-frequency rate, 26.5, was, therefore, higher than the average for all workers within the industry (table 2).

Within the group, however, there was considerable variation in rates. For the 15 separate production departments for which injury rates were computed, frequency rates ranged from 15.2 for peeling and coring departments to 44.8 for receiving departments. In addition to the receiving departments, one other department, corn husking and cutting, had an injury-frequency rate (40.9) greater than 40. Two departments had rates between 35 and 40 and 4 had rates between 30 and

35. Besides peeling and coring, only 1 department had a frequency rate below 20—sealing, 18.1.

Two departments reported some fatal work injuries and all but one of the 15 groups reported some permanent disabilities. In 4 departments—cooking, corn husking and cutting, vining, and sealing—permanent disabilities occurred at the high rate of 1.5 or more per million hours worked.

Only 1 group of production departments—miscellaneous cutting and trimming—reported no serious disabilities. As a result, the average time lost per disabling injury in those departments was very low, 10 days.

*Warehousing and shipping departments.* This group of departments had the most adverse injury-frequency rate of the 3 major groups of departments, 28.9. There was, however, considerable variation in rates for specific departments: Warehousing, 38.8, shipping, 29.9, casing, 26.5, and labeling, 17.2.

Only 1 of these departments reported any fatalities, but some employees in all of them experienced permanent disabilities. However, the incidence of permanent injuries for the combined group was no greater than the average for the industry. Consequently, severity records for the warehousing and shipping departments were near industry averages.

*Service and maintenance departments.* Because of the high proportion of relatively nonhazardous office work in this group of departments, injuries were less frequent than in other major groups of departments, 17.5 disabling injuries per million hours worked. The favorable rate was attained, however, by the lower incidence of nonserious temporary disabilities, the incidence of serious disabilities being greater than in the industry generally. As a result, the average loss per disabling injury was very high, 109 days.

Within the group, maintenance employees had the worst injury records in respect to both frequency and severity. Janitors and cleaners had the second highest injury frequency within the group, but their injuries included relatively few serious disabilities.

—GEORGE R. McCORMACK  
Branch of Industrial Hazards

## Injury Rates in Manufacturing, Fourth Quarter 1953

THE ALL-MANUFACTURING injury-frequency rate<sup>1</sup> of 12.1 for the fourth quarter of 1953, according to preliminary reports compiled by the Bureau of Labor Statistics, was the lowest quarterly average on record. It was 13 percent lower than the rate for the preceding quarter and 10 percent below that for the fourth quarter of 1952.

This decrease during the fourth quarter of 1953, while largely seasonal, was somewhat greater than usual. During the past 10 years, third-quarter to fourth-quarter declines in average injury rates have varied from 1 to 14 percent. The average decrease has been 10 percent.

The movement of monthly rates during the fourth quarter of 1953 followed the typical pattern fairly closely, although the decline in rates was somewhat greater than in most previous years. The October rate of 13.3 was the same as that for September, although the rates in 7 of the past 10 years have shown slight increases between these 2 months. November showed a drop of 11 percent, compared with a usual decrease of 8 percent, and December recorded a further 7-percent decline to reach a record low monthly rate of 11.0.

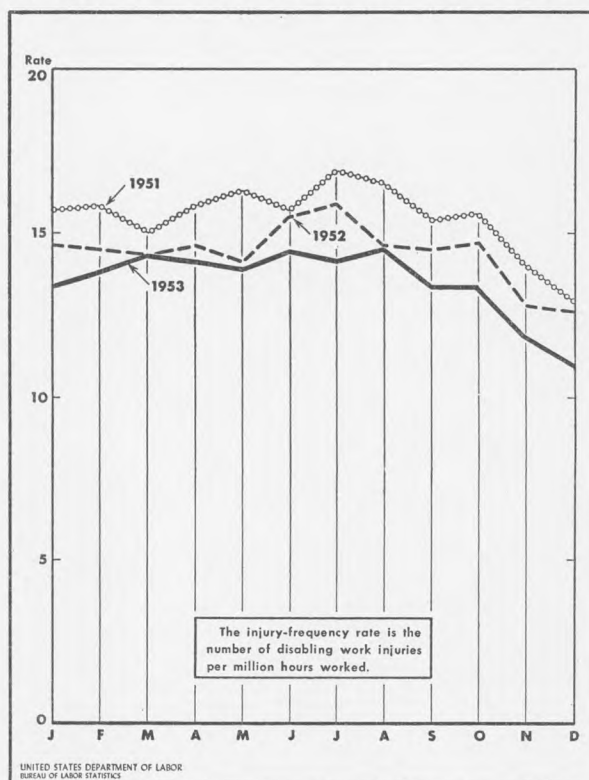
With the exception of March, the 1953 monthly rates for all manufacturing have been below those for 1952. On the basis of these preliminary data, it is anticipated that the 1953 average, when finally determined, will be about 13.7. If it is established at this level, it will be the lowest yearly average on record.

The fourth-quarter decline was quite general among the various manufacturing industries. Of the 129 industry classifications for which quarterly injury rates were available, 82 showed decreases of 1 full frequency-rate point or more, 19 of which

had decreases amounting to 5 points or more; only 9 industries recorded increases; and the remaining 38 showed little change.

Many of the decreases between the third and the fourth quarter were seasonal. However, in a comparison of annual averages for 1953 with those of 1952, 49 out of a total of 132 industries showed a significant improvement in their injury records, 25 had higher rates, and 58 recorded little change. The principal year-to-year improvements were shown in the lumber group and in primary metals, machinery, and instruments industries.

**Injury-Frequency Rates in Manufacturing, 1951-53**



In the logging industry, injuries per million man-hours dropped from 92.1 in 1952 to 81.3 in 1953, in integrated saw and planing mills, from 47.2 to 38.7. Four other industries in this group showed decreases of 1 to 5 points. Five out of nine industries in the primary metals group, 9 out of 15 in machinery manufacturing,

<sup>1</sup> The injury-frequency rate is the average number of disabling work injuries for each million employee-hours worked. A disabling work injury is any injury occurring in the course of and arising out of employment, which (a) results in death or any degree of permanent physical impairment, or (b) makes the injured worker unable to perform the duties of any regularly established job, which is open and available to him, throughout the hours corresponding to his regular shift, on any one or more days after the day of injury (including Sundays, days off, or plant shutdowns). The term "injury" includes occupational diseases.

and 4 out of 6 in the instruments group showed significant decreases in injury rates between 1952 and 1953.

Rates of less than 5 injuries per million man-hours were recorded by the synthetic fibers,

synthetic rubber, miscellaneous communication equipment, explosives, rubber footwear, aircraft, radio tubes, electric lamps (bulbs), electrical equipment for vehicles, and tires and inner tubes industries.

*Injury-frequency rates for selected manufacturing industries, fourth quarter 1953*

Industry	Fourth quarter 1953				Fourth quarter 1952	Annual average	
	October	November	December	Fourth quarter		1953	1952
Total manufacturing.....	13.3	11.8	11.0	12.1	13.4	13.7	14.3
Food and kindred products:							
Meat products.....	19.8	15.4	18.8	17.9	20.8	20.3	21.2
Dairy products.....	(1)	(1)	(1)	15.0	16.7	17.5	17.0
Canning and preserving.....	23.1	19.2	21.6	21.5	21.5	26.2	25.4
Grain-mill products.....	19.3	15.8	20.8	18.7	22.7	18.0	19.1
Bakery products.....	16.2	16.6	16.6	16.4	16.7	18.5	16.0
Cane sugar.....	22.4	17.5	12.5	17.5	17.3	19.1	19.4
Confectionery and related products.....	16.7	9.0	8.9	11.7	13.7	13.8	13.5
Bottled soft drinks.....	(1)	(1)	(1)	26.0	25.2	28.8	30.0
Malt and malt liquors.....	20.2	17.6	19.1	19.0	18.4	22.0	21.9
Distilled liquors.....	(1)	(1)	(1)	5.3	7.3	6.6	8.5
Miscellaneous food products.....	17.0	19.8	17.1	18.0	16.0	18.0	15.8
Textile-mill products:							
Cotton yarn and textiles.....	8.1	7.9	7.6	7.9	9.0	9.0	8.9
Rayon, other synthetic, and silk textiles.....	6.2	6.6	6.2	6.4	9.0	7.0	8.2
Woolen and worsted textiles.....	14.6	14.2	11.0	13.4	14.7	16.7	16.9
Knit goods.....	4.8	5.2	2.9	4.4	5.7	5.3	5.8
Dyeing and finishing textiles.....	16.5	12.6	12.0	13.7	14.4	15.3	15.0
Miscellaneous textile goods.....	16.4	11.2	15.5	14.4	17.3	16.7	17.3
Apparel and other finished textile products:							
Clothing, men's and boys'.....	5.9	6.2	6.8	6.3	6.8	7.6	7.8
Clothing, women's and children's.....	(1)	(1)	(1)	5.7	6.1	7.3	6.4
Miscellaneous fabricated textile products.....	8.9	10.3	13.6	10.9	9.9	12.4	13.6
Lumber and wood products (except furniture):							
Logging.....	75.3	83.3	71.3	76.9	88.7	81.3	92.1
Planing mills.....	(1)	(1)	(1)	(1)	(1)	33.6	38.4
Sawmills.....	(1)	(1)	(1)	46.6	54.0	53.7	55.3
Sawmills and planing mills, integrated.....	38.7	34.8	32.4	35.5	43.5	38.7	47.2
Millwork and structural wood products.....	22.2	19.1	17.8	19.8	27.2	25.0	25.8
Plywood mills.....	27.1	19.6	27.6	24.9	31.8	27.9	31.3
Wooden containers.....	34.3	28.6	31.9	31.7	30.5	34.2	34.4
Miscellaneous wood products.....	31.7	22.7	25.1	26.7	31.7	29.5	34.1
Furniture and fixtures:							
Household furniture, nonmetal.....	24.2	18.5	18.8	20.6	18.3	21.8	20.6
Mattresses and bedsprings.....	19.8	22.7	22.8	21.7	21.0	18.9	19.6
Office furniture.....	27.3	16.5	22.8	22.4	14.5	24.2	18.9
Public-building and professional furniture.....	(1)	(1)	(1)	17.6	18.9	19.6	22.9
Partitions and fixtures.....	(1)	(1)	(1)	11.3	19.6	15.7	20.2
Paper and allied products:							
Pulp, paper, and paperboard mills.....	14.2	12.1	10.7	12.4	13.2	13.1	14.4
Paperboard containers and boxes.....	19.3	16.3	13.6	16.5	17.4	18.5	17.0
Miscellaneous paper and allied products.....	16.9	13.5	15.7	15.4	13.0	16.4	14.8
Printing, publishing, and allied industries:							
Newspapers and periodicals.....	(1)	(1)	(1)	11.4	11.3	9.3	9.2
Miscellaneous printing and publishing.....	9.6	9.4	7.4	8.8	10.7	9.3	9.1
Chemicals and allied products:							
Industrial inorganic chemicals.....	5.8	5.5	5.5	5.6	7.3	5.8	8.0
Plastics, except synthetic rubber.....	5.2	7.4	3.5	5.4	6.9	5.4	5.4
Synthetic rubber.....	(1)	(1)	(1)	2.2	2.8	2.8	3.3
Synthetic fibers.....	(1)	(1)	(1)	.9	1.4	1.1	1.6
Explosives.....	(1)	(1)	(1)	1.9	4.1	3.2	3.4
Miscellaneous industrial organic chemicals.....	4.6	6.3	3.9	4.9	6.8	5.8	7.0
Drugs and medicines.....	9.5	7.8	7.0	8.1	7.5	8.2	8.7
Soap and related products.....	4.1	9.6	8.9	7.5	10.9	8.7	9.4
Paints, pigments, and related products.....	10.0	11.3	5.5	8.9	13.7	10.7	11.7
Fertilizers.....	(1)	(1)	(1)	14.1	17.3	18.3	19.8
Vegetable and animal oils and fats.....	25.1	23.6	28.0	25.5	26.9	25.7	22.5
Compressed and liquefied gases.....	(1)	(1)	(1)	10.1	12.9	8.0	11.8
Miscellaneous chemicals and allied products.....	(1)	(1)	(1)	17.4	17.6	18.8	17.9
Rubber products:							
Tires and inner tubes.....	4.1	6.2	2.9	4.4	4.3	4.9	5.6
Rubber footwear.....	2.5	3.5	3.0	2.9	3.9	3.3	3.8
Miscellaneous rubber products.....	9.8	10.8	9.8	10.1	12.7	11.8	12.8
Leather and leather products:							
Leather tanning and finishing.....	29.1	17.9	18.6	22.1	25.3	27.3	26.0
Boot and shoe cut stock and findings.....	(1)	(1)	(1)	(1)	(1)	20.7	23.1
Footwear (except rubber).....	7.5	6.8	7.2	7.2	8.0	8.2	9.3
Miscellaneous leather products.....	(1)	(1)	(1)	13.8	12.0	15.6	12.7
Stone, clay, and glass products:							
Glass and glass products.....	9.8	9.6	10.9	10.1	11.1	11.3	11.0
Structural clay products.....	29.3	30.0	33.7	30.9	32.4	36.4	35.3
Pottery and related products.....	15.4	18.0	10.8	14.8	15.7	14.1	15.7
Concrete, gypsum, and mineral wool.....	(1)	(1)	(1)	19.5	26.6	27.1	25.4
Miscellaneous nonmetallic mineral products.....	15.7	12.0	14.3	14.1	18.3	19.8	17.1

See footnotes at end of table.



## Injury-frequency rates for selected manufacturing industries, fourth quarter 1953—Continued

Industry	Fourth quarter 1953				Fourth quarter 1952	Annual average	
	October	November	December	Fourth quarter		1953	1952
<b>Primary metal industries:</b>							
Blast furnaces and steel mills.....	5.8	5.5	4.8	5.4	6.1	5.8	6.5
Gray-iron and malleable foundries.....	27.1	24.3	21.9	24.5	31.2	29.5	33.0
Steel foundries.....	21.0	13.8	14.8	16.7	20.2	20.2	24.7
Nonferrous rolling, drawing, and alloying.....	11.6	13.9	13.7	13.0	12.5	13.3	13.7
Nonferrous foundries.....	19.8	21.5	18.3	19.9	25.6	21.4	23.5
Iron and steel forgings.....	25.3	18.7	14.1	19.5	23.0	23.8	24.8
Wire drawing.....	9.1	9.2	12.9	10.4	8.8	11.0	11.7
Welded and heavy-riveted pipe.....	9.0	9.3	11.1	9.8	10.9	10.8	14.1
Cold-finished steel.....	13.9	18.0	13.7	15.2	11.9	15.8	11.6
<b>Fabricated metal products:</b>							
Tin cans and other tinware.....	12.2	9.2	10.7	10.8	10.0	10.9	11.2
Cutlery and edge tools.....	10.6	17.1	8.8	12.0	19.4	16.7	15.6
Hand tools, files, and saws.....	21.8	22.3	15.1	19.7	20.1	21.7	18.4
Hardware.....	11.8	8.9	7.9	9.5	11.4	10.4	10.8
Sanitary ware and plumbers' supplies.....	16.4	12.8	13.6	14.4	16.6	15.0	14.8
Oil burners, heating and cooking apparatus.....	20.8	17.5	18.9	19.2	20.3	20.9	21.0
Structural steel and ornamental metal work.....	19.4	18.8	16.4	18.2	21.3	22.2	23.6
Boiler-shop products.....	32.2	25.1	22.0	26.6	25.8	26.0	27.2
Sheet-metal work.....	24.6	25.7	15.8	22.1	27.1	24.6	27.6
Stamped and pressed metal products.....	13.2	14.9	11.6	13.2	14.5	15.1	13.8
Metal coating and engraving.....	(1)	(1)	(1)	22.0	29.5	29.2	29.5
Fabricated wire products.....	18.2	15.2	17.3	16.9	16.2	20.3	17.1
Metal barrels, drums, kegs, and pails.....	(1)	(1)	(1)	8.4	13.7	11.2	13.9
Steel springs.....	11.4	18.3	13.7	14.4	21.1	19.9	20.8
Bolts, nuts, washers, and rivets.....	11.3	8.9	12.1	10.8	12.2	15.2	14.5
Screw-machine products.....	13.2	12.2	10.8	12.1	15.8	16.8	15.2
Fabricated metal products, not elsewhere classified.....	15.7	13.3	13.2	14.1	11.3	13.5	12.0
<b>Machinery (except electrical):</b>							
Engines and turbines.....	9.4	8.7	7.2	8.4	9.6	9.0	10.0
Agricultural machinery and tractors.....	9.1	10.1	10.1	9.9	10.7	12.6	12.8
Construction and mining machinery.....	16.3	14.1	16.4	15.6	18.4	19.8	22.0
Metalworking machinery.....	11.0	9.4	10.1	10.1	12.1	12.0	13.8
Food-products machinery.....	25.6	23.6	24.1	24.5	16.5	20.8	17.9
Textile machinery.....	10.3	12.9	6.9	10.0	16.7	12.6	13.0
Miscellaneous special-industry machinery.....	17.1	15.0	12.8	15.0	17.2	16.6	18.6
Pumps and compressors.....	13.3	14.0	13.5	13.6	17.5	16.7	17.6
Elevators, escalators, and conveyors.....	12.3	14.5	14.5	13.7	16.8	16.1	16.3
Mechanical power-transmission equipment (except ball and roller bearings).....	11.7	9.4	10.0	10.4	11.8	11.3	13.2
Miscellaneous general industrial machinery.....	14.4	12.6	12.5	13.2	16.7	15.6	16.8
Commercial and household machinery.....	9.3	6.9	7.3	7.9	8.1	8.7	8.6
Valves and fittings.....	15.3	15.0	9.2	13.1	15.3	14.6	17.2
Ball and roller bearings.....	9.9	8.0	8.6	8.9	10.5	10.3	11.8
Machine shops, general.....	14.3	13.7	11.8	13.3	14.6	14.7	17.0
<b>Electrical machinery:</b>							
Electrical industrial apparatus.....	8.5	7.2	8.0	7.9	7.8	8.4	8.1
Electrical appliances.....	8.4	8.7	7.7	8.3	7.9	8.7	7.3
Insulated wire and cable.....	16.6	8.9	9.3	11.8	15.8	14.2	16.2
Electrical equipment for vehicles.....	3.4	2.7	2.3	2.8	4.7	4.2	4.7
Electric lamps (bulbs).....	5.8	3.3	4.3	4.5	5.2	3.9	3.9
Radios and related products.....	6.5	5.7	4.4	5.6	6.4	6.3	6.5
Radio tubes.....	3.4	3.4	2.5	3.1	4.4	3.6	4.5
Miscellaneous communication equipment.....	2.2	3.0	1.6	2.3	2.5	2.8	3.2
Batteries.....	12.8	11.9	8.4	11.1	12.1	11.8	12.0
Electrical products, not elsewhere classified.....	(1)	(1)	(1)	7.3	9.5	9.5	8.4
<b>Transportation equipment:</b>							
Motor vehicles, bodies, and trailers.....	5.4	5.3	4.3	5.0	4.7	5.2	5.2
Motor-vehicle parts and accessories.....	8.2	6.6	5.9	6.9	8.0	7.9	8.4
Aircraft.....	3.4	3.3	2.8	3.2	3.5	3.4	3.7
Aircraft parts.....	6.5	5.5	5.6	5.9	7.2	6.2	6.7
Ship building and repairing.....	19.6	13.8	11.7	15.1	20.4	19.7	21.4
Boat building and repairing.....	(1)	(1)	(1)	31.4	(1)	34.4	40.0
Railroad equipment.....	9.3	7.4	7.9	8.3	8.3	8.6	9.1
<b>Instruments and related products:</b>							
Scientific instruments.....	5.0	6.9	4.0	5.2	5.6	7.3	5.2
Mechanical measuring and controlling instruments.....	5.9	6.9	4.6	5.8	5.8	6.2	7.3
Optical instruments and lenses.....	(1)	(1)	(1)	4.8	5.0	6.8	8.0
Medical instruments and supplies.....	5.9	7.7	7.6	7.0	11.5	7.3	10.0
Photographic equipment and supplies.....	8.3	4.9	5.4	6.3	5.7	6.1	7.7
Watches and clocks.....	8.5	3.7	7.1	6.5	6.0	7.5	7.5
<b>Miscellaneous manufacturing industries:</b>							
Paving and roofing materials.....	(1)	(1)	(1)	10.8	10.0	11.7	13.1
Jewelry, silverware, and plated ware.....	(1)	(1)	(1)	6.1	4.9	7.7	6.9
Fabricated plastics products.....	19.0	18.7	12.0	16.6	15.1	17.4	16.1
Miscellaneous manufacturing.....	15.3	16.0	11.7	14.4	12.6	15.4	13.3
Ordnance and accessories.....	7.1	4.8	5.3	5.8	6.5	6.4	6.4

<sup>1</sup> Insufficient data to warrant presentation of average.

NOTE.—The monthly and quarterly injury-frequency rates presented in this table were derived from a sample of about 12,500 establishments, covering approximately one-third of the employees engaged in manufacturing. They were adjusted to be comparable with the final annual average for 1952,

which were based on a more comprehensive survey covering approximately 60 percent of all employees engaged in manufacturing. All rates shown are preliminary and are subject to revision when 1953 final annual averages become available. See Monthly Labor Review, February 1954 (p. 173), for comparable quarterly rates for 1952 and the first 9 months of 1953.

# Foreign Labor Briefs\*

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## A New Labor Court Law for Western Germany<sup>1</sup>

A COMPREHENSIVE SYSTEM of labor courts for the West German Republic was established by a Federal act of September 3, 1953. The law provides for a network of courts of original jurisdiction (125 initially), State Labor Courts of Appeal, and a supreme Federal Labor Court, all functioning independently from the general West German court system. Their jurisdiction is concerned with specific legal issues arising out of disputes over existing collective agreements or individual employment contracts, for example, controversies between the parties to collective contracts about alleged violations of the agreements, and disputes about wage claims of individual workers. In addition, the courts have jurisdiction over issues arising in connection with the establishment or operation of works councils required by the West German legislation on employee representation within the plant. They also decide whether trade unions or management associations satisfy the statutory conditions for being parties to collective agreements.

The institution of labor courts has a long history in Germany. Their popularity among German labor made it necessary for the Nazi regime to continue the labor courts system established by the Weimar Republic, and the German States reestablished them in 1946 as soon as the Allied Control Council granted the necessary authority.<sup>2</sup>

The labor court system provides expertly staffed tribunals and simpler, speedier, and less expensive judicial procedures than those of the ordinary courts. Main characteristics of the scheme are:

1. In the labor courts of original jurisdiction and the appeals courts, the majority of the judges are laymen, who are selected in equal numbers from nominees of employers' associations and of trade unions. On the supreme labor court, lay judges, nominated by national trade union centers and management associations, are in the minority.

2. The presiding judges in the lower courts, usually jurists, are required to have extensive knowledge and experience in labor matters. They are appointed after consultation with a committee including representatives of the important unions and employers' associations. The same is true for the majority of the judges in the supreme court.

3. In the labor courts of original jurisdiction, the parties may present their own cases or may be represented by officials of trade unions or employers' associations. Attorneys-at-law are admitted only in exceptional cases; in such cases, an indigent party may be assigned an attorney by the court.

4. Requirements for preparation of written briefs are minimized. The period between petition and trial may not be more than 2 days.

5. Court costs are fixed by the law at only small fractions of those for general lawsuits. No fee is required if the suit is settled informally by the court.

Parties to collective agreements may provide for arbitration of disputes arising in connection with the contracts and thus exclude them from the jurisdiction of the labor courts. But, in the case of individual employment relationships, the court's jurisdiction may be limited by an agreement to arbitrate only for special categories of workers listed in the law, such as actors, entertainers, and seamen. This restriction of arbitration agreements is a new feature of the German labor courts law, which is officially attributed, in part, to the fact that the past operations of many arbitration boards have been much slower than those of the labor courts.

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\*Prepared in the Bureau's Division of Foreign Labor Conditions.

<sup>1</sup> Based upon *Bundesarbeitsblatt*, September 1953.

<sup>2</sup> See *Monthly Labor Review*, December 1950 (p. 668).

## Manpower for Agriculture in Israel<sup>3</sup>

A DOUBLING of the agricultural population and a threefold increase in the irrigated area within the next 7 years are the overall targets of the agricultural plan made public by the Israeli Agricultural Advisory Council. The majority of the additional farming units are to be included within the framework of the immigrant settlement movement.

In the light of recent experience, difficulties may be expected in reaching the target for expansion of the agricultural population. Despite virtually free housing and land and large grants of equipment and livestock by the settlement authorities, many new immigrant settlers prefer to hire themselves out on road building, forestation, and similar types of work, to save enough money to move into large urban centers. A census of 181 new settlements in the spring of 1953 revealed that farm work was totally neglected on 2,353, or 19 percent, of the 12,110 farming units surveyed, while only a small part of the soil was cultivated on many others. This neglect is primarily due to the social and occupational background of the new settlers, the majority of whom had been engaged, in their countries of origin, as small-scale merchants or artisans. Moreover, recent immigrants characteristically have lacked the pioneering spirit which had inspired farm development in the pre-State era.

The authorities have continued to follow established settlement patterns which, being based on the assumption that large numbers of new immi-

grants can be attracted to small-scale farming under individual ownership, have gotten out of line with the changed human material and socio-economic reality of the country. Even the comparatively few immigrants who have been induced to settle on the land have in many cases proved both unwilling and incapable of shouldering the responsibility which independent farming entails, in addition to the physical and social hardship of agricultural life in outlying areas. Only the emergence of unemployment in the towns<sup>4</sup> has prevented the drift from rural to urban areas from assuming even more disturbing proportions.

A plan for the establishment of farms based on hired labor, according to the *Israel Economist*, was proposed by Dr. A. G. Black (head of the United Nations Food and Agriculture Organization delegation in Israel) in a report to the Government. The implementation of such a plan would relieve the new immigrant of the burden of individual responsibility and at the same time provide him with a steady income. It would also facilitate the concentration of farm workers in larger population centers where the amenities of urban life could more easily be made accessible. Moreover, the organization of administrative farms extending over larger tracts of land would allow for greater utilization of mechanized equipment and would particularly lend itself to the cultivation of field and industrial crops which are presently on the list of agricultural priorities. Finally, an opportunity would be afforded for the progressive training of new settlers.

<sup>3</sup> Summary of Aspects of Agricultural Planning (*in the Israel Economist*, Jerusalem, December 1953, p. 255 ff.)

<sup>4</sup> See Israel: Unemployment Under the New Economic Program (*in Notes on Labor Abroad*, April 1953, p. 26).

## Wage and Price Developments in Mexico

ALL INDICATIONS point to a rise in the general level of real earnings of Mexican workers in 1953. This was particularly true after midyear, when the effect of Government efforts to reduce the cost of living began to be apparent in lower food prices.

The approximately 900 collective labor agreements negotiated during the year provided increases in wage rates averaging about 12 percent; most of these ranged between 10 and 15 percent—the pattern set by the Government in settling disputes. These 2-year contracts covered most of Mexico's major industries, notably mining, textiles, construction, petroleum, and sugar.<sup>5</sup>

The quarter million employees of the Federal Government were granted salary increases, effective January 1, 1953, which averaged 10 percent. These workers received another 10 percent increase on January 1, 1954.

Late in the year, hundreds of tripartite municipal commissions throughout the country began to establish legal minimum wage rates to be in force during 1954 and 1955, under the highly decentralized procedure provided in the Constitution. Mexico's largest and most influential labor organization, the Confederation of Mexican Workers (CTM), sponsored a large general congress on minimum wages in October, which recommended a countrywide minimum daily wage of 12 pesos. However, late in December the Minimum Wage Commission for the Federal District, an important industrial area, established rates of 8 pesos daily for urban workers and 6 pesos for rural workers, replacing minimums of 6.70 and 5 pesos, respectively. For the country as a whole, preliminary indications are that minimum rates were increased by about 18 percent, with the great majority of increases ranging from 10 to 25 percent. While it is estimated that less than 30 percent of the

industrial workers will be directly affected by the new minimums, the increases are widely expected to have an elevating effect on the general wage structure.

Incomplete statistical data on real wages in manufacturing industries indicate that the 1953 rise was the first since 1949. During 1950, real wages fell to a level about 8 percent above the 1948 level, fell further in 1951, and in 1952 reached a point somewhat below the 1948 level. The 1953 gain brought the level back up to approximately that of 1948. However, for the period 1939 to 1952—a time of rapid economic development and vigorous prosperity in Mexico—real wages of workers in the manufacturing sector fell between 10 and 20 percent.

During 1953, the new administration concentrated on efforts to check inflation and to lower prices, largely through encouragement of increased food production, ceilings on food prices, and wholesale price supports for corn and beans—staples in the Mexican diet. Cost of living declined for the first time in a decade of rapidly rising prices.

The official cost-of-living index for a wage earner's family in Mexico City in December 1953 was down 4.7 percent from the December 1952 figure as a result of lower food prices. The food component of the index (weighted 76 percent of all components) decreased 6.5 percent, while clothing remained fairly stable, and household articles (charcoal, laundry soap, and candles) increased by 2.6 percent.<sup>6</sup>

Signs of a slight but general economic downturn became apparent by the end of 1953. The Government took a wide variety of measures to bolster falling consumer demand, notably an increased public works budget.

<sup>5</sup> In the nationalized petroleum industry, as in 1951, no general wage increase was granted. However, augmented "fringe benefits" included improvements in medical care, education, housing, credit facilities, vacations, and a 50-percent wage bonus for dangerous or unhealthy work. These gains were estimated by the Mexican Department of Labor to be equivalent to a 17.9-percent wage increase.

<sup>6</sup> Rent and other items are not covered.

## Effects of the Philippine Industrial Peace Act<sup>7</sup>

THE TRADE UNION MOVEMENT and collective bargaining procedures in the Philippines have been strengthened as a result of the Industrial Peace Act which became effective in June 1953.<sup>8</sup> Among the more significant provisions of the Act (which is considered to be a Magna Carta of Labor) are those dealing with requirements for legal recognition of unions, union certification elections, establishment of a 30-day waiting period prior to strikes, the functions of the Court of Industrial Relations, and governmental conciliation and mediation agencies.

From June 17 to December 31, 1953, the total number of unions registered with the Secretary of Labor grew from 836 to 1,092. This growth indicates that the new provisions are having the desired effect of making the achievement of legal status readily possible for any trade union that does not have subversive leadership and that meets certain specified standards with regard to union administration. Prior to the Industrial Peace Act, the Secretary of Labor was able to grant, withhold, or cancel the registration for any given union at his own discretion, which led to charges of abuse.

From the time the law went into effect to the end of the year, the Court of Industrial Relations (CIR) ordered the Department of Labor to hold 13 union certification elections. Of these, 12 have

been conducted, with unions winning 8, no union being selected in 1, and 3 held to be indecisive pending CIR decisions as to challenged ballots. Of the total of 10,568 workers covered by the 12 elections, about 7,100 cast valid votes (exclusive of challenged ballots); of these, approximately 6,800 were cast in favor of unions, and about 300 were for "no union," according to Department of Labor figures.

From mid-June to mid-December, the Department of Labor's Conciliation Service reported receipt of 78 notices of intent to strike from trade unions under the 30-day cooling off provisions of the Industrial Peace Act. Thus, the formal strike notice appears to have been used as almost an automatic device to signal intent to bargain.

The Court of Industrial Relations took its first action on an unfair labor case in March 1954. The delay was reported to be caused by the presiding judge's dissatisfaction with the Court's rules of procedure under the pertinent sections of the Industrial Peace Act.

Union organizing and bargaining activity has continued to increase, particularly since the advent of the new national administration. According to official Department of Labor Conciliation Service reports, in the period June 17-December 17, the Service assisted disputing parties in reaching collective bargaining agreements in 25 instances, while labor and management reached agreements independently in 16 additional disputes.

<sup>7</sup> Based primarily on U. S. Foreign Service Report No. 747, of January 11, 1954, from Manila.

<sup>8</sup> For a summary of this act, see Notes on Labor Abroad, August 1953.

# Technical Note

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## Relationships Between Productivity Measures\*

ANY MEASURE RELATING PRODUCTION (output) in specified units to one factor of input is a productivity measure. Specialized examples of useful productivity measures are such ratios as bushels of wheat per acre of land (or per ton of fertilizer), tons of steel per ton of iron ore or per ton of coal consumed, value added by manufacture per kilowatt-hour of electric energy consumed, and production of lumber per man-hour worked or paid for. All are measures of productivity in the broad sense.

One such measure is output per man-hour. The Bureau of Labor Statistics has generally focused attention on this and related productivity measures—output per worker or per employee. Man-hour output, or its inverse, man-hours per unit of production, has more general significance and application than many other productivity measures because (1) labor is a resource common to all industries; (2) output per man-hour provides a measure which relates physical production to the economy's human resources; and (3) increases in man-hour output provide a means of improving living standards without impinging on any one economic group. The Bureau adheres to the following definition of output per man-hour:

Output per man-hour refers to production, in physical units, per man-hour of work. It is a measure of the relationship between the volume of goods produced and one factor of input—labor time. The indexes do not measure the specific contribution of labor or of capital or of any other factor of production. Changes in the ratio between output and man-hours of work show the joint effect of a large number of separate, though interrelated, influences such as technical improvements, the rate of operations, the relative contributions to production of plants at different levels of efficiency, the flow of materials and components, as well as the skill and effort of the work force, the efficiency of management, and the status of labor relations.

Closer examination of this particular definition of physical output per man-hour reveals that even this more restrictive term encompasses a number of possible concepts and measures. Development and presentation of a wide variety of measures is a goal of the BLS program, although it may not be reached for several years. It is the purpose of this article to examine these. No one measure of output per man-hour is more nearly correct or intrinsically "better" than any other. Various productivity measures have validity, each for its own special purpose. Taken together, all the measures constitute a family of related data, and additional analytical value can be obtained by comparing trends of one series with those of others.

Productivity measures can be constructed for a single commodity or product. Data for a number of products can be combined in a number of ways to attain industry measures, and the industry measures can be combined for groups of industries or for all manufacturing, mining, or the economy as a whole. So long as the discussion is restricted to a single product, the definition of output per man-hour constitutes no real problem, but when product information is combined to derive trends for industries, for industry groups, or for the economy as a whole, the question of weighting arises.

When the purpose of productivity measurement is to derive a relationship between *physical* output and man-hours, the question arises as to proper choice of weights for combining product indexes into industry measures, and industry measures into series for industry groups and for manufacturing as a whole. In the opinion of the BLS, man-hour weights are most appropriate for this particular measurement purpose, because such a weighting system results in a measure which is a weighted average of indexes of physical productiv-

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\*By Allan D. Searle of the Bureau's Division of Productivity and Technological Developments.

ity for the separate products.<sup>1</sup> Problems of sampling enter into the construction of these and the other series, and the actual measures themselves must be used with the question of sampling error in mind. For the sake of simplicity in developing the concepts, however, the sampling problem is not here discussed.

### Product Measures

*Fixed Establishment Man-Hour Weights.* In preparing an index showing changes in unit man-hours (or output per man-hour) for a product, it is possible to collect from each plant in an industry data on production and man-hours required to produce the product. Establishment figures on man-hours per unit can then be combined to an industrywide total for the product by means of fixed weights—i. e., each plant in the industry would be assigned a relative importance in terms of man-hours devoted to the product and would retain this importance in the index throughout the period under study. An index of this type can be expressed as follows:

$$\frac{\sum (l_i/l_o) l_o q_o}{\sum l_o q_o}$$

where—

$l_i$  = unit man-hours for the product in the plant, year "i".  
 $l_o$  = unit man-hours for the product in the plant, year "o".  
 $q_o$  = production of the product in the plant, year "o".

*An index of unit man-hours constructed in such a manner is affected only by changes in physical productivity arising from causes within the plant, and is unaffected by changes in relative importance of plants with high or low output per man-hour. The published direct report series of the Bureau of Labor Statistics are of the fixed-establishment-weight type.*

<sup>1</sup> The BLS has attempted to employ man-hour weights in the construction of its productivity series wherever these are obtainable. Where such weights cannot be obtained for individual products, weighting of items in the production index is done with unit labor costs, unit value added by manufacture, or unit values, in descending order of preference. When any of the latter are used as weights, they are considered to be substitutes for unit man-hour weights, and an effort is made to check their validity from this standpoint. Industry indexes are combined using man-hour weights to form indexes for industry groups. For an extended discussion of weights, see *Production, Employment and Productivity in 59 Manufacturing Industries, Part I*, National Research Project, Works Progress Administration (p. 11).

*Changing Establishment Man-Hour Weights.* Another measure of unit man-hours for a product is one in which each establishment is weighted with its relative current (rather than fixed) importance. Such an index can be constructed by adding the man-hours spent on the manufacture of a product in all plants and dividing the result by the total output of the product in all plants. If, as is likely, the relative importance of the plants in total industry output varies from year to year, this index of unit man-hours will measure not only changes in productivity from causes arising within the plant but also from changes in the relative output of plants at different levels of efficiency. The index of unit man-hours can be expressed as follows:

$$\frac{\sum l_i q_i / \sum l_o q_o}{\sum q_i / \sum q_o}$$

where—

$l_i$  = unit man-hours for the product, year "i".  
 $l_o$  = unit man-hours for the product, year "o".  
 $q_i$  = production of the product, year "i".  
 $q_o$  = production of the product, year "o".

The Bureau's general productivity measurement reports on industrial productivity are developed from industrywide data from secondary sources on total production of the product and total man-hours of production workers. As a result of the inherent nature of the data themselves, these measures are of the changing-establishment-weight type.

*Fixed v. Changing Establishment Weights.* A product index prepared with fixed establishment weights may move in general accord with a changing-weights index, but it is by no means necessary that this be so. In fact, it is in periods of dynamic industrial change that agreement is least likely and, for this reason, a comparison of both sets of indexes can be most meaningful.

A hypothetical situation may serve to illustrate the different results which each weighting system can yield. Assume that in two successive years the man-hours per unit of product remain constant in two plants, I and II, but that the relative amounts of production in the two plants change. Under these conditions, an index based on fixed

establishment weights would not change from one year to the next, while one based on changing establishment weights would change (table 1).

It can be seen that the changing-weight industry index of unit man-hours decreases as a larger and larger share of total production comes from the more efficient plant I (index C). Indeed, the unit man-hour index decreased 6.6 percent between year 1 and year 2 solely as a result of this, without any change in productivity in either plant. In year 3, *unit man-hours of plant I and*

*plant II increased 50 percent and 25 percent, respectively (indexes A and B), but the movement to the more efficient plant I continued, and the interplant shift more than offset the intraplant factors so that unit man-hours for the industry decreased 6 percent (from an average of 0.171 to 0.160 man-hours per unit) between years 2 and 3 (index C). The BLS indexes of productivity developed from secondary sources, like this index, describe movements in productivity arising from both intra- and inter-plant factors.*

TABLE 1.—Indexes of unit man-hours for a product

[Year 1=100]

Plant	Item	Year		
		1	2	3
<i>Individual Establishment Indexes</i>				
I -----	Production—number of units .....	100	1000	900
	Total man-hours .....	10	100	135
	Man-hours per unit .....	.10	.10	.15
	Indexes—unit man-hours (A) .....	100.0	100.0	150.0
II -----	Formula—unit man-hours .....		$l_i/l_o$	
	Production—number of units .....	500	2500	100
	Total man-hours .....	100	500	25
	Man-hours per unit .....	.20	.20	.25
	Indexes—unit man-hours (B) .....	100.0	100.0	125.0
	Formula—unit man-hours .....		$l_i/l_o$	
<i>Indexes—Establishment Data Combined with Changing Weights</i>				
Total: I and II -----	Production—number of units .....	600	3500	1000
	Total man-hours .....	110	600	160
	Man-hours per unit .....	.183	.171	.160
	Indexes—unit man-hours (C) .....	100.0	93.4	87.4
	Formula—unit man-hours .....		$\frac{\sum l_i q_i}{\sum q_i} / \frac{\sum l_o q_o}{\sum q_o}$	
<i>Indexes—Establishment Data Combined with Fixed Weights</i>				
Weights	Item	Unit man-hours		
		Year 1 or 2	Year 3	
Year 1—Man-hours ---	Unit man-hours (D) -----	$\frac{100.0 \times 10 + 100.0 \times 100}{110} = 100.0$	$\frac{150.0 \times 10 + 125.0 \times 100}{110} = 127.3$	
	Formula—unit man-hours .....		$\frac{\sum (l_i/l_o) l_o q_o}{\sum l_o q_o}$	

Note:  $l_i$  = Unit man-hours for the product in the plant, year "i".  
 $l_o$  = Unit man-hours for the product in the plant, year "o".  
 $q_i$  = Production of the product in the plant, year "i".  
 $q_o$  = Production of the product in the plant, year "o".



By assigning fixed weights to the plant data, the effect of interplant shifts is eliminated. The index number for year 2 is 100.0 because productivity did not change in either plant; in year 3, when both plants experienced a rise in unit man-hours, the unit man-hour index rose to 127.3 (index D) solely on this account. A comparison of this index with that of 87.4 (index C), based on changing weights, provides an indication of the effect of the changing importance of plants in the industry, i. e., if unit man-hours had remained constant, the shift in production alone would have brought about a 40-percent decrease in unit man-hours.

### Industry Measures

Trends in unit man-hours for an industry can be measured in a number of ways. The following index shows changes in man-hours per unit for a fixed composite of goods. The product data on unit man-hour requirements are weighted with base-year quantities of the various items produced.

$$\text{Unit man-hours index} = \frac{\sum_1^n L_1 Q_0}{\sum_1^n L_0 Q_0}$$

where—

$L_1$  = man-hours per unit, given year

$L_0$  = man-hours per unit, base year

$Q_1$  = production, given year

$Q_0$  = production, base year

$n$  = number of products

This index shows the change in man-hours needed to reproduce the actual output of the base year.

Another possible measure involves the combination of product data by means of current year production weights:

$$\text{Unit man-hours index} = \frac{\sum_1^n L_1 Q_1}{\sum_1^n L_0 Q_1}$$

\* See Measurement of Unit Man-Hour Requirements, by George E. Sadler and Allan D. Searle, Monthly Labor Review, February 1950.

<sup>3</sup> The 1947 Census of Manufactures contains the following definition of value added by manufacture:

"Value added by manufacture is calculated by subtracting the cost of materials, supplies, and containers, fuel, purchased electric energy, and contract work from the total value of shipments. In that it approximates the value created in the process of manufacture, value added provides the most satisfactory measure of the relative economic importance of given industries available in the Census of Manufactures."

This expression shows the change, between the base year and the current year, in the man-hours needed to reproduce the actual output of the current year.

Both these measures are equivalent to weighted averages of the individual product indexes of unit man-hours. They are also equivalent to measures which can be derived from dividing industrywide man-hours indexes by appropriately weighted indexes of production.<sup>2</sup>

### Measures for Groups of Industries

*Man-Hour Weights.* When man-hour weights are used to construct industry-group measures the indexes reflect changes in physical productivity which arise (1) from factors operating within individual establishments, and (2) from changing proportions of output coming from establishments with higher or lower efficiency in the use of man-hours.

*Value-Added Weights.* A productivity index constructed by combining physical production data for an industry with value-added weights must be interpreted differently from an index prepared with man-hour weights.<sup>3</sup> Weighting with values added yields a measure which is affected by the changes in the relative importance of the industries as well as by changes within the various plants and within individual industries in physical productivity. Thus, such an index would record as a productivity increase a trend toward industries of high value added per man-hour worked (for example, an increase in importance of the fabricating industries) even if productivity measured in terms of physical output per man-hour had not changed in any industry included in the index.

If values added of the base year are used as weights, the unit man-hours index is:

$$\frac{\sum_1^n L_1 Q_1}{\sum_1^n L_0 Q_0} \div \frac{\sum_1^n V_0 Q_1}{\sum_1^n V_0 Q_0}$$

where—

$L_1$  = man-hours per unit, given year

$L_0$  = man-hours per unit, base year

$Q_1$  = production, given year

$Q_0$  = production, base year

$V_0$  = value added per unit, base year

Substitution of  $V_1$  for  $V_0$  results in an index in which current year weights are used. A comparison of this index with one constructed with man-hour weights would provide insight into the effect of certain interindustry shifts.

*Gross National Product per Man-Hour.* A productivity measure which can be prepared from data on gross national product originating in a major sector of the economy, such as manufacturing, would utilize production data, not in physical units, but in terms of value added in constant prices. This measure shows the net effect of productivity changes arising from factors originating (1) within the plant, (2) from changing relative contributions to total output of plants at different levels of efficiency within each industry, (3) from certain interindustry shifts, and (4) from changing proportions of inputs of materials, supplies, containers, fuels, purchased electric energy, and contract work. This fourth factor distinguishes this type of measure from that previously described prepared with value-added weights. This last factor influences the measure because changes in materials consumed per unit of output affect the value-added data. Thus, a more efficient use of coal by the steel industry results in a decrease in coal cost per ton of steel and, consequently, in an increase in value added per man-hour in the steel industry. A productivity change would be recorded by this net product type of measure even with no change in physical output per man-hour in any industry and no change in relative importance of all the industries.

Since the net output productivity measure is based on a concept of work done or value added in which the consumption of intermediate products is eliminated, net output indexes can be aggregated to industry group and division levels without the duplication of output found in value weighted gross output measures.

The productivity measure—man-hours per unit of net output—can be expressed in a number of ways. The production measure can be expressed in terms of base-year prices or current prices.

If current-year prices are chosen, the index of unit man-hours is:

$$\frac{\sum_1^S L_1 q_1}{\sum_1^S L_0 q_0} \div \frac{\sum_1^S \left( \sum_1^N q_1 P_1 - \sum_1^M Q_1 P_1 \right)}{\sum_1^S \left( \sum_1^N q_0 P_1 - \sum_1^M Q_0 P_1 \right)}$$

where—

S=number of industries

N=number of products produced in an industry

M=number of inputs used in an industry

q=number of units of output

p=price of unit of output

Q=number of units of input

P=price of unit of input

L=unit man-hours

Substitution of  $p_0$  for  $p_1$  and  $P_0$  for  $P_1$  converts the above formula into a form in which all quantities are valued at base-year prices.

Both forms of unit man-hour index based on the net output approach (base year or current prices) involve expression of production in constant prices in the comparison years. It is important to note, however, that the cost *per unit of output* of materials and other inputs can change for two reasons: (1) When prices change, and (2) when the physical quantity of material used per unit of production changes. Holding prices constant eliminates the first factor but properly allows the second to influence the net output index of productivity. As a result, savings in inputs per unit of output are recorded as productivity increases.

### Value of a Variety of Measures

The construction of productivity measures based on various weighting systems permits analysis of productivity from a variety of viewpoints and for a number of purposes. Indexes can be constructed for establishments, products, industries, or for industry as a whole, measuring productivity in terms of physical output per man-hour or with interindustry shifts taken into account by means of weights other than man-hours. In each of these series, fixed or changing weights may be

employed. Measures based on gross national product in constant prices per man-hour represent still other areas of study. Table 2 compares, in

summary form, several of the possible measures and indicates some appropriate applications to economic and statistical problems.

TABLE 2.—Comparison of indexes of output per man-hour by factors influencing trend and by use

Type of index	Factors which influence trend	Practical applications
A. Industry indexes based on physical production data combined with fixed establishment man-hour and product weights.	Includes only influences internal to the establishment—interplant shifts and interproduct shifts eliminated.	Management: Comparison of own plants with industry trend. Factors beyond control of engineer eliminated.
B. Industry indexes based on physical production data combined with changing establishment man-hour and product weights.	Includes, in addition to above, effect of interplant and interproduct shifts.	Manpower problems: Employment expected at given levels of production. Economic analysis.
C. Indexes for industry groups—industry indexes (as in B) combined with man-hour weights to form group or total index.	Same as B—Interindustry shifts eliminated.	Same as above. Appropriate economic series for comparison would be those which are unaffected by changes arising from changing importance of industries.
D. Indexes for industry groups—industry indexes based on physical production data, combined with value-added weights to form group or total index.	Same as B, plus effect of interindustry shifts.	Same as above but comparable economic series would be those which are affected by changes arising from shift of workers between industries.
E. Indexes for industry groups or divisions—based on data on gross product originating in the group or division, in constant prices, per man-hour.	Includes, in addition to above, effect of changing proportion of materials input from other industries.	Broadest economic analysis. Economic health and well-being of economy. Comparable economic series are those affected by interindustry shifts.

# Significant Decisions in Labor Cases<sup>1</sup>

## Wages and Hours<sup>2</sup>

*Watchmen Guarding Premises Against Fire.* A United States court of appeals held<sup>3</sup> that watchmen employed to watch for fires that would endanger buildings in which goods were produced for interstate commerce were subject to the Fair Labor Standards Act. The watchmen were employed by a realty company (which leased the land on which the buildings were situated to various tenants), their duties consisting solely of looking for fires and turning in alarms when fires were discovered.

The court, noting that the facts in this case closely paralleled those in *Walton v. Southern Package Corp.*,<sup>4</sup> found that these employees' activities served to safeguard the buildings and thus to keep them available for use in producing goods for interstate commerce. Citing *Kirschbaum v. Walling*,<sup>5</sup> the court pointed out that it is the relationship of the service rendered by the employee in respect to the production of goods, rather than the relation of the employer's business to such production, which is controlling.

*Religious Corporation's Sales Outside State.* A United States court of appeals held<sup>6</sup> that printing-plant employees of a religious corporation engaged in the production of pamphlets, leaflets, and other printed material, nearly all of a religious character, for out-of-State shipment, were entitled to the minimum-wage and overtime benefits of the FLSA. The court found that, during the 2-year period September 1950 to September 1952, the corporation made sales to interstate customers totaling over \$200,000.

Denying that the act, as applied to such employees, was an unconstitutional restriction on freedom of religion, the court pointed out that a corporation organized for religious purposes may still come within coverage of the act by engaging

in "trade, commerce, transportation or communication among the several States." The court cited *Mabee v. White Plains Publishing Co.*,<sup>7</sup> which held that employees of a newspaper company that sent only one-half of 1 percent of its newspapers outside the State were covered by the act.

*Night Watchman on Road Construction Project.* A United States district court held<sup>8</sup> that a night watchman on a road construction project was not engaged in commerce or in the production of goods for commerce within the meaning of the FLSA. During the period of his employment, his employer was engaged in the original construction of an entirely new expressway, which had never been used by interstate traffic, and in laying new pavement and putting in new sidewalks, gutter bottoms, and curbs on city streets which were to be used as "feeders" for the new expressway, but which were not dedicated to commerce during the work in question.

The court, citing *Overstreet v. North Shore Corp.*,<sup>9</sup> noted that persons engaged in maintenance and repair of interstate instrumentalities are within FLSA coverage. But those engaged in original construction of facilities which have not yet become instrumentalities of commerce are not so covered, the court pointed out, citing *Raymond v. Chicago, Milwaukee & St. Paul Ry. Co.*<sup>10</sup>

## Prevailing Wage

*Davis-Bacon Act Interpretation.* The Supreme Court of the United States found<sup>11</sup> that a Govern-

<sup>1</sup> Prepared in the U. S. Department of Labor, Office of the Solicitor.

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

<sup>2</sup> This section is intended merely as a digest of some recent decisions involving the Fair Labor Standards Act and the Portal-to-Portal Act. It is not to be construed and may not be relied upon as interpretation of these acts by the Administrator of the Wage and Hour Division or any agency of the Department of Labor.

<sup>3</sup> *Mitchell v. Famous Realty, Inc.* (C. A. 2, Mar. 19, 1954).

<sup>4</sup> 320 U. S. 540.

<sup>5</sup> 316 U. S. 517.

<sup>6</sup> *Mitchell v. Pilgrim Holiness Church Corp.* (C. A. 7, Feb. 23, 1954).

<sup>7</sup> 327 U. S. 178.

<sup>8</sup> *Van Klarenen v. Killian-House Co.* (D. C. W. D. Tex., Feb. 23, 1954).

<sup>9</sup> 318 U. S. 125.

<sup>10</sup> 243 U. S. 43.

<sup>11</sup> *United States v. Binghamton Construction Co., Inc.* (U. S. Sup. Ct., Mar. 8, 1954).

ment construction contractor is not entitled to recover the difference between the minimum wage rates determined by the Secretary of Labor as prevailing minimum rates in the area and the rates which the contractor was required to pay in order to obtain workmen.

A schedule of rates predetermined by the Secretary pursuant to the Davis-Bacon Act was included in contract specifications furnished to the contractor by the Government contracting agency. This schedule, dated January 31, 1941, set a minimum hourly wage rate of \$1.00 for carpenters and 50 cents for laborers. In the performance of the contract, the contractor paid workers in these classifications \$1.125 and 62½ cents an hour, respectively, in order to attract workers, and then demanded an adjustment of compensation on the theory that the schedule of rates in the specifications was an affirmative representation as to the prevailing rates in the area.

The Court, citing *United States v. Morley Construction Co.*<sup>12</sup> pointed out that the law was enacted, not to benefit contractors, but rather to protect employees from substandard earnings. Neither the contract nor the specifications referred to "prevailing rates," the Court said. The contract referred only to "wage rates not less than those stated in the specifications," and the specifications referred only to "minimum wage rates applicable in the locality." Further, the Court noted, the Davis-Bacon Act does not authorize any assurance that the specified minimums will in fact be the prevailing rates.

## Labor Relations

*Retransfer of Employee Not Required.* A United States court of appeals modified<sup>13</sup> a National Labor Relations Board ruling in an unfair-labor-practice case involving the allegedly discriminatory transfer of an employee.

Shortly after a union won a bargaining election, an employee who had actively campaigned for the union was transferred from his job to another similar position with the same pay and hours of work but several miles from his former location. Up-

holding the trial examiner's findings, the NLRB ruled that this transfer was due to the employee's union activities and in violation of section 8 (a) (3) of the Labor Management Relations Act, and ordered the employee retransferred to his former position.

The court found, however, that the evidence showed such a reinstatement would work an undue hardship on the employer company. The transfer had resulted in increased efficiency and a saving to the company, which had abolished the former position. To order a retransfer, the court said, would be a usurpation of management's inherent prerogative to operate its business more efficiently by reducing expenses.

*Unauthorized Strike Not Concerted Activity.* A United States court of appeals held,<sup>14</sup> in denying an NLRB petition for enforcement of an order, that an unauthorized strike which was designed to put a State legislature under pressure to enact a bill desired by the union was not concerted activity protected by the act. The company had barred an employee from its property, after he had ceased his duties to lead the unauthorized work stoppage, and the Board ruled that he should be reinstated.

The court found that the strike, picketing, and work stoppage were not authorized by the union and had nothing to do with working conditions or relations between employer and employees. The stoppage occurred, the court said, to permit protest by the employees against passage of the legislation concerned, and the workers had no grievance against the company.

*Probationary Employees Eligible To Vote in Representation Election.* The NLRB, overruling prior decisions inconsistent with this holding, ruled<sup>15</sup> that probationary employees may participate in representation elections. Although 80 percent of such employees fail to complete the 90-day trial period, the Board ruled, they receive and hold their employment in contemplation of permanent tenure, and their working conditions and employment interests are like those of regular employees. In this instance, the probationary employees constituted over a third of the employer's work force, doing the same work as regular employees and being accorded the same general working conditions.

<sup>12</sup> 98 F. 2d 781; certiorari denied, 305 U. S. 651.

<sup>13</sup> *NLRB v. Southeastern Pipe Line Co.* (C. A. 5, Feb. 23, 1954).

<sup>14</sup> *NLRB v. Pretz Fuel Co.* (C. A. 4, Feb. 16, 1954).

<sup>15</sup> *In re David S. Pearl and Ephraim Werner d. b. a. National Torch Tip Co.* (107 NLRB 269, Feb. 24, 1954).

In ordering an election, the Board also ruled that employees doing production work and only occasionally supervising new employees were to be included in the production and maintenance unit, but that an employee who spent 50 percent of his time in training and directing employees was to be excluded.

*Craft Severance Policy Reexamined.* The NLRB ruled<sup>16</sup> that, while its present practice of denying craft severance on an industrywide basis in basic steel, aluminum, lumber, and wet milling industries would be continued, it would not be extended to other industries. In a case involving electricians, operating engineers, and mechanics, an employer was seeking to have the "National Tube" doctrine<sup>17</sup> extended to include chemical manufacturing by interdependent plant operations in a continuous-flow process, contending that it involved the same type of integration as that in the basic steel industry.

The Board recognized that it would be unwise to upset a bargaining practice firmly established in certain industries, but it declined to extend this doctrine. It ruled that, hereafter, the practice of denying craft severance on the "integration of operations" theory will not be followed. Instead, the Board stated, a craft group will be appropriate for severance purpose when "a true craft group is sought" and when the union seeking to represent it "traditionally represents that craft." The requirement that the unit to be severed constitute a "true craft group" will be rigidly enforced, the Board noted, and care will be exercised in administration of the new rule. Such a "true craft group" was defined as "a distinct and homogeneous group of skilled journeymen-craftsmen, working as such, together with their apprentices and/or helpers." To be a "journeyman-craftsman," the Board ruled, a worker must have the kind and degree of skill normally acquired only by a substantial period of apprenticeship or comparable training.

In addition, the Board ruled, all craftsmen of the same type in any plant must be included in this unit except those in traditional departmental units. Employees working in association with the craft but not in the craft's "direct line of progres-

sion" will be excluded. All craftsmen in the unit must be practitioners of the same allied craft and primarily engaged in the performance of tasks requiring the exercise of their craft skills.

Board member Murdock, concurring in part and dissenting in part, noted that the majority rule ignored the basic principle underlying craft severance—that the community of interest among members of a skilled craft outweighs that among employees in general. Member Peterson also dissented in part, holding that the ruling would be an open invitation to a revival of raiding practices and jurisdictional wars to the detriment of industrial peace.

*"Hit-and-Run" Strike Not Protected.* The NLRB ruled<sup>18</sup> that employees of a telephone company who joined in a hit-and-run strike lost the protection afforded by the LMRA for concerted activities. The ruling referred to a multiplicity of work stoppages called by a traffic employees' union as a result of a labor dispute, "to harass the company into a state of confusion." Many employees in the company's more than 200 offices walked off the job on different days, returning to duty in some cases for a day or two and then walking out again. Picket lines, when they appeared, were respected by members of a union of toll workers, with the result that the company was unable to maintain service.

The trial examiner had found that the striking union's activities were protected concerted activities within the meaning of the act. The Board, however, reversed this finding, holding it to have been the union's intention to bring about a condition that would be neither strike nor work, a method by its inherent nature outside the scope of protected activity.

It was beyond belief, the Board noted, to regard the toll workers as ignorant of the methods of the striking traffic workers. These tollmen, therefore, had likewise removed themselves from LMRA protection, the Board ruled, and the company did not violate the act by its failure to reinstate them immediately.

One tollman went on strike for 1 day in protest against the layoff of two fellow tollmen when they had returned to work after a 1-day strike. The Board held that he had thereby made common cause with the strikers and that his layoff was not discriminatory.

<sup>16</sup> *In re American Potash & Chemical Corp.* (107 NLRB 290, Mar. 1, 1954).

<sup>17</sup> *In re National Tube Co.* (76 NLRB 1199, Apr. 7, 1948).

<sup>18</sup> *In re Pacific Telephone and Telegraph Co.* (107 NLRB 301, Mar. 12, 1954).

Board member Murdock, who regarded the question as to the work stoppage a close one, dissented, affirming the trial examiner's finding that the company, by laying off the tollmen, violated the act.

### Veterans Reemployment

*Seniority—Temporary Carman Who Became Mechanic.* A court of appeals, affirming a district court, found<sup>19</sup> no discrimination, and therefore no violation of reemployment statutes, in a collective bargaining agreement which was made long after a veteran's reinstatement, and which affected his seniority.

By a supplemental agreement of March 1, 1949, all temporary carmen who had completed 1,160 days of carman mechanic's work, and who elected to be allowed carman-mechanic seniority, were given a March 1, 1949, seniority date, but ranked on the roster in the order in which they completed the 1,160 days.

The veteran had been promoted before his induction, to the equivalent of temporary carman and was reinstated in that classification. In his absence, the adjustment of seniority for temporary carmen was postponed for future settlement. The uncontested facts were that, but for military service, the veteran would have finished his 1,160 days on June 1, 1946. He actually completed the work on January 10, 1949, after his restoration and before the adjustment agreement of March 1, 1949. Four nonveterans completed their required work after June 1, 1946, but before January 10, 1949. The veteran brought action under the reemployment statutes to place his name ahead of these nonveterans, but his claim was dismissed.

The rationale of the court of appeals was that the supplemental agreement of March 1, 1949, if not invalid because of discrimination, created the escalator upon which the veteran must rise to seniority. No discrimination was found because, the court said, the veteran was treated like other workmen in his "class or working group" and was dealt with on a parity with nonveterans. Putting him ahead of them would, in the court's opinion, give him a kind of superseniority not contemplated by the statutes.

According to the rulings by the court of appeals, this action arose under the Selective Training and Service Act of 1940 (the veteran's military service

began in 1943), the reemployment section of which act survived its general repeal. The provisions as to restoration in section 8 (c) of the 1940 act and those in section 9 (c) (1) of the 1948 act (now known as the Universal Military Training and Service Act) are identical. Section 9 (c) (2) of the latter declares it to be the sense of the Congress that the returning veteran shall be so restored as to give him the status he would have enjoyed if he "had continued in such employment continuously." This is a restatement of the escalator principle. It declares the meaning not only of section 9 (c) (1) of the 1948 act but also of section 8 (c) of the 1940 act. The identity of language shows that no change in the law was intended.

The language of section 9 (c) (1) of the 1948 act (and therefore of 8 (c) of the 1940 act) in providing not only for restoration without loss of seniority, but also that the veteran shall be considered as having been on furlough or leave of absence, conflicts with this declaration of the sense of Congress. Furlough and leave of absence are different from continuous employment. The legislative history is indecisive.

Being unable to reconcile these conflicts, the court ruled that the congressional intent as expressed in the actual words of the 1948 statute must be held paramount to the express congressional interpretation of the statute, even when the latter appears in an immediately following clause.

### Unemployment Compensation

*Existence of Available Labor Market.* A ruling by the Supreme Court of Idaho held<sup>20</sup> that a claimant's moving to a smaller city where he had every reason to believe that few jobs existed and prospects of work were extremely limited, rendered him ineligible for benefits under the Idaho employment security law. The court found the claimant was able and willing to work and was seeking work, but was not able and ready and willing to accept—and was not seeking—suitable work at a point where an available labor market existed. Claimant chose to detach himself from the Boise area and whatever job opportunities might occur there, it was stated, and moved to another locality where labor opportunities, as far as he was concerned, were nonexistent.

<sup>19</sup> *Diehl v. Lehigh Valley R. R. Co.* (C. A. 3, Mar. 3, 1954).

<sup>20</sup> *In re Sapp* (Sup. Ct. of Idaho, Feb. 10, 1954).

# Chronology of Recent Labor Events

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## March 1, 1954

THE National Labor Relations Board ruled that it would not extend its practice of denying craft severance on an industrywide basis beyond the 4 industries to which the Board had applied the National Tube doctrine (see Chron. item for Apr. 9, 1948, MLR, May 1948) and where plant-wide bargaining prevails. Instead, it ruled that "a craft group . . . employed in an industry which involves highly integrated production processes and in which the prevailing pattern of bargaining is industrial in character" may be severed if a true craft unit is desired, and if, "in addition, the union seeking to represent it is one which traditionally represents that craft." Similarly, a departmental group which has acquired traditional trades or occupations may also be severed. The consolidated case involved *American Potash & Chemical Corp.*, Trona, Calif., and *International Union of Operating Engineers, Local 501 . . . (AFL)* and *International Brotherhood of Electrical Workers, Local 477 (AFL)* and *International Association of Machinists (AFL)* and *International Chemical Workers Union (AFL)*. (See also p. 560 of this issue.)

## March 4

THE NLRB regional director in New York obtained a Federal court order, on a secondary boycott charge, to restrain the independent International Longshoremen's Association in the Port of New York area and 8 locals from striking or otherwise interfering with the loading and unloading of trucks operated by the AFL-Teamsters in retaliation for the latter's support of AFL-ILA picketing for steward recognition at one pier.

On March 5, the independent-ILA, in defiance of the foregoing injunction, began a "wildcat" walkout which crippled Port operations and continued during the month in spite of a civil and criminal contempt citation against the union, 8 locals, and officials of 3 locals.

On March 24, the New York District Council of the independent-ILA gave official sanction to the 19-day tie-up and formally instructed tugboat crews to respect picket lines set up by the dock strikers. On March 30, these crews returned to work under a Federal court order obtained by the NLRB on a secondary boycott charge. (See also p. 564 of this issue.)

## March 8

THE Supreme Court of the United States overruled the lower court's dismissal of two cases of antitrust prosecution, holding that the combined action of a union and a trade association in barring local competition resulted in an unreasonable restraint of materials in interstate com-

merce. It also held that the unions were not protected by the Clayton Act against prosecution for violation of the Sherman Act. The cases were *United States v. (1) Employing Plasterers' Association of Chicago, Journeymen Plasterers' Protective and Benevolent Society, Local No. 5 [AFL], et al.*; and (2) *Employing Lathers Association of Chicago and Vicinity, Local No. 74 of International Union of Wood, Wire & Metal Lathers of Chicago [AFL], et al.*

THE Supreme Court of the United States, reversing an award for damages by the United States Court of Claims, ruled, in the case of *United States v. Binghamton Construction Co., Inc.*, that the schedule of "minimum wage rates included in a Government construction contract, as required by the Davis-Bacon Act," was not "a representation or warranty as to the prevailing wage rates in the contract area," but only a statement of the minimums to be observed. (See also p. 558 of this issue.)

## March 10

THE United States and Mexico concluded a new agreement (which will run until December 31, 1955) governing the recruitment and protection of temporary Mexican farm labor for work in the United States; on March 16, President Eisenhower approved an amendment to the Agricultural Act of 1949 (see Chron. items for July 12, 1951, MLR, Aug. 1951, and Aug. 8, 1953, MLR, Oct. 1953) permitting the United States Government to place and protect such workers in the absence of a treaty.

REPRESENTATIVES of 6 major New York City newspapers and the Photo-Engravers' Union (AFL) signed a formal contract accepting the recommendations of a fact-finding board for no changes in wages and the workweek beyond those incorporated in a strike settlement (see Chron. item for Dec. 8, 1953, MLR, Feb. 1954).

## March 11

THE NLRB ruled, in a supplemental decision in the case of *Morganton Full Fashioned Hosiery Co., Huffman Full Fashioned Hosiery Mills, Inc.*, Morganton, N. C., and *Thomas Edward Parks (Petitioner)*, and *United Textile Workers of America, Local Union No. 161 (AFL)*, that the employer had not interfered with a decertification election, which the union lost, by furnishing the petitioner with a mailing list of employees to which he sent three antiunion letters prior to the election, or by refusing to disavow statements made in the letters, as requested by the union.

## March 12

J. ERNEST WILKINS, Chicago attorney, was confirmed by the Senate to be Assistant Secretary of Labor, in charge of International Labor Affairs. He succeeded Spencer Miller, Jr., resigned. (See Chron. item for July 10, 1953, MLR, Sept. 1953.)

THE NLRB, in the case of *Pacific Telephone and Telegraph Co.*, San Francisco, Calif., and *Order of Repeatermen and Toll Test-boardmen (Ind.)*, held that a "hit-and-run"



(intermittent) strike tactic used by the CIO-Communications Workers against the company in 1951 was not a protected concerted activity, and that therefore the activity of ORTT members in respecting the CWA picket lines was not protected. (See also p. 560, this issue.)

### March 15

MEMBERS of the Insurance Agents' International Union (AFL) ratified (during the week of March 15) a 2-year contract negotiated with the Prudential Life Insurance Co. (on February 28). The agreement provides for a minimum annual compensation guaranty of 65 percent of the average earnings per agent for the preceding calendar year and other improvements. (See also p. 566 of this issue.)

THE Federal Court of Appeals at Richmond, Va., reversed an NLRB decision in the case of *Mount Hope Finishing Co., et al. v. NLRB* (see Chron. item for July 30, 1953, MLR, Sept. 1953), holding that the company moved its textile plant South because of longstanding unfavorable economic conditions, and not for the purpose of running away from the union.

THE Federal Court of Appeals at Richmond, Va., reversed the lower court in the case of *United Mine Workers of America v. Patton* (see Chron. item for Sept. 3, 1953, MLR, Nov. 1953), holding that the Taft-Hartley Act does not authorize punitive damage awards for violations of the secondary boycott ban.

### March 16

DANIEL W. TRACY resigned as president of the International Brotherhood of Electrical Workers (AFL) because of ill health, effective April 15. Tracy was made president emeritus of the IBEW by the executive council, which named as his successor J. Scott Milne, present secretary-treasurer, who in turn will be succeeded by Joseph D. Keenan, secretary-treasurer of the Building and Construction Trades Department (AFL).

### March 17

THE EXECUTIVE BOARD of the Bakery and Confectionery Workers (AFL) approved a nationwide pension program for its 160,000 members, similar to the Federal old age and survivors insurance system. Plans include a basic actuarial study, a standard rate of employer contributions, uniform eligibility requirements to protect pension rights of workers who transfer to another employer covered by the fund, and benefits based on earnings.

### March 19

THE Governor of South Carolina approved an act which bans all forms of union security but permits the checkoff. The State became the 16th to adopt a "right-to-work" law.

### March 22

THE CIO executive board, noting that virtually every CIO affiliate had agreed to ratify the AFL-CIO "no-raiding"

pact (see Chron. item for Nov. 17, 1953, MLR, Jan. 1954), voted to take no further action toward having the CIO individual unions sign the agreement until additional AFL unions accepted it. (See also p. 568 of this issue.)

### March 25

THE National Mediation Board announced that the Brotherhood of Locomotive Engineers (Ind.) and the major railroads agreed to submit to final and binding arbitration their dispute over the union's demand for a 30-percent wage increase to restore "skill differentials."

### March 26

THE Federal Wage and Hour Administrator approved, under the Fair Labor Standards Act, a new minimum wage rate of 50 cents an hour (formerly 40 cents) for employees in the hosiery industry in Puerto Rico, effective May 3, 1954.

THE NLRB, reversing past decisions, ruled that truck-drivers who "divide their time between agricultural and nonagricultural employment" are agricultural laborers within the meaning of the Taft-Hartley Act "to the extent that they spend a substantial part of their time in an agricultural function," and are therefore to be excluded from a bargaining unit. The case was *Clinton Foods, Inc., Frostproof, Fla., and International Brotherhood of Teamsters, Chauffeurs, Warehousemen & Helpers of America (AFL), Local No. 79*.

### March 28

THE Governor of New York approved an act conferring authority on the State superintendent of insurance to examine the records of union welfare trust funds and requiring the trustees of such funds to keep adequate books. The measure followed an investigation of welfare funds by the State insurance department in connection with the murder of the president of Local 32-E of the Building Service Employees Union (AFL) and a related inquiry into harness racing operations in New York State.

### March 29

THE NLRB revealed that the vote in a representation election at the Anaconda Copper Co.'s mines at Butte and Anaconda, Mont., was 4,099 for retaining the independent Mine, Mill & Smelter Workers Union (see Chron. item for Dec. 29, 1953, MLR, Feb. 1954) as bargaining agent, against 2,185 for the United Steel Workers (CIO).

### March 31

THE Federal District Court in the District of Columbia refused to enjoin the NLRB in the case of *International Union of Mine, Mill & Smelter Workers [Ind.] v. Farmer* and upheld the Board's order of February 4, 1954, for an administrative investigation of the union's compliance status growing out of charges that the union's secretary-treasurer had admitted the falsity of his non-Communist affidavits and that the membership was aware thereof.

# Developments in Industrial Relations<sup>1</sup>

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DURING the first quarter of 1954 there were considerably fewer work stoppages than in the same quarter of 1953. Estimated idleness was about one-fifth less than a year ago. Only two strikes of 10,000 or more workers occurred during this period in 1954—both during March. One of these resulted from the continuing fight of dockworkers for control of the New York waterfront. The other involved engineers at the Sperry Gyroscope Co. Other developments in March included moderate wage adjustments for some workers, the extension without change of a group of textile contracts, and continued activity in the area of health, insurance, and pension programs.

## Strike Settlements and Negotiations

*New York Docks.* Labor unrest in the Port of New York erupted again in early March causing idleness of most of the port's longshoremen for the first time since early October. A dispute in February at a Moore-McCormack Line pier involved refusal by members of the ILA-Ind. to work on the pier while an ILA-AFL steward was employed there, and protest picketing by members of the ILA-AFL after the Line dismissed the AFL shop steward. Members of the Teamsters (AFL) refused to cross the picket line. In retaliation, the ILA-Ind. declared a boycott of all truck freight handled by the Teamsters' local at any piers. This led to establishment of Teamsters' picket lines at all such docks.

The National Labor Relations Board, on March 4, obtained a temporary Federal court restraining order, under the secondary boycott provisions of the Taft-Hartley Act, directing the ILA-Ind. and 8 of its locals in New York and New Jersey, to avoid strikes or other actions which would interfere with the loading or unloading of trucks at the piers. Members of the independent ILA stopped

work on March 5 in defiance of the court order. Officials of the union insisted that the stoppage was a "spontaneous" demonstration by members who believed that the AFL Teamsters and Longshoremen also should have been enjoined. The New York Shipping Association, representing 170 stevedoring companies in the port, also took the position that the restraining order should have included the AFL unions. However, as the stoppage continued, the NLRB petitioned the court for contempt action against the independent ILA, 3 officials of its local unions, and 8 locals.

The Army, on March 16, began hiring dockworkers under civil service rules to load troop and cargo ships at its strikebound bases in the port. Several thousand members of the ILA-AFL, assured of police protection, reported for work at other piers. However, the stoppage remained virtually portwide most of the month, with occasional physical clashes occurring between AFL-ILA men and pickets of the old dock union.

Endorsement of the work stoppage by ILA-Ind. officials, including the union's president, on March 24, and the threat that the strike might spread to other East Coast ports, brought NLRB warnings of further legal action. The Mayor of New York appealed for immediate action by President Eisenhower to end the strike.

The New York Shipping Association, on March 25, offered a 10-cent hourly package increase, retroactive to October 1, 1953, to all longshoremen who returned to their jobs by March 31. This offer did not result in any widespread back-to-work movement and members of the tug division of the independent ILA began respecting picket lines the day after the offer was made. The tugboat employees resumed work on March 30, after a temporary restraining order was issued by a Federal court judge.

Meanwhile, Secretary of Labor Mitchell, Governor Dewey, and other government officials issued a joint statement that the Federal and State Governments would coordinate efforts to end the strike, which was called "primarily a criminal conspiracy." The New York Harbor Waterfront Commission also issued an interim report on the strike, criticizing some of the steamship and steve-

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<sup>1</sup> Prepared in the Bureau's Division of Wages and Industrial Relations.

doring firms for their refusal to accept other than former employees on their piers.

The December 1953 representation election among longshoremen on New York docks was set aside by the NLRB, on April 1, in ordering a new election. The Board indicated that if the ILA-Ind. did not cease "conduct designed to thwart or abuse the processes of the Board," it would be left off the ballot. The Board ordered that the new election should be held no later than 30 days from the date the Board "determines that the circumstances permit the free choice of a bargaining representative." The New York State Supreme Court, on April 2, also ordered the union to call off the strike. The president of the independent ILA, on April 2, instructed the longshoremen to return to their jobs, but the union and some of its officers still faced a series of court actions and grand jury investigations.

Several shipping lines and major manufacturers announced their intention of moving to other ports because of the unrest on the New York docks. Members of the ILA (Ind.) in other harbors threatened to blockade ships diverted from New York. Leaders of the New York tieup were reported seeking to enlist the support of Baltimore longshoremen in the blockade. In Philadelphia, 6,000 longshoremen took a 24-hour "holiday" on March 17, reportedly on orders from the old ILA to register their backing for the New York strikers.

Local unions in Tampa and Jacksonville, Fla., and Galveston, Tex., left the old ILA early in March and requested charters in the AFL affiliate. Charters were issued for 9 locals in these areas and the AFL reported that shortly after this action 8 additional southern locals had applied for charters. On March 30, representatives of 103 of the 127 locals in the South Atlantic and Gulf Coast district, with a membership of 17,000 of the approximately 19,000 dockworkers in the district, voted to reject affiliation with the AFL.

*Sperry Gyroscope.* Work at the Sperry Gyroscope Co. plant in Great Neck, N. Y., was affected by a 13-day strike of about 2,000 engineers represented by the Engineers and Scientists of America (Ind.).

About 10,000 employees represented by other unions observed the engineers' picket lines during the first week of the stoppage. The dispute was settled on March 14, with a new 2-year contract, which provides for a 6.3-percent "package," consisting of a 2.5-percent general wage increase, inequity adjustments, and fringe benefits, including an improved pension plan. The new contract drops the cost-of-living escalator clause, but incorporates the previous allowance in the base.

*Hat Workers.* The prolonged stoppage involving employees of the Hat Corp. of America in Norwalk, Conn., continued into its ninth month.<sup>2</sup> A superior court judge in Bridgeport, Conn., on March 16, rejected a plea by the union to stay an injunction and damage action brought by the company against the strikers, on the grounds that it was necessary to hear evidence concerning the legality of the job security clause. As a result of the decision, the case will be assigned for a hearing after an answer has been filed by the union and eight of its officers.

*Dress Industry Shipping Clerks.* The International Ladies' Garment Workers' Union (AFL) and 5 New York City dress associations reached agreement March 15 on the first contract covering shipping clerks in the industry. The agreement provides recognition of the union, a general wage increase of \$3 a week for 4,000 workers, an employer-financed health and welfare fund, and vacation and holiday benefits. The contract was an outgrowth of a 1-day strike staged by the union on January 12.

*Textiles.* The American Woolen Co. and the Textile Workers Union (CIO) agreed to a 30-day extension of their contract due to expire on March 15, 1954. Union reports indicated that extensions had also been negotiated with approximately 100 other woolen and worsted companies whose contracts have the same expiration date. Approximately one-third of these were reported to have agreed to the full year's extension sought by the union.

Among the textile contracts renewed without change in basic wage rates was one with the Forstman Woolen Co., covering 3,100 workers at Passaic and Garfield, N. J. The new agreement provides for liberalized hospitalization benefits,

<sup>2</sup> This dispute revolves around the company's rejection of the demand of the United Hatters, Cap and Millinery Workers (AFL) for a job security clause in their contract prohibiting further diversion of work from the company's Norwalk plants. See *Monthly Labor Review*, November 1953 (p. 1218) and March 1954 (p. 306).

and is for a 2-year period, with wage reopenings. It also provides that the union will cooperate in improving job efficiency. During negotiations the company withdrew its demand for a wage reduction and the union agreed to forego the next 2-cents-an-hour increase in the cost-of-living allowance if it becomes due. The union also agreed to eliminate a paid lunch period for certain workers at the Passaic plant.

On March 28, textile workers in the woolen and worsted and dyeing industry in Woonsocket, R. I., represented by an independent union, voted overwhelmingly against acceptance of management proposals for a 15-percent reduction in wages and modification of fringe benefits affecting approximately 4,200 workers in 17 firms. Similarly, employees of the Wyandotte Worsted Co. at Waterville, Maine, and Pittsfield, Mass., voted to reject a company proposal to reduce wage rates by 17 cents an hour; contracts with the Textile Workers (CIO) expired April 1.

The American Federation of Hosiery Workers (AFL) also rejected a 23-percent wage reduction which was requested by the Apex Hosiery Co., one of the largest firms in its field. The company had indicated that continued operation of the Philadelphia and Spring City, Pa., plants depended on the outcome of current negotiations with the union.

*Aircraft.* Wages and fringe benefits were liberalized for about 16,000 employees of United Aircraft Corp. Agreements with the United Auto Workers (CIO) provided 5-cent-an-hour general wage increases, discontinuance of the escalator clause with the existing 19-cent cost-of-living allowance incorporated into base rates, a seventh paid holiday, improved vacations, insurance and other benefits for 8,500 production workers at Dallas and 2,700 employees of the Sikorsky Division in Bridgeport, Conn. Similar changes were announced later in the month for 4,700 salaried employees at the company's Chance Vought Division in Dallas.

*Printing and Publishing.* New York newspaper Photo-Engravers voted March 7 to accept a \$3.75 weekly package increase offered by the publishers of 6 major New York City newspapers, which the engravers had rejected in November before their 11-day strike.<sup>3</sup> The vote authorized union leaders to accept the recommendations of a factfinding

panel that the engravers should not receive more than this package.

On March 21, the typographers also voted acceptance of the factfinders' recommendations. The weekly "package" included a \$3 raise, retroactive to December 8, an additional paid holiday, and a 30-cent-a-week increase in company per-capita contributions to a welfare fund. About 3,000 printers employed by the newspapers were affected.

An earlier arbitration award provided increases averaging \$3.75 a week for 1,600 editorial, commercial, and building maintenance employees of the New York Times Co., represented by the Newspaper Guild (CIO). These increases, which ranged from \$2.50 to \$4.50 a week, were influenced by the \$3.75 "package" settlement offered the printing-trades unions following the November work stoppage.

*Insurance Agents.* Late in February, after 7 weeks of negotiations, the Prudential Life Insurance Co. and the AFL Insurance Agents International Union agreed to a new 2-year contract. The agreement, which covered 14,600 agents in 33 eastern States and the District of Columbia, guarantees to agents minimum compensation amounting to 65 percent of the average annual earnings of all the company's agents. Differences between the actual annual earnings of individual agents and the minimum guarantee are payable at the beginning of the succeeding year. Other contract terms include changed commission provisions for certain types of insurance, and liberalized vacation and life insurance plans for the agents.

*Bakeries.* The Bakery and Confectionery Workers' International Union (AFL) signed a new nationwide contract covering 17,000 workers with the National Biscuit Co., on March 1, calling for wage increases of 6.25 cents an hour for men and 5.25 cents for women. In addition, the company agreed to discontinue by January 1, 1955, insurance provided under its present employees' benefit plan, and to take out insurance in the employee health and welfare plan sponsored by the union. The latter plan, effective in May 1953, is reported to cover approximately 100,000 members.

<sup>3</sup> See Monthly Labor Review, January 1954 (p. 66) and February 1954 (p. 192).

The general executive board of the union, encouraged by its experience with the health and welfare plan, approved a proposal for a 1-year actuarial study, prior to the establishment of a single national retirement fund for its 160,000 members. A standard schedule of employer contributions is to be sought in all union contracts; pension benefits would be based on a worker's earnings. The pension plan would operate under the supervision of 3 trustees chosen by the bakery industry and 3 by the union. Uniform eligibility rules would be adopted for all workers so that a baker could, for example, transfer from a job in New York to one in California without forfeiting his pension protection.

*Pensions in Small Detroit Firms.* The United Auto Workers (CIO) and 6 small firms employing 600 persons established a pension plan for small, diversified industries in Detroit. The new program differs from that which has been in effect in the area since 1950 for employees of more than 70 firms affiliated with the Automotive Tool and Die Manufacturers Association, in that it is not limited to a single industry. It is similar to a program set up by the UAW in Toledo in 1950, which now covers approximately 2,000 employees of more than 25 firms in various industries.

The new Detroit plan permits the transfer of pension credits among participating employers. Employees who quit or are discharged from a shop have up to 18 months to find work in another covered shop without losing accumulated credits; if they are laid off, they are protected against loss of credits for 3 years. Employees with 20 years of accumulated service credits retain their rights even if they leave the group of participating employers permanently.

Pension benefits will amount to \$1.75 monthly for each year of service up to a maximum of \$52.50 a month, exclusive of social security payments. When added to maximum social security benefits, the plan will provide a \$137 monthly pension for those retiring at age 65 after 30 years' service. The plan is financed by employer payments of 8 cents an hour and is administered by a joint labor-management board.

<sup>4</sup> See Monthly Labor Review, January 1951 (p. 11).

## Other Developments

*Federal Employees.* The Committee on Retirement Policy for Federal Personnel, created pursuant to Public Law 555 (82d Cong.), submitted a partial report to the Senate, on January 22, 1954. Further findings and the Committee's recommendations are in preparation. Meantime, hearings were continued on proposed legislation dealing with pay and other working conditions of Federal employees. Beginning in February and continuing into April, the House Committee on Post Office and Civil Service heard proposals of the Post Office administration for a reclassification of salaries of the postal field service. Representatives of postal employee unions testified at length. Most of the union representatives opposed the reclassification plan and urged, instead, a general salary increase and further study of the job and pay structure of the postal field service. The Senate Post Office and Civil Service Committee considered legislation dealing with allowances for uniforms, incentive award systems, overtime pay, and other fringe benefits for Government employees.

*Communist Unions.* Membership in unions ousted by the CIO in 1949 and 1950<sup>4</sup> continued to dwindle. This was reflected in the struggle of the largest of these unions, the United Electrical Workers (UE), to retain control of its largest local (301), representing 20,000 production workers at General Electric Co.'s Schenectady, N. Y., plant. Early in March, local officers circulated a petition among the employees in the Schenectady plant favoring secession from the UE (Ind.) and affiliation with the CIO International Union of Electrical Workers (IUE). Local union members reportedly endorsed the action overwhelmingly, and the local promptly received a new charter from IUE.

National officers of the UE thereupon notified the local officers that they were "no longer authorized to represent UE local 301" and wired General Electric not to remit dues until new local officers were named by the national organization. Local officers countered by notifying the company that such dues were "the property of the workers." National officials then obtained a Federal court

order, tying up the local's funds and property, which in effect temporarily stalled the secession move. Meanwhile local union officials conferred with the regional office of the NLRB regarding an early representation election among local 301's members and continued preparations for eventual affiliation with IUE.

On the other hand, members of the Butte Miners Union No. 1, the oldest local of miners in the West, and the Anaconda Mill and Smeltermen's local in Montana, voted in favor of continued affiliation with the Mine, Mill & Smelter Workers (Ind.), one of the unions ousted from the CIO as being Communist-dominated. Earlier in the year, these two local unions, representing 7,900 employees of Anaconda Copper Co., were chartered by the United Steelworkers of America (CIO), following a vote for such affiliation at special membership meetings. In the NLRB election on March 22, these employees voted nearly 2 to 1 in favor of keeping the Mine, Mill & Smelter Workers Union as their bargaining agent.

*"No-Raiding" Pact.* The executive board of the International Ladies' Garment Workers (AFL) and the executive council of the International Association of Machinists (AFL) early in March authorized their respective presidents to sign the AFL-CIO "no-raiding" agreement,<sup>5</sup> making a total of 47 AFL affiliates that have indicated a willingness to sign. Both organizations also endorsed the AFL's plan for settling internal jurisdictional disputes.<sup>6</sup> Later in the month, the executive board of the CIO announced that it would defer final approval of the "no-raiding" agreement until more AFL unions agreed to go along with the pact.

*NLRB.* Early in March, in an NLRB decision involving the Trona, Calif., plant of the American Potash and Chemical Corp.<sup>7</sup> two new rules

governing the granting of separate representation in collective bargaining emerged: (1) The Board indicated it will permit craft groups to be separated from larger bargaining units "where a true craft group is sought and where in addition, the union . . . is one which traditionally represents that craft." (2) The Board will also grant separate representation to "certain departmental groups which by tradition and practice have acquired craft-like characteristics." At the same time, the Board excluded from this rule four industries—basic steel, aluminum, logging, and wet milling—in which it found the doctrine of the *National Tube* case (76 NLRB 1199) continued to be applicable.

In another case, involving the Pacific Telephone and Telegraph Co., and the independent Order of Repeatermen and Toll Testboardmen, the board found that the "hit-and-run" strike, as reflected by a series of brief sporadic stoppages at scattered locations in the 1951 telephone dispute involving the company and the Communications Workers of America (CIO), was "a form of economic warfare beyond the pale of proper strike activities." The case arose when members of the independent union respected the CWA picket lines, but returned to work when the pickets were withdrawn. In a number of cases, the company delayed a day or so in providing work for the tollmen. The independent union then charged the company with conducting an illegal lockout that infringed on rights guaranteed by the Taft-Hartley Act. An NLRB examiner upheld this contention and ordered the company to pay back wages to the workers involved. The Board, however, overruled the examiner and dismissed the case.

<sup>5</sup> See Monthly Labor Review, November 1953 (p. 1165).

<sup>6</sup> See Monthly Labor Review, April 1954 (p. 440).

<sup>7</sup> See Monthly Labor Review, December 1953 (p. 1325).

# Book Reviews and Notes

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## Special Reviews

*How to Lie with Statistics.* By Darrell Huff. New York, W. W. Norton & Co., Inc., 1954. 142 pp. \$2.95.

*Design for Decision.* By Irwin D. J. Bross. New York, Macmillan Co., 1953. 276 pp., bibliography, diagrams. \$4.25.

These books are reviewed together because both are concerned with presenting statistical methods to the layman. However, they differ markedly as to level of sophistication.

*How to Lie with Statistics* covers, to a limited extent, the elements of statistics usually found in an elementary statistics textbook. *Design for Decision* aims, in nontechnical language, to cover the entire field of modern statistical theory.

Mr. Huff, in *How to Lie with Statistics*, does not actually try to fulfill the verb of the title, but rather attempts to teach the layman the fundamental concepts of statistics, with illustrations of what are poor or misleading statistics. These illustrations of misuses of statistics appear to be good motivation devices. The use of good charts and excellent pictures enables him to present succinctly the important concepts used in statistics. Discussions are directed at such things as a biased sample, and use of the mean, median, or mode. The explanation of sample error is particularly good. There are a few conceptual errors in the book, the most glaring of which is referring to "quota sampling" as "stratified random sampling."

*Design for Decision* is a considerably more sophisticated presentation. It covers such subjects as the fundamental notions of probability, the history of methods used in reaching decisions, and concepts of a decision maker. Further, it treats data collection, model building, sampling,

statistical inference, and a number of other statistical techniques.

The book will not teach the reader how to make sound decisions, but rather will give him an appreciation of what statistical theory can contribute to decision making. The book is in a sense similar to a work on music appreciation, which will enable a person to better appreciate music but will not make him either a composer or a professional instrumentalist. Similarly, the reader of *Design for Decision* will gain an appreciation of what statistical methodology can do but he will not acquire the facility for executing the many complicated statistical techniques. These remarks are not intended to diminish the value of the book. It is an excellent treatise on modern statistical theory. By reading it, one who is concerned in any way with data production, data use, or statistical methodology will acquire an increased appreciation for what modern statistical methodology can do for him.

The following quotation from Mr. Bross' book is suggestive of his well-balanced treatment of the subject: "There is another very grave danger in the use of models. After a scientist plays for a long time with a given model he may become attached to it, just as a child may become, in the course of time, very attached to a doll (which is also a model). A child may become so devoted to the doll that she insists that her doll is a real baby, and some scientists become so devoted to their model (especially if it is a brain child) that they will insist that this model is the real world."

The author would have been much more effective in *Design for Decision* if his basic illustration in decision making, used throughout the book, had been more realistic. The choice of this simple and somewhat unreal example was motivated by the desire to omit the complex mathematics usually encountered in real problems. This reviewer believes that a more realistic example could have been used without introducing difficult mathematics.

In contrast with the heaviness of most books on statistics, these two will be found very pleasant reading. They are very well written and are recommended for those interested in the application of statistics.

—SAMUEL WEISS  
Bureau of Labor Statistics

*Bargaining on Productivity—A Management Guide.*

By Fred Rudge. Washington, Bureau of National Affairs, Inc., 1953. 146 pp., bibliography, charts. \$5.75.

This study of the productivity concept as it has been and might be used in collective bargaining is, in effect, a plea to management to come to grips with the concept at the plant level. Mr. Rudge presents a brief résumé of productivity measurement techniques and development, and of the growing discussion of productivity as an active wage determinant. All this is done to prepare the employer against the day when the productivity issue might be raised at the bargaining table.

First prepare productivity indexes for your own plant, the author recommends, then he suggests ways of doing this for the single-product and the multi-product plants. A careful study of these indexes, and of the plant's wage trends for a similar time period, will permit a more meaningful discussion of productivity when necessary. If the subject is never brought into bargaining talks, the effort spent in assembling indexes is far from wasted. The plant-level research may be most revealing to the individual company, especially insofar as it isolates factors which mitigate against efficient production.

This management guide also reviews and comments upon the major instances in which productivity has played a role in collective bargaining, including the railroad case before the Wage Stabilization Board, early in 1953, concerning annual improvement (productivity) increases.

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

*Unity and Diversity in European Labor: An Introduction to Contemporary Labor Movements.* By Adolf Sturmthal. Glencoe, Ill., Free Press, 1953. 237 pp., bibliography. \$3.75.

There has been a growing need for well-documented interpretation of the philosophies and objectives of European labor as distinguished from the unique development of the American trade-union movement. Dr. Sturmthal's book is a serious attempt to fill this need and to inspire further more detailed analysis. He systematically shows the permanent marks which feudalism and absolutism have left upon the forming of the

cultural and social structure of European society. From his wealth of background information and rich personal experience, he rewards the reader with a host of basic historical events which have led to splits in European labor. In evaluating recent events, he stops at 1951.

The book is not a complete, logical unit. As the author explains, it is, rather, a compilation of lectures on related subjects in the field of international labor. By covering such a wide area in a rather spotty way, he does not convincingly show the need, as seemingly intended, for using the tools of all social sciences in studying the problem of the international behavior of organized labor. The reader would have benefited, for instance, from a more comprehensive analysis of the patterns without limiting the concept to mere feudalistic influences.

—ARNOLD L. STEINBACH  
Office of International Labor Affairs

*World Population and Production—Trends and Outlook.* By W. S. Woytinsky and E. S. Woytinsky. New York, Twentieth Century Fund, 1953. lxxii, 1268 pp., bibliography, charts, maps. \$12.

The encyclopedic nature of this volume will make it a historical monument to the painstaking and indefatigable research job of the authors. They recognize the almost complete lack of statistical information in a large number of countries; they emphasize the lack of comparability in the data that do exist; and deplore the unreliability of information originating behind the Iron Curtain. However, they have succeeded in putting together a plausibly realistic picture of the world, its natural and human resources, and its industrial developments and their potentiality for the future. The major stress is placed on the march of science and technology and the tremendous technological changes of recent decades. The authors point to these changes as omens of even greater and more revolutionary changes to come.

Although the stupendous job of collecting data on, and describing, measuring, and explaining the progress of, the world's mechanical civilization fully justifies the decision of the authors to abstain from "appraising," the need for appraising has become more urgent with the publication of this



document. What does the revolution in the applied sciences mean to us as human beings? The authors have not raised this question and perhaps never intended to raise it. Nevertheless, it and a host of other questions emerge from their book. As statistical economists, they have given us a realistic view of the forces behind our recurring technological revolutions, but have declined to draw conclusions. The field is wide open for the sociologist and others specializing in human and social behavior to fill the gap.

—BORIS STERN  
Bureau of Labor Statistics

### Arbitration

*Cases on Arbitration Law.* By Wesley A. Sturges. Albany, N. Y., Matthew Bender & Co., Inc., 1953. 912 pp. \$9.

*Grievance Arbitration in the Federal Courts.* By Archibald Cox. (In *Harvard Law Review*, Cambridge, Mass., February 1954, pp. 591-607. \$1.)

*Guides for Labor Arbitration.* Philadelphia, University of Pennsylvania Press (for Labor Relations Council of Wharton School of Finance and Commerce), 1953. 15 pp.

*Labor Arbitration and the Law in Utah.* By Sanford H. Kadish. (In *Utah Law Review*, Salt Lake City, Fall 1953, pp. 403-420; also reprinted.)

A general discussion of the subject as well as of its particular application in Utah.

### Cooperative Movement

*Consumer Cooperatives in the United States—Recent Developments.* By Jean A. Flexner. Washington, U. S. Department of Labor, Bureau of Labor Statistics, 1954. 31 pp.; processed. (Bull. 1158.) 30 cents, Superintendent of Documents, Washington.

*What Every Cooperator Should Know: A Guide to Cooperative Housing.* New York, United Housing Foundation, [1953]. 32 pp., bibliography, illus. 25 cents.

*The Strength of the I. C. A. [International Cooperative Alliance] and Its Affiliates.* By A. Wössner. (In *Review of International Cooperation*, London, December 1953, pp. 295-300.)

*Brugsforeningerne, 1952.* [Copenhagen?], Fællesforeningen for Danmarks Brugsforeninger, [1953?]. 47 pp., charts.

Report of Danish Federation of Consumers Societies for 1952. Accompanying the report is a separate explanatory pamphlet in English.

### Education and Training

*Employee Training Handbook: A Guide for Training by Operating Management.* By Bleick von Bleicken. New York and Chicago, Conover-Mast Publications, Inc., 1953. 300 pp., bibliography, forms, illus. \$5.50.

*National Standards for Carpentry Apprenticeship.* Washington, U. S. Department of Labor, Bureau of Apprenticeship, 1954. 31 pp. Free.

*Techniques of Successful Foremanship: A Guide to Effective Foremanship Training.* By Eugene E. Jennings. Madison, University of Wisconsin, School of Commerce, Bureau of Business Research and Service, 1953. 41 pp. (Wisconsin Commerce Studies, Vol. I, No. 5.) \$1.15.

*Training the Semi-Skilled Employee.* By Del Peterson. (In *Industrial Relations Newsletter*, University of Denver, Department of Personnel and Industrial Relations, Denver, Colo., Winter 1954, pp. 1-13.)

### Guaranteed Wage

*ABC's of Guaranteed Wages.* By Alfred G. Larke. (In *Dun's Review and Modern Industry*, Chicago, March 1954, pp. 39-41, bibliography.)

*An Introduction to Guaranteed Wages.* Detroit, Mich., Detroit Labor Trends, 1954. 12 pp. (Special Report XIV.) \$2.25.

*The Guaranteed Annual Wage.* By William Haber. (In *Michigan Business Review*, University of Michigan, School of Business Administration, Ann Arbor, January 1954, pp. 26-32.)

Discusses some economic aspects, with particular attention to the relationship between guaranteed wages and unemployment insurance.

*The Guaranteed Annual Wage and Its Implications to a Free Economy.* New York, National Association of Manufacturers, Employee Relations Division, 1954. 43 pp., bibliography. 50 cents to members, \$1 to nonmembers, of Association.

Presents National Association of Manufacturers' views of increasing union demands, pro and con arguments, and economic implications of guaranteed work or wages.

*Guaranteed Annual Wage Payments and Related Employer Payments Under State Unemployment Insurance Systems.* Washington, U. S. Department of Labor, Bureau of Employment Security, 1953. 14 pp.; processed. Free.

*Guaranteed Annual Wage—A Modified System.* By Émile Bouvier, S. J. Montreal, Industrial and Labor Relations Publications, 1954. 52 pp., bibliography. 50 cents.

## Handicapped

*A Guide for the Placement of the Physically Handicapped (5th Edition): Part II, Ordnance and Ordnance Stores Positions (Pertaining to the Procurement, Manufacture, Repair, Testing, Storage, and Issue of Ammunition and Military Equipment).* Washington, U. S. Civil Service Commission, 1953. 536 pp. (Pamphlet 14-2.) \$1.25, Superintendent of Documents, Washington.

*Proceedings of the Third AFPH National Conference on Placement of Severely Handicapped, [Washington], March 23-25, 1953.* Washington, American Federation of the Physically Handicapped, 1953. 204 pp. \$2.

*A Survey of Sheltered Workshops Operated by Jewish Vocational Service Agencies.* New York, Jewish Occupational Council, 1954. 31 pp. \$1.

*The Rehabilitation of Industrial Hand and Arm Disabilities.* New York, Institute for the Crippled and Disabled, [1953]. 47 pp., illus. \$1.

A series of papers presented at the second annual conference and demonstration for compensation insurers and physicians sponsored by the Institute for the Crippled and Disabled, April 28, 1953.

## Industrial Hygiene

*Chromate Hazards in Industry.* By Edmund N. Walsh, M.D. (In *Journal of the American Medical Association*, Chicago, December 5, 1953, pp. 1305-1308. 45 cents.)

*Radiation Hazards.* Trenton, New Jersey Department of Health, Bureau on Adult and Industrial Health, [1953?]. 8 pp., bibliography. (Industrial Health Bull., Vol. 4, No. 10.)

*Safe and Sane Uses of Atomic Energy.* (In *Industrial Bulletin*, State Department of Labor, New York, January 1954, pp. 3-7, illus.)

Brief account of some industrial uses of atomic energy and of a "model safety program" at a New York electronics plant.

*Industrial Noise.* By Noel S. Symons and others. (In *Factory Management and Maintenance*, New York, December 1953, pp. 113-136, diagrams, illus.; also reprinted by McGraw-Hill Publishing Co. as *Plant Operation Library No. 148.*)

Symposium of six articles dealing, respectively, with legal problems (connected with compensation for hearing loss), noise deafness, noise measurement, noise standards, hearing tests, and noise abatement.

*A Noise Survey of Manufacturing Industries.* By Henry B. Karplus and George L. Bonvallet. (In *American*

*Industrial Hygiene Association Quarterly*, Chicago, December 1953, pp. 235-263, charts. 75 cents.)

Noise levels, as they affect workers, were measured in 40 plants of selected industries, including the metalworking industries as having the most severe noise problems.

A second article in the same journal, by F. G. Tyzzer, deals with general principles of reducing industrial noise.

*Tuberculosis Control in Industry.* By Harold A. Vonachen, M.D., and others. (In *Industrial Medicine and Surgery*, Chicago, January 1954, pp. 9-12, illus. 75 cents.)

A short account of one company's experience.

## Industrial Relations

*Collective Bargaining and Decentralization in the Rubber-Tire Industry.* By Irvin Sobel. (In *Journal of Political Economy*, Chicago, February 1954, pp. 12-25. \$1.50.)

*Employer Associations Engaged in Collective Bargaining in New York State—A Directory.* New York, State Department of Labor, Division of Research and Statistics, 1953. 81 pp.; processed. (Publication B-71.)

*The Future of Collective Bargaining in an Age of Inflation.* By Theodore Levitt. (In *Labor Law Journal*, Chicago, January 1954, pp. 7-27. \$1.)

*Holiday Provisions in Union Agreements in 1952-53.* By Abraham Weiss and Dena G. Wolk. Washington, U. S. Department of Labor, Bureau of Labor Statistics, 1954. 6 pp., chart. (Serial R. 2130; reprinted from *Monthly Labor Review*, February 1954.) Free.

*Provisions of Teamsters' Union Contracts in Effect in December 1952 in New York City.* New York, State Department of Labor, Division of Research and Statistics, 1954. 47 pp.; processed. (Special Labor News Memorandum 46.)

*Labor Unions and National Politics in Italian Industrial Plants.* By Maurice F. Neufeld. Ithaca, N. Y., Cornell University, Institute of International Industrial and Labor Relations, 1954. 146 pp. (Cornell International Industrial and Labor Relations Reports, 1.) \$2.

Historical description of shop grievance committees and their relative ineffectiveness because of the extreme Marxist views pervading the Italian trade-union movement. The author concludes that "so long as an overwhelming number of Italian workers remain wedded to an embittered Marxist outlook upon life, they will give their allegiance to the Communist CGIL [Italian General Confederation of Labor] and the purposes of grievance committees will remain unfulfilled."

## Labor Organizations

*Union Security.* By Orme W. Phelps. Los Angeles, University of California, Institute of Industrial Relations, 1953. 57 pp., bibliography. 25 cents.

*Directory of Labor Unions [in New Mexico], Listed by Local Office Area, January 15, 1954.* [Albuquerque], State Employment Service, 1954. 24 pp.; processed.

*Participation of a Labor Union in the Study of Problems of Psychiatry in Industry.* By Louis L. Tureen, M.D. (In A.M.A. Archives of Industrial Hygiene and Occupational Medicine, Chicago, January 1954, pp. 23-28. \$1.)

Describes the psychiatric activities of the St. Louis Labor Health Institute.

*Proceedings of 13th Annual Convention, Canadian Congress of Labor, Montreal, September 14-18, 1953.* Ottawa, Canadian Congress of Labor, [1954]. 126 pp.; supplement, 103 pp.

*Fifty-Ninth Annual Report of Irish Trade Union Congress, . . . 1952-53, and Report of Proceedings of Fifty-Ninth Annual Meeting, Held in Sligo, July 22-24, 1953.* Dublin, Irish Trade Union Congress, 1953. 180 pp.

*Third World Congress of International Confederation of Free Trade Unions, Stockholm, July 4-11, 1953: General Secretary's Report on the Activity of the Confederation Since July 1951 and Financial Reports for the Period April 1, 1951-December 31, 1952.* Brussels, International Confederation of Free Trade Unions, [1953?]. 182 pp., illus.

## Medical Care and Sickness Insurance

*Government Aid for Health Plans.* By Helen B. Shaffer. Washington (1205 19th Street NW.), Editorial Research Reports, 1954. 18 pp. (Vol. I, 1954, No. 7.) \$1.

*Principles of Payment for Hospital Care Recommended by the Council on Prepayment Plans and Hospital Reimbursement of the American Hospital Association.* Chicago, American Hospital Association, 1953. 17 pp.; processed.

*Role of the State Public Assistance Agency in Medical Care—A Series of Reports: I, General Aspects of Medical Assistance; II, Pooled Funds for Medical Care.* Chicago, American Public Welfare Association, 1953. 8 pp.; 7 pp. 20 cents each.

*Group Disability Insurance Plans.* By Lois E. Forde. (In Management Record, National Industrial Con-

ference Board, Inc., New York, March 1954, pp. 90-93, 113-116.)

Analysis of the plans of 51 companies.

*Retail Health and Life Insurance Plans.* By Hazel Jean Waldrop. (In Stores, the Magazine of Retailing, New York, November 1953, pp. 44-47, 59.)

## Occupations

*Career, the Annual Guide to Business Opportunities, 1954.* New York, Career Publications, Inc., 1954. 198 pp., charts, maps, illus. \$2.

*Career Planning for High School Students.* By William J. Reilly. New York, Harper & Brothers, 1953. 110 pp. \$2.

*Directory of Professional Opportunities.* By Robert Shosteck. Washington, B'nai B'rith Vocational Service Bureau, 1954. 81 pp. 75 cents.

Compilation of practitioner-population ratios in selected professional and related occupations in about 200 major American cities and metropolitan areas.

*Professional Opportunities in Mathematics.* Buffalo, N. Y., [Prof. H. M. Gehman, Mathematical Association of America, University of Buffalo], 1954. 24 pp., bibliography. 2d ed. 25 cents.

*Orthoptic Technician.* Peapack, N. J., Personnel Services, Inc., 1953. 6 pp. (Occupational Abstract 165.) 50 cents.

Other recent leaflets in this series, not previously listed in the Monthly Labor Review, cover the following occupations: Pathologist, medical record librarian, forester, purchasing agent, and department store salesclerk.

*Social Origins and Occupational Career Patterns.* By Reinhard Bendix, Seymour M. Lipset, F. Theodore Malm. (In Industrial and Labor Relations Review, Ithaca, N. Y., January 1954, pp. 246-261. \$1.50.)

## Pensions

*Guide to Pension and Profit Sharing Plans.* By Robert S. Holzman; edited by Saul B. Ackerman. Mount Vernon, N. Y., Farnsworth Publishing Co., Inc., 1953. 64 pp. \$1.50.

The guide deals almost entirely with pension plans. It consists of questions and answers, primarily for employers, with emphasis on tax advantages obtainable from the plans.

*Private Pension Plans.* (In Monthly Review of Credit and Business Conditions, Federal Reserve Bank of New York, New York City, December 1953, pp. 185-188.)

Discusses rate and amount of growth, investment practices of administrators, and prospects for future growth of

private pension plans, as well as their effects on other savings and spending.

*The Problem of Retirement in Industry: Fifth Annual Labor-Management Conference, Rutgers University, May 12, 1953.* New Brunswick, N. J., Rutgers University, Institute of Management and Labor Relations, [1953?]. 79 pp.; processed. \$2.

*Survey of Pension Funds in the Houston Area.* By Patrick J. Nicholson. Houston, Texas, University of Houston, College of Business Administration, Bureau of Business and Economic Research, 1953. 22 pp. (Houston Studies in Business and Economics, Industrial Relations Series, 2.) \$1.

*Retail Pension and Profit-Sharing Plans.* By Hazel Jean Waldrop. (In *Stores*, the Magazine of Retailing, New York, October 1953, pp. 16-20, 58.)

*Value of Benefits Under Railroad Retirement Act.* (In *Monthly Review*, U. S. Railroad Retirement Board, Chicago, December 1953, pp. 224-229, 231.)

## Personnel Management

*Essentials of Effective Personnel Administration—Case Studies of Successful Company Experience.* New York, American Management Association, 1953. 51 pp. (Personnel Series, 154.) \$1 to members, \$1.25 to nonmembers, of Association.

*Guide to Personnel Activities of Professional and Technical Associations.* By Dorothy W. Otten. Chicago, Civil Service Assembly, 1953. 55 pp., bibliographies. (Personnel Report Series, 534.) \$1.50 to members, \$2 to nonmembers, of Assembly.

Brings together for the first time, according to the foreword, a "working source of information about the types of assistance available to public personnel agencies from professional and technical associations in a wide variety of personnel operations."

*Personnel Practices in Industry.* By William R. Spriegel and Alfred G. Dale. Austin, University of Texas, Bureau of Business Research, 1954. 67 pp., charts. (Personnel Study 8.) \$1.50.

*Stock Ownership Plans for Employees.* New York, New York Stock Exchange, 1953. 85 pp.

*Worker Attitude on Incentives.* By Alfred G. Larke. (In *Dun's Review and Modern Industry*, New York, December 1953, pp. 61-63, charts; also reprinted.)

Summary data from a survey among 2,500 production employees of a large metal fabricating corporation, made by the University of Michigan's Survey Research Center in its "human relations program."

*Worker Values in Job Evaluation: Impact of Job Evaluation on Worker Attitudes.* By Leonard R. Sayles. (In *Personnel*, New York, January 1954, pp. 266-274. \$1.)

## Wages, Salaries, and Hours of Labor

*Clerical Salary Survey, [September 1953].* New York, National Industrial Conference Board, Inc., 1954. 46 pp., chart. (Studies in Labor Statistics, 10.)

*Earnings of First-Line Supervisors.* Washington, Bureau of National Affairs, Inc., 1954. 17 pp. (Personnel Policies Forum Survey 22.) \$1.

*Union Wages and Hours: Building Trades, July 1, 1953.* By John F. Laciskey. Washington, U. S. Department of Labor, Bureau of Labor Statistics, 1954. 34 pp. (Bull. 1152.) 30 cents, Superintendent of Documents, Washington.

In addition to the above, the Bureau has published bulletins on union wages as of July 1, 1953, covering local transit operating employees, motortruck drivers and helpers, and the printing trades (Bulletins 1153, 1154, and 1155, respectively).

*Wage Changes Negotiated in Major California Union Agreements, 1953.* San Francisco, Department of Industrial Relations, Division of Labor Statistics and Research, 1954. 16 pp.; processed.

*Une Révolution Économique: La Belgique Pays à Hauts Salaires.* By le Baron Snoy et d'Oppuers. Brussels, Société d'Économie Politique de Belgique, January 1954. 34 pp. (Comptes Rendus, 223.)

A review of Belgian wage policies since World War II and an evaluation of their effects upon the Belgian economy.

*Wage Rates, Salaries, and Hours of Labor in Canada, October 1952.* Ottawa, Department of Labor, 1953. 174 pp., chart. (Annual Report 35.) 25 cents.

## Women in Industry

*The Outlook for Women as Medical X-Ray Technicians.* By Mildred S. Barber. Washington, U. S. Department of Labor, Women's Bureau, 1954. 53 pp., bibliography, illus. (Bull. 203-8; Medical Services Series.) 25 cents, Superintendent of Documents, Washington.

*State Hour Laws for Women.* Washington, U. S. Department of Labor, Women's Bureau, 1953. 114 pp. (Bull. 250.) 40 cents, Superintendent of Documents, Washington.

*Toward Better Working Conditions for Women: Methods and Policies of the National Women's Trade Union League of America.* By Mary Elizabeth Pidgeon. Washington, U. S. Department of Labor, Women's Bureau, 1953. 71 pp., bibliography, illus. (Bull. 252.) 25 cents, Superintendent of Documents, Washington.

*Women in the [Canadian] Labor Force.* (In *Labor Gazette*, Department of Labor, Ottawa, March 1954, pp. 372-390, charts. 25 cents.)

*The Statistical Outlook on Japanese Women Workers, 1952.* [Tokyo], Ministry of Labor, Women's and Minors' Bureau, 1953. 14 pp., chart; processed.

### Workmen's Compensation

*Workmen's Compensation in the United States.* Washington, U. S. Department of Labor, Bureau of Labor Statistics, 1954. 45 pp. (Bull. 1149.) 30 cents, Superintendent of Documents, Washington.

The eight chapters of the bulletin, dealing with various aspects of workmen's compensation, appeared originally as articles in the Monthly Labor Review during 1953.

*Report of [California] Senate Interim Committee on Workmen's Compensation Benefits.* Sacramento, 1953. Part I, 263 pp.; Part II, 23 pp.

Findings on a number of problems arising under the State workmen's compensation law and its administration are contained in Part I; recommendations are presented in Part II. Additional reports, the committee states, are to follow.

*How Can We Improve the [Illinois] Workmen's Compensation Law and Its Administration?* By Reuben G. Soderstrom. Champaign, University of Illinois, Institute of Labor and Industrial Relations, 1954. 20 pp.; processed. (Lecture Series, 10.)

Includes consideration of 1953 amendments to the law.

*The Nevada Industrial Insurance Act and Nevada Occupational Diseases Act, Effective July 1, 1953.* Carson City, Nevada Industrial Commission, 1953. 90 pp.

*Forces That Spiral Workmen's Compensation Costs, [New York State].* By Joseph S. Keiper. New York, Commerce and Industry Association of New York, Inc., 1953. 110 pp., charts. \$1.50.

*Report of the Committee of Consultants on Occupational Loss of Hearing.* Albany, New York State Workmen's Compensation Board, 1953. 17 pp.

Contains answers to questions propounded to its committee of consultants by the New York State Workmen's Compensation Board in its quest for standards for use in considering hearing-loss compensation claims, together with a background statement by the Board chairman.

### Miscellaneous

*American Labor and the American Spirit: Unions, Labor-Management Relations, and Productivity.* By Witt Bowden. Washington, U. S. Department of Labor, Bureau of Labor Statistics, 1954. 66 pp., bibliography, charts. (Bull. 1145.) 40 cents, Superintendent of Documents, Washington.

Shows the development of the labor movement in the United States in terms of historical and philosophical influences.

*Economic Planning Under Free Enterprise.* By Henry Grayson. Washington, Public Affairs Press, 1954. 134 pp. \$2.

Deals particularly with the United States, Canada, Great Britain, and Sweden, with an overall chapter on the O. E. E. C. countries.

*Films for Labor.* Washington, American Federation of Labor, Workers Education Bureau, 1954. 44 pp., illus. 25 cents.

*Proceedings of Sixth Annual Conference of Council of Profit Sharing Industries, November 12-13, 1953, Boston, Mass.* Akron, Ohio, Council of Profit Sharing Industries, 1954. xxix, 233 pp.

Subjects considered at the various sessions were: Why profit sharing? how to maintain employee interest; what the employee has to say about profit sharing; pertinent laws and regulations; and investment of profitsharing trust funds.

*Puerto Rican Population of New York City: 1, Demographic and Labor Force Characteristics; 2, Vital Statistics; 3, Social and Welfare Statistics.* Edited by A. J. Jaffe. New York, Columbia University, Bureau of Applied Social Research, 1954. 61 pp.; processed.

Papers delivered before New York Area Chapter of American Statistical Association, October 21, 1953.

*Economic Situation [in Japan] During 1953.* (In Survey of Economic Conditions in Japan, Monthly Circular of Mitsubishi Economic Research Institute, Tokyo, January 1954; 56 pp.)

A section on labor includes data on employment, wages, incomes, expenditures, and labor productivity.

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NOTE.—Beginning with the May 1953 issue, data shown in tables A-2, A-3, A-4, A-5, C-1, C-2, C-3, and C-4 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 <sup>1</sup>												
	1954 <sup>2</sup>			1953									
	Mar.	Feb.	Jan.	Dec.	Nov. <sup>3</sup>	Oct.	Sept. <sup>3</sup>	Aug.	July	June	May	Apr.	Mar.
	Total, both sexes												
Total labor force.....	67,218	67,139	66,291	66,106	66,874	66,954	67,127	68,238	68,258	68,290	66,497	66,338	66,679
Civilian labor force.....	63,825	63,725	62,840	62,614	63,353	63,404	63,552	64,648	64,668	64,734	62,964	62,810	63,134
Unemployment.....	3,725	3,671	3,087	1,850	1,428	1,162	1,246	1,240	1,548	1,562	1,306	1,582	1,674
Unemployed 4 weeks or less.....	1,301	1,434	( <sup>4</sup> )	1,093	886	727	817	724	924	1,042	656	818	812
Unemployed 5-10 weeks.....	932	1,198	( <sup>4</sup> )	444	294	236	234	278	368	212	326	376	394
Unemployed 11-14 weeks.....	484	408	( <sup>4</sup> )	125	96	72	58	88	104	96	116	146	188
Unemployed 15-26 weeks.....	741	470	( <sup>4</sup> )	124	96	82	81	88	78	124	150	166	184
Unemployed over 26 weeks.....	267	160	( <sup>4</sup> )	64	55	46	56	62	74	88	58	76	96
Employment.....	60,100	60,055	59,753	60,764	61,925	62,242	62,306	63,408	63,120	63,172	61,658	61,228	61,460
Nonagricultural.....	54,225	54,351	54,469	55,326	55,274	55,083	55,044	56,134	55,492	55,246	55,268	55,158	55,740
Worked 35 hours or more.....	44,291	42,825	( <sup>4</sup> )	46,889	42,847	46,957	32,767	45,598	43,196	46,304	45,988	45,478	46,030
Worked 15-34 hours.....	5,804	7,246	( <sup>4</sup> )	5,139	8,972	4,906	18,114	4,482	5,054	4,924	5,608	5,690	5,712
Worked 1-14 hours <sup>5</sup> .....	2,364	2,265	( <sup>4</sup> )	1,811	1,873	1,711	1,543	1,260	1,224	1,468	1,926	2,074	2,326
With a job but not at work <sup>6</sup> .....	1,765	2,013	( <sup>4</sup> )	1,487	1,582	1,509	2,620	4,794	6,018	2,550	1,746	1,946	1,672
Agricultural.....	5,875	5,704	5,284	5,438	6,651	7,150	7,262	7,274	7,628	7,926	6,390	6,070	5,720
Worked 35 hours or more.....	4,294	3,844	( <sup>4</sup> )	3,900	5,092	5,713	5,772	5,512	5,898	6,334	4,346	4,334	3,822
Worked 15-34 hours.....	1,100	1,283	( <sup>4</sup> )	1,123	1,274	1,175	1,261	1,442	1,436	1,346	1,578	1,320	1,250
Worked 1-14 hours <sup>5</sup> .....	304	301	( <sup>4</sup> )	232	180	185	154	190	186	178	230	194	254
With a job but not at work <sup>6</sup> .....	178	272	( <sup>4</sup> )	184	105	86	76	130	108	68	236	222	324
	Males												
Total labor force.....	47,408	47,539	( <sup>4</sup> )	47,013	47,184	47,129	47,446	48,599	48,803	48,372	47,333	47,379	47,890
Civilian labor force.....	44,057	44,167	( <sup>4</sup> )	43,565	43,709	43,626	43,917	45,056	45,260	44,862	43,848	43,898	43,892
Unemployment.....	2,552	2,542	( <sup>4</sup> )	1,337	927	736	768	814	1,024	1,024	898	1,104	1,108
Employment.....	41,504	41,625	( <sup>4</sup> )	42,228	42,782	42,889	43,149	44,242	44,236	43,838	42,950	42,794	42,784
Nonagricultural.....	36,337	36,592	( <sup>4</sup> )	37,335	37,283	37,241	37,370	38,204	38,042	37,626	37,470	37,498	37,758
Worked 35 hours or more.....	31,219	30,899	( <sup>4</sup> )	32,897	30,470	33,319	24,173	32,680	31,243	33,166	32,582	32,382	32,686
Worked 15-34 hours.....	2,944	3,829	( <sup>4</sup> )	2,672	4,910	2,283	10,968	2,112	2,660	2,258	2,822	2,918	3,048
Worked 1-14 hours <sup>5</sup> .....	1,040	1,053	( <sup>4</sup> )	718	788	648	560	514	470	634	854	904	934
With a job but not at work <sup>6</sup> .....	1,134	1,309	( <sup>4</sup> )	1,048	1,115	991	1,699	2,898	3,664	1,568	1,212	1,294	1,090
Agricultural.....	5,167	5,033	( <sup>4</sup> )	4,893	5,499	5,849	5,779	6,038	6,194	6,212	5,480	5,296	5,026
Worked 35 hours or more.....	4,052	3,633	( <sup>4</sup> )	3,724	4,849	4,848	4,891	5,052	5,350	5,458	4,154	4,130	3,610
Worked 15-34 hours.....	687	884	( <sup>4</sup> )	815	727	695	707	726	620	568	960	846	946
Worked 1-14 hours <sup>5</sup> .....	261	273	( <sup>4</sup> )	186	120	127	109	150	130	122	184	140	188
With a job but not at work <sup>6</sup> .....	167	243	( <sup>4</sup> )	168	103	78	71	110	94	64	202	180	282
	Females												
Total labor force.....	19,810	19,600	( <sup>4</sup> )	19,094	19,690	19,825	19,681	19,639	19,455	19,918	19,164	18,959	19,289
Civilian labor force.....	19,768	19,558	( <sup>4</sup> )	19,050	19,645	19,778	19,635	19,592	19,408	19,872	19,116	18,912	19,242
Unemployment.....	1,173	1,128	( <sup>4</sup> )	513	501	425	478	426	524	538	408	478	566
Employment.....	18,596	18,430	( <sup>4</sup> )	18,536	19,143	19,353	19,157	19,166	18,884	19,334	18,708	18,434	18,676
Nonagricultural.....	17,888	17,759	( <sup>4</sup> )	17,991	17,991	17,842	17,674	17,930	17,450	17,620	17,798	17,690	17,982
Worked 35 hours or more.....	13,072	12,426	( <sup>4</sup> )	13,992	12,377	13,638	8,594	12,918	11,948	13,138	13,406	13,096	13,344
Worked 15-34 hours.....	2,860	3,417	( <sup>4</sup> )	2,468	4,062	2,624	7,146	2,370	2,394	2,660	2,786	2,742	2,664
Worked 1-14 hours <sup>5</sup> .....	1,324	1,212	( <sup>4</sup> )	1,093	1,085	1,063	983	746	754	834	1,072	1,170	1,392
With a job but not at work <sup>6</sup> .....	631	704	( <sup>4</sup> )	439	467	518	951	1,896	2,354	982	534	652	582
Agricultural.....	708	671	( <sup>4</sup> )	545	1,152	1,510	1,484	1,236	1,434	1,714	212	204	212
Worked 35 hours or more.....	242	211	( <sup>4</sup> )	175	544	865	880	460	548	876	618	474	378
Worked 15-34 hours.....	413	399	( <sup>4</sup> )	308	547	580	554	716	816	778	618	474	378
Worked 1-14 hours <sup>5</sup> .....	43	28	( <sup>4</sup> )	46	60	58	45	40	56	56	46	54	62
With a job but not at work <sup>6</sup> .....	11	29	( <sup>4</sup> )	16	2	7	5	20	14	4	34	42	42

<sup>1</sup> 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.

<sup>2</sup> Data beginning January 1954 are based upon a new Census sample in 230 areas and are not entirely comparable with earlier data. In addition, the introduction during 1953 of materials from the 1950 Census into the estimating procedures produced certain discontinuities in the data. Revised figures are expected to be available at a later date.

<sup>3</sup> Census survey week contained legal holiday.

<sup>4</sup> Not available.

<sup>5</sup> Excludes persons engaged only in incidental unpaid family work (less than 15 hours); these persons are classified as not in the labor force.

<sup>6</sup> Includes persons who had a job or business, but who did not work during the census 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. Does not include unpaid family workers.

Source: U. S. Department of Commerce, Bureau of the Census.



TABLE A-2: Employees in nonagricultural establishments, by industry division and group <sup>1</sup>

[In thousands]

Industry group and industry	1954			1953									Annual average		
	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	April	Mar.	1952	1951
Total employees.....	47,288	47,422	47,721	49,703	49,340	49,663	49,695	49,409	49,215	49,416	49,058	48,860	48,685	47,993	47,202
<b>Mining</b> .....	760	777	792	809	816	813	826	831	823	835	831	835	846	872	913
Metal.....	95.9	97.1	98.5	99.5	99.4	99.2	99.6	99.7	100.2	101.0	99.9	99.7	100.2	96.4	100.2
Iron.....		36.4	37.7	39.1	39.2	39.5	40.0	40.3	40.3	40.1	39.6	38.6	38.0	33.3	37.7
Copper.....		28.2	28.3	28.4	28.2	27.7	27.7	27.6	27.5	27.8	27.2	27.5	27.7	25.9	25.7
Lead and zinc.....		15.5	15.4	14.9	15.0	15.2	15.3	15.8	16.1	17.0	17.3	17.9	18.4	20.8	20.4
Anthracite.....		44.7	46.4	48.5	49.0	48.7	50.2	50.2	48.6	53.6	55.6	51.2	57.4	63.4	69.1
Bituminous-coal.....	249.2	266.3	274.4	280.6	285.5	283.7	291.1	291.1	290.1	299.2	300.4	309.6	318.4	333.8	372.0
Crude-petroleum and natural-gas production.....		272.5	276.4	278.8	278.2	276.1	279.3	283.9	279.7	276.2	271.4	272.1	270.9	276.0	269.3
Nonmetallic mining and quarrying.....	97.0	96.2	96.5	101.6	103.6	105.3	106.1	106.2	104.8	104.7	103.6	102.3	99.2	102.3	102.0
<b>Contract construction</b> .....	2,282	2,248	2,247	2,521	2,674	2,772	2,751	2,715	2,662	2,608	2,509	2,416	2,301	2,572	2,588
Nonbuilding construction.....		395	392	465	524	567	570	574	546	530	499	456	410	501	493
Highway and street.....		151.9	146.8	192.0	230.6	260.7	264.4	269.4	253.4	241.8	219.4	186.8	155.2	207.9	201.0
Other nonbuilding construction.....		242.7	245.6	273.1	292.9	305.9	305.9	304.5	292.1	287.8	280.0	269.6	255.0	293.3	289.0
Building construction.....		1,853	1,855	2,056	2,150	2,205	2,181	2,141	2,116	2,078	2,010	1,960	1,891	2,071	2,098
General contractors.....		771.0	774.5	882.4	936.2	974.2	968.3	971.8	952.2	925.5	888.4	861.6	823.2	919.6	950.2
Special-trade contractors.....		1,081.6	1,080.0	1,173.2	1,213.8	1,230.6	1,213.0	1,168.9	1,163.3	1,152.9	1,121.8	1,098.8	1,068.1	1,151.3	1,147.3
Plumbing and heating.....		283.0	287.6	300.9	305.2	306.7	298.8	294.6	288.1	283.3	278.1	278.1	277.5	286.3	286.9
Painting and decorating.....		121.9	123.4	142.3	152.6	159.1	160.1	165.3	160.6	153.9	148.2	140.9	133.3	156.5	155.7
Electrical work.....		154.4	158.7	160.4	161.7	162.4	160.1	157.2	154.5	150.6	149.2	148.2	147.2	151.3	139.5
Other special-trade contractors.....		522.3	510.3	569.6	594.3	602.4	594.0	551.8	560.1	565.1	546.3	531.6	510.1	557.3	565.3
<b>Manufacturing</b> .....	15,873	16,034	16,158	16,488	16,706	17,017	17,221	17,258	17,069	17,162	17,040	17,077	17,135	16,209	16,082
Durable goods <sup>2</sup> .....	9,137	9,287	9,402	9,584	9,705	9,879	9,955	10,006	10,007	10,121	10,096	10,117	10,103	9,262	9,071
Nondurable goods <sup>3</sup> .....	6,736	6,747	6,756	6,904	7,001	7,138	7,266	7,062	7,041	6,944	6,960	6,960	7,032	6,946	7,011
Ordnance and accessories.....	161.7	175.4	188.9	196.4	201.0	204.6	205.1	205.7	210.8	206.6	203.0	195.6	190.5	166.4	77.0
Food and kindred products.....	1,413.4	1,413.2	1,431.0	1,490.6	1,557.4	1,631.0	1,728.2	1,697.4	1,618.0	1,627.3	1,470.6	1,441.7	1,436.5	1,538.5	1,544.1
Meat products.....		300.9	308.4	318.1	323.6	313.6	306.2	304.1	302.7	299.7	295.5	294.6	299.2	309.8	306.1
Dairy products.....		115.8	114.9	116.7	119.1	121.8	127.7	132.9	135.3	134.2	127.0	122.1	118.2	123.4	125.2
Canning and preserving.....		138.6	145.6	162.8	195.8	261.3	372.2	346.5	274.1	194.5	174.5	162.0	160.3	217.1	230.3
Grain-mill products.....		122.9	122.5	122.2	123.1	126.2	127.5	127.3	126.9	127.3	122.6	121.1	122.9	124.8	121.2
Bakery products.....		284.0	282.8	285.8	289.8	291.8	290.3	289.9	290.7	289.7	285.8	283.2	284.2	284.6	281.2
Sugar.....		27.8	30.2	44.1	52.6	51.0	33.0	30.1	30.2	28.5	27.5	27.2	27.8	33.4	34.9
Confectionery and related products.....		81.1	83.6	90.2	93.0	93.1	89.6	83.2	75.5	78.1	75.7	79.1	84.0	86.2	87.9
Beverages.....		205.9	208.9	214.6	220.5	227.8	235.9	239.4	237.8	231.4	224.2	217.1	213.6	220.8	217.6
Miscellaneous food products.....		136.2	134.1	136.1	139.9	144.4	145.8	144.0	144.8	143.9	137.8	135.3	136.3	138.5	139.5
Tobacco manufactures.....	94.1	100.9	107.5	114.8	111.8	119.5	122.4	115.2	93.5	93.4	93.6	94.0	96.4	107.0	104.4
Cigarettes.....		31.9	31.8	32.0	32.0	31.6	31.6	31.4	30.6	31.4	31.6	31.6	31.4	30.4	29.0
Cigars.....		41.4	40.4	41.8	42.8	42.4	41.6	41.0	40.0	41.4	41.3	41.2	42.0	41.8	40.9
Tobacco and snuff.....		8.8	8.7	8.9	9.2	8.9	8.8	8.6	8.5	8.9	8.9	8.9	9.0	9.2	9.4
Tobacco stemming and redrying.....		18.8	26.6	32.1	27.8	36.6	40.4	34.2	14.4	11.7	11.8	12.3	14.0	25.5	25.1
Textile-mill products.....	1,094.9	1,099.4	1,100.0	1,132.7	1,151.2	1,173.6	1,194.6	1,200.3	1,192.1	1,220.1	1,214.4	1,216.7	1,231.8	1,201.7	1,272.7
Scouring and combing plants.....		5.1	5.2	5.8	5.7	6.3	6.9	7.1	7.2	7.0	6.7	6.6	6.5	6.4	6.8
Yarn and thread mills.....		131.2	133.7	139.2	141.4	144.8	150.3	153.2	150.9	154.9	153.3	153.6	156.6	154.2	165.2
Broad-woven fabric mills.....		473.5	475.4	486.8	495.6	503.8	512.5	515.0	519.3	526.6	523.8	523.3	528.2	527.9	576.1
Narrow fabrics and smallwares.....		32.7	32.7	33.7	34.2	34.7	35.0	34.8	34.5	35.1	35.0	34.2	35.4	33.2	34.7
Knitting mills.....		228.6	225.0	233.8	239.9	246.5	251.6	253.4	248.5	254.7	254.0	254.4	257.0	244.5	244.6
Dyeing and finishing textiles.....		89.8	89.5	92.1	91.8	92.9	94.0	93.7	92.2	94.0	93.9	95.8	97.0	94.2	94.5
Carpets, rugs, other floor coverings.....		52.5	52.4	53.3	53.6	54.4	55.4	54.1	52.7	56.7	56.5	58.3	58.5	54.5	59.6
Hats (except cloth and millinery).....		17.0	16.8	17.5	17.2	17.4	16.9	17.4	17.8	18.1	18.6	17.2	19.2	17.1	17.7
Miscellaneous textile goods.....		69.0	69.3	70.5	71.8	72.8	72.0	71.6	69.0	73.0	72.6	73.3	73.4	69.6	73.5
Apparel and other finished textile products.....	1,204.0	1,194.9	1,174.4	1,198.1	1,198.8	1,216.9	1,212.2	1,235.7	1,178.6	1,200.1	1,187.2	1,212.3	1,266.1	1,190.8	1,187.1
Men's and boys' suits and coats.....		138.4	137.2	138.4	139.4	141.7	142.7	142.5	131.0	140.7	138.6	137.8	139.8	132.5	142.2
Men's and boys' furnishings and work clothing.....		292.0	288.2	296.1	305.4	311.1	312.0	313.4	299.1	311.0	310.8	311.1	310.9	286.1	283.4
Women's outerwear.....		388.1	377.7	378.2	357.4	357.4	356.0	376.1	354.9	349.7	338.4	359.1	396.8	371.7	366.5
Women's, children's undergarments.....		105.0	102.8	105.1	109.4	110.6	108.3	107.6	105.9	108.5	110.9	113.1	113.5	106.4	101.5
Millinery.....		25.1	23.2	20.6	18.6	22.2	21.6	22.7	20.4	17.4	17.9	21.6	27.2	23.2	22.6
Children's outerwear.....		66.6	64.2	64.4	62.5	64.7	64.6	67.3	65.0	67.8	65.2	63.8	67.5	64.9	61.4
Fur goods.....		7.8	8.2	10.1	10.6	9.4	9.6	10.5	11.7	12.0	9.8	7.2	8.7	12.0	13.6
Miscellaneous apparel and accessories.....		53.1	57.0	61.4	63.8	65.8	66.0	65.9	63.1	64.5	64.6	65.3	65.4	65.1	68.7
Other fabricated textile products.....		113.8	115.9	125.8	131.7	134.0	131.4	129.7	127.5	128.5	131.0	133.3	136.3	129.0	127.3

See footnotes at end of table.

TABLE A-2: Employees in nonagricultural establishments, by industry division and group<sup>1</sup>—Continued

Industry group and industry	[In thousands]												Annual average		
	1954						1953						1952	1951	
	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1952	1951
<b>Manufacturing—Continued</b>															
Lumber and wood products (except furniture).....	679.5	687.6	681.9	716.9	755.5	773.0	781.0	792.1	786.6	800.1	782.2	769.7	757.1	782.0	834.4
Logging camps and contractors.....	65.5	57.5	69.0	83.7	84.9	86.1	89.2	85.5	89.6	83.7	75.7	72.6	84.0	101.4	
Sawmills and planing mills.....	402.7	403.7	420.6	439.5	450.8	456.6	462.5	460.2	465.7	456.3	450.4	441.2	457.8	477.4	
Millwork, plywood, and prefabricated structural wood products.....	109.0	109.8	113.3	116.6	119.8	119.6	119.9	120.1	123.1	121.3	122.7	120.9	118.9	124.4	
Wooden containers.....	55.4	55.5	56.9	57.6	58.7	59.1	60.2	61.2	61.8	61.5	61.0	61.2	61.0	65.8	
Miscellaneous wood products.....	55.0	55.4	57.1	58.1	58.8	59.6	60.3	59.6	59.9	59.4	59.9	61.2	60.4	63.4	
Furniture and fixtures.....	339.4	344.5	347.8	355.8	363.4	367.5	370.3	370.1	369.9	371.6	376.5	383.0	387.1	361.0	361.3
Household furniture.....	241.0	241.7	248.7	256.5	259.6	261.3	261.6	261.4	264.2	269.4	275.5	279.8	257.1	257.1	
Office, public-building, and professional furniture.....	37.5	37.9	38.4	38.3	38.6	39.3	39.5	39.2	39.0	39.6	40.0	40.1	39.9	40.7	
Partitions, shelving, lockers, and fixtures.....	35.6	36.9	36.8	36.8	37.5	36.8	37.0	37.1	36.7	36.3	36.3	36.3	35.9	34.1	34.4
Screens, blinds, and miscellaneous furniture and fixtures.....	30.4	31.3	31.9	31.8	31.8	32.9	32.0	32.2	31.7	31.2	31.2	31.3	29.9	29.1	
Paper and allied products.....	530.8	530.5	530.7	535.3	539.2	541.8	543.9	541.5	533.4	535.9	528.5	527.7	527.3	505.6	511.5
Pulp, paper, and paperboard mills.....	264.7	264.4	266.9	266.1	266.7	267.8	266.9	265.4	264.9	261.4	260.7	261.6	257.1	258.7	
Paperboard containers and boxes.....	140.3	141.6	143.9	148.9	149.1	147.8	146.5	141.2	143.8	140.9	141.3	140.8	129.6	131.0	
Other paper and allied products.....	125.5	124.7	124.5	124.2	126.0	128.3	128.1	126.8	127.2	126.2	125.7	124.9	119.0	121.0	
Printing, publishing, and allied industries.....	789.1	788.1	790.2	801.6	798.5	797.5	789.6	778.6	775.5	779.7	775.1	774.3	774.3	762.9	755.5
Newspapers.....	294.9	294.9	299.4	297.6	296.8	294.8	292.9	292.3	293.8	292.5	291.5	290.5	290.5	286.8	282.2
Periodicals.....	69.2	68.9	70.1	69.9	68.5	67.0	65.1	65.0	65.0	65.3	65.4	66.3	64.1	61.1	
Books.....	47.2	47.2	47.5	47.7	48.7	48.4	47.5	46.9	46.9	46.6	46.8	47.4	45.2	45.1	
Commercial printing.....	194.6	197.3	199.4	196.5	196.9	195.3	192.0	192.7	194.3	193.2	193.8	194.0	192.8	193.4	
Lithographing.....	55.9	55.7	57.3	57.9	56.9	56.2	54.7	53.3	54.1	53.6	53.3	53.2	52.9	53.5	
Greeting cards.....	17.3	17.2	19.1	20.3	20.2	19.6	19.3	18.9	18.9	17.6	17.2	17.5	18.2	18.5	
Bookbinding and related industries.....	44.3	44.2	45.1	45.4	46.6	46.0	45.5	45.0	44.9	44.5	44.3	43.9	42.9	42.7	
Miscellaneous publishing and printing services.....	64.7	64.8	63.7	63.2	62.9	62.3	61.6	61.4	61.8	61.8	62.0	61.5	59.9	59.0	
Chemicals and allied products.....	734.2	738.0	742.1	744.5	751.9	756.5	759.1	755.0	751.7	753.2	754.7	762.7	761.3	741.7	742.8
Industrial inorganic chemicals.....	84.0	84.7	85.1	85.1	85.1	85.4	85.7	86.0	84.7	84.0	83.4	83.0	81.9	81.5	
Industrial organic chemicals.....	259.6	266.0	269.6	272.7	275.2	279.3	282.1	280.3	278.1	274.4	272.2	270.6	259.0	259.3	
Drugs and medicines.....	94.9	95.1	91.5	94.0	93.7	94.0	93.2	92.8	94.6	94.2	95.0	95.3	98.4	95.6	
Soap, cleaning and polishing preparations.....	49.6	49.4	49.3	49.3	49.9	49.7	49.4	49.3	49.7	49.0	50.5	50.5	49.8	51.6	
Paints, pigments, and fillers.....	74.0	74.2	74.8	75.1	75.2	75.6	76.3	76.6	75.6	75.4	75.5	75.0	73.1	73.6	
Gum and wood chemicals.....	7.8	7.8	7.8	7.8	7.8	7.6	7.5	7.5	7.4	7.6	7.9	7.8	7.9	8.3	
Fertilizers.....	37.6	32.7	30.9	30.5	32.2	32.7	31.2	30.3	33.0	38.6	45.8	44.4	35.8	35.8	
Vegetable and animal oils and fats.....	42.0	43.7	45.5	46.6	46.2	43.6	37.9	36.4	37.3	38.2	39.9	42.6	44.2	46.8	
Miscellaneous chemicals.....	88.5	88.5	90.0	90.8	91.2	91.2	91.7	92.5	92.8	92.4	92.5	92.1	91.7	90.3	
Products of petroleum and coal.....	252.3	253.4	254.1	256.3	258.8	261.5	264.0	266.4	266.3	264.3	261.0	260.3	259.0	253.9	252.7
Petroleum refining.....	204.3	204.9	205.9	206.7	208.3	209.9	211.7	211.4	209.4	206.8	207.0	206.3	202.1	198.6	
Coke and other petroleum and coal products.....	49.1	49.2	50.4	52.1	53.2	54.1	54.7	54.9	54.9	54.2	53.3	52.7	51.8	54.1	
Rubber products.....	248.2	251.4	254.0	257.7	259.5	265.0	270.3	271.0	269.5	276.3	276.3	276.6	276.4	262.3	263.3
Tires and inner tubes.....	107.9	108.0	108.4	108.4	109.5	112.1	115.3	115.7	116.1	118.1	118.7	118.2	117.5	116.1	111.2
Rubber footwear.....	25.9	27.0	28.3	29.2	29.6	29.7	29.3	28.1	29.1	28.9	29.4	29.8	28.3	29.2	
Other rubber products.....	117.6	119.0	121.0	120.8	123.3	125.3	126.0	125.3	129.1	128.7	129.0	129.1	117.9	123.0	
Leather and leather products.....	375.1	376.9	371.5	372.7	373.7	374.7	381.5	390.8	383.8	390.2	382.4	393.3	402.5	381.9	376.9
Leather, tanned, curried, and finished.....	44.3	44.2	44.3	44.7	46.0	46.6	47.0	46.8	47.6	46.9	46.8	47.4	46.5	48.0	
Industrial leather belting and packing.....	4.8	5.0	5.0	5.1	5.2	5.1	5.3	5.3	5.4	5.7	5.8	5.7	5.1	5.5	
Boot and shoe cut stock and findings.....	18.0	17.7	17.5	16.7	16.2	16.3	17.5	17.7	18.0	16.9	18.1	18.8	17.5	16.8	
Footwear (except rubber).....	250.3	247.8	244.8	240.0	238.1	245.4	253.2	248.8	254.5	249.2	255.4	261.7	246.7	241.0	
Luggage.....	15.2	14.9	16.9	18.7	19.2	18.8	18.6	18.3	19.2	19.2	19.1	18.4	17.8	15.9	
Handbags and small leather goods.....	30.2	28.6	28.9	30.8	30.7	29.6	29.7	28.2	26.7	26.1	29.7	32.2	29.0	29.4	
Gloves and miscellaneous leather goods.....	14.1	13.3	15.3	17.7	19.3	19.7	19.5	18.7	18.8	18.4	18.4	18.3	19.4	20.3	
Stone, clay, and glass products.....	508.0	506.9	507.4	527.8	538.8	544.7	547.7	546.6	538.9	547.7	543.0	544.1	541.2	527.9	551.2
Flat glass.....	33.8	34.9	35.6	35.5	35.5	35.8	35.4	35.1	34.9	35.0	35.3	35.4	32.6	33.2	
Glass and glassware, pressed or blown.....	96.8	96.2	101.6	104.6	104.8	104.8	103.1	100.4	105.4	104.2	104.3	103.6	96.2	98.0	
Glass products made of purchased glass.....	14.8	15.1	15.6	15.8	16.4	16.4	16.6	16.3	16.9	17.0	17.7	17.5	16.2	16.7	
Cement, hydraulic.....	39.8	40.3	41.0	41.4	41.2	41.7	41.9	41.8	40.9	41.0	40.6	40.6	39.9	40.6	
Structural clay products.....	71.8	72.8	76.1	77.6	78.5	78.5	79.4	80.0	80.3	78.0	77.5	76.9	80.9	85.2	
Pottery and related products.....	52.1	50.2	52.3	53.7	54.8	54.4	53.3	48.5	54.3	55.1	56.3	57.0	57.2	63.0	
Concrete, gypsum, and plaster products.....	95.7	95.3	100.8	104.1	105.8	107.7	108.6	108.1	105.8	104.7	104.1	101.6	100.7	101.6	
Cut-stone and stone products.....	18.4	18.2	18.8	18.9	18.8	18.8	18.8	18.4	18.5	17.9	18.3	18.3	17.5	18.0	
Miscellaneous nonmetallic mineral products.....	83.7	84.4	86.0	87.2	88.9	89.6	89.5	90.3	90.7	90.1	90.0	90.3	86.9	94.2	

See footnotes at end of table.

TABLE A-2: Employees in nonagricultural establishments, by industry division and group <sup>1</sup>—Continued

[In thousands]

Industry group and industry	1954				1953									Annual average	
	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1952	1951
<b>Manufacturing—Continued</b>															
Primary metal industries.....	1,185.1	1,209.0	1,232.7	1,258.3	1,276.0	1,300.7	1,316.9	1,330.1	1,336.9	1,346.0	1,338.4	1,343.9	1,343.6	1,227.4	1,313.0
Blast furnaces, steel works, and rolling mills.....	603.1	614.2	626.6	637.7	650.3	650.3	654.0	666.8	665.1	662.1	655.9	656.6	656.5	570.7	643.5
Iron and steel foundries.....	216.3	219.2	222.7	224.0	230.1	236.9	237.1	243.1	248.7	250.5	253.2	253.2	253.0	266.2	266.2
Primary smelting and refining of non-ferrous metals.....	50.4	50.2	50.3	50.7	51.5	52.5	52.4	52.8	52.5	52.2	51.5	51.2	50.6	50.3	50.3
Secondary smelting and refining of non-ferrous metals.....	11.5	11.8	12.0	12.2	12.4	12.4	12.5	12.6	12.8	12.9	12.9	12.7	12.3	13.2	13.2
Rolling, drawing, and alloying of non-ferrous metals.....	111.8	115.6	118.4	119.6	122.0	121.7	122.3	121.5	123.8	123.4	123.1	122.0	122.0	111.3	110.8
Nonferrous foundries.....	82.3	84.8	87.9	89.7	90.7	92.9	93.1	95.3	96.6	94.9	97.2	98.2	98.2	89.8	87.0
Miscellaneous primary metal industries.....	133.6	136.9	140.4	142.1	143.7	146.5	145.9	146.5	149.5	148.6	149.4	149.8	139.8	142.2	142.2
Fabricated metal products (except ordnance, machinery, and transportation equipment).....	1,057.3	1,076.2	1,088.9	1,092.8	1,120.8	1,142.0	1,156.3	1,160.5	1,151.7	1,168.0	1,162.3	1,160.6	1,159.3	1,045.6	1,059.7
Tin cans and other tinware.....	53.5	54.4	53.9	56.2	59.3	59.3	63.1	64.3	61.3	59.7	57.8	57.0	56.9	56.6	58.1
Cutlery, handtools, and hardware.....	152.9	151.4	152.7	150.9	152.6	155.4	159.5	159.1	164.6	165.3	164.0	164.9	149.8	162.8	162.8
Heating apparatus (except electric) and plumbers' supplies.....	133.5	134.2	140.4	145.4	150.9	151.5	152.1	151.3	153.4	153.7	155.0	154.1	142.8	144.1	144.1
Fabricated structural metal products.....	272.2	273.8	279.8	281.9	283.6	285.2	283.6	278.8	279.7	274.6	272.2	272.7	263.8	241.2	241.2
Metal stamping, coating, and engraving.....	222.9	228.6	231.5	229.5	234.4	236.0	235.4	236.6	242.1	241.8	241.4	240.8	196.7	202.0	202.0
Lighting fixtures.....	46.2	47.1	48.2	48.2	48.7	49.4	50.1	49.4	50.1	50.3	50.9	50.8	45.6	48.2	48.2
Fabricated wire products.....	62.8	65.4	69.5	70.5	70.2	71.2	71.2	71.5	72.4	72.9	73.7	73.2	63.9	66.1	66.1
Miscellaneous fabricated metal products.....	132.2	134.0	136.8	138.2	142.3	144.5	144.3	143.7	146.0	145.9	146.4	145.9	136.5	137.1	137.1
Machinery (except electrical).....	1,565.2	1,581.0	1,589.1	1,597.2	1,599.6	1,614.6	1,626.3	1,635.3	1,665.7	1,698.4	1,702.0	1,714.3	1,727.8	1,642.4	1,601.3
Engines and turbines.....	84.9	86.2	88.8	90.7	91.2	91.5	90.6	94.5	95.5	95.6	95.9	96.5	96.5	88.9	81.2
Agricultural machinery and tractors.....	150.3	145.3	143.5	142.2	151.0	162.4	171.5	179.3	184.5	187.1	190.6	195.8	185.1	198.4	198.4
Construction and mining machinery.....	120.6	121.3	121.8	122.8	124.3	127.4	129.7	131.0	133.5	130.9	131.1	134.2	132.2	120.5	120.5
Metalworking machinery.....	274.6	278.7	279.0	281.3	283.0	284.2	281.1	281.6	285.8	285.6	285.2	285.4	280.3	262.4	262.4
Special-industry machinery (except metalworking machinery).....	180.4	181.8	183.5	183.5	184.0	183.7	185.6	186.8	191.0	190.3	190.9	191.9	190.9	196.0	196.0
General industrial machinery.....	227.6	230.6	234.0	234.7	235.3	233.5	234.0	236.4	236.9	234.2	234.4	234.5	230.7	224.4	224.4
Office and store machines and devices.....	110.4	111.2	112.4	112.0	112.8	111.6	110.3	111.4	112.0	112.4	112.6	112.3	109.8	106.3	106.3
Service-industry and household machines.....	197.2	195.4	194.2	193.2	193.6	192.0	194.0	202.0	213.3	219.4	224.7	227.5	186.5	182.2	182.2
Miscellaneous machinery parts.....	235.0	238.6	240.0	239.2	239.4	240.0	238.5	242.7	245.9	246.5	248.9	247.8	230.0	228.8	228.8
Electrical machinery.....	1,086.2	1,100.9	1,119.1	1,148.4	1,176.7	1,196.1	1,203.7	1,195.4	1,179.3	1,194.8	1,202.0	1,206.5	1,204.0	1,068.4	1,005.4
Electrical generating, transmission, distribution, and industrial apparatus.....	376.0	376.5	382.3	383.0	386.9	388.6	389.5	391.7	393.7	393.6	393.0	390.5	364.8	354.9	354.9
Electrical appliances.....	60.2	67.6	70.0	71.1	71.3	71.2	69.8	70.3	70.9	70.5	69.9	69.3	56.2	59.5	59.5
Insulated wire and cable.....	29.8	30.7	32.0	32.6	33.7	34.2	34.5	34.3	35.4	35.5	35.6	35.5	31.5	29.2	29.2
Electrical equipment for vehicles.....	83.3	83.8	84.6	84.9	85.0	87.3	86.8	88.2	90.9	91.0	91.0	90.5	79.2	78.6	78.6
Electric lamps.....	27.6	28.0	28.3	28.4	28.2	28.0	27.5	27.4	27.3	27.2	26.9	26.3	25.2	31.0	31.0
Communication equipment.....	479.1	488.0	504.8	528.0	541.3	544.9	538.4	519.4	529.2	537.2	542.8	546.0	464.9	405.8	405.8
Miscellaneous electrical products.....	44.9	44.5	46.4	48.7	49.7	49.5	48.9	48.0	47.4	47.0	47.3	45.9	46.6	46.6	46.6
Transportation equipment.....	1,774.2	1,802.3	1,844.7	1,864.9	1,829.6	1,885.2	1,898.8	1,931.4	1,944.1	1,950.8	1,955.8	1,969.9	1,965.7	1,674.9	1,510.3
Automobiles.....	821.4	851.4	886.1	865.9	897.2	904.0	943.8	965.5	969.4	982.3	993.1	983.2	793.5	844.5	844.5
Aircraft and parts.....	762.6	771.2	753.9	734.9	755.6	758.2	749.7	740.9	733.6	728.4	727.3	735.0	641.6	468.6	468.6
Aircraft.....	460.7	467.2	449.6	434.7	455.9	457.7	453.1	447.6	444.5	445.6	446.9	449.2	413.9	313.3	313.3
Aircraft engines and parts.....	165.9	166.8	168.9	169.1	171.3	170.4	168.2	167.9	165.9	161.3	159.2	165.6	134.7	90.8	90.8
Aircraft propellers and parts.....	16.3	16.5	16.6	16.5	16.5	16.7	16.3	16.3	16.4	16.4	16.5	16.5	14.0	10.8	10.8
Other aircraft parts and equipment.....	119.7	120.7	118.8	114.6	111.9	113.4	112.1	109.1	106.8	105.1	104.7	103.7	79.1	48.8	48.8
Ship- and boatbuilding and repairing.....	140.7	141.5	141.9	144.3	144.5	148.1	148.5	151.6	153.9	153.0	157.1	155.1	151.0	116.0	116.0
Shipbuilding and repairing.....	116.0	117.3	118.9	120.4	120.7	124.0	123.6	125.6	127.1	126.1	130.5	129.7	131.2	101.6	101.6
Boatbuilding and repairing.....	24.7	24.2	23.0	23.9	23.8	24.1	24.9	26.0	26.8	26.9	26.6	25.4	19.8	14.4	14.4
Railroad equipment.....	68.2	71.0	72.2	71.5	73.9	74.4	75.3	72.3	80.0	78.6	79.0	79.2	75.8	73.7	73.7
Other transportation equipment.....	9.4	9.6	10.8	13.0	14.0	14.1	14.1	13.8	13.9	13.5	13.4	13.2	12.9	12.6	12.6
Instruments and related products.....	307.7	322.4	327.4	331.0	332.7	330.9	332.6	331.8	333.2	335.4	333.3	333.2	332.5	310.2	292.2
Laboratory, scientific, and engineering instruments.....	52.9	53.6	54.1	54.3	54.2	54.0	51.8	54.4	54.0	53.6	53.6	53.5	48.9	39.1	39.1
Mechanical measuring and controlling instruments.....	78.7	79.1	80.3	80.6	79.1	79.9	81.4	81.1	82.6	81.9	81.8	81.9	74.1	71.8	71.8
Optical instruments and lenses.....	12.0	11.9	11.6	12.0	12.1	12.3	12.3	12.1	12.3	12.3	12.4	12.4	12.4	12.5	12.5
Surgical, medical, and dental instruments.....	37.6	38.5	39.2	39.3	39.6	40.2	40.7	40.8	41.2	41.1	41.1	40.9	39.6	40.0	40.0
Ophthalmic goods.....	28.4	28.5	28.9	28.5	27.8	28.3	28.1	27.9	28.4	28.7	29.0	29.2	28.1	29.0	29.0
Photographic apparatus.....	70.0	71.2	71.1	71.2	71.1	71.2	71.8	71.3	69.4	68.9	68.5	68.3	66.1	62.1	62.1
Watches and clocks.....	42.8	44.6	45.8	46.8	47.0	46.7	45.8	45.6	47.5	46.8	46.8	46.3	41.0	37.7	37.7
Miscellaneous manufacturing industries.....	472.3	480.6	473.8	494.5	511.1	519.2	515.8	508.7	490.2	501.5	497.2	495.9	494.1	456.0	465.4
Jewelry, silverware, and plated ware.....	57.8	57.5	58.4	59.6	58.9	58.9	57.6	55.6	52.8	54.9	54.2	54.6	55.0	54.7	54.7
Musical instruments and parts.....	17.7	17.8	18.1	17.9	18.0	18.2	18.0	17.7	18.0	18.0	18.1	18.3	16.3	16.0	16.0
Toys and sporting goods.....	72.1	69.6	76.6	86.5	93.1	92.7	90.8	87.4	88.1	87.1	84.3	81.3	75.4	41.0	41.0
Pens, pencils, and other office supplies.....	33.0	32.3	33.2	33.7	33.3	32.9	32.4	31.9	32.3	32.3	32.1	32.0	31.7	31.5	31.5
Costume jewelry, buttons, notions.....	68.6	65.5	67.8	70.9	71.9	71.9	71.7	71.7	68.3	68.1	66.4	67.2	69.3	62.1	63.9
Fabricated plastic products.....	70.9	72.5	74.2	76.1	77.3	77.3	76.7	74.6	75.5	75.1	75.1	74.1	66.9	67.2	67.2
Other manufacturing industries.....	160.5	158.6	166.2	166.4	166.7	165.5	161.5	157.5	164.6	164.3	164.6	164.4	153.4	157.0	157.0

See footnotes at end of table.

TABLE A-2: Employees in nonagricultural establishments, by industry division and group <sup>1</sup>—Continued

Industry group and industry	1954												1953												Annual average	
	1954			1953			1952			1951			1950			1949			1952	1951						
	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1952	1951											
<b>Transportation and public utilities</b> .....	4,050	4,103	4,137	4,240	4,273	4,310	4,323	4,337	4,340	4,315	4,279	4,244	4,235	4,220	4,166											
Transportation.....	2,740	2,791	2,824	2,922	2,953	2,989	2,999	3,001	2,999	2,990	2,966	2,949	2,928	2,941	2,921											
Interstate railroads.....	1,250.2	1,272.5	1,328.6	1,354.0	1,382.6	1,393.7	1,407.2	1,409.6	1,399.9	1,387.0	1,376.0	1,360.5	1,360.5	1,399.8	1,449.3											
Class I railroads.....	1,086.1	1,107.6	1,155.1	1,188.0	1,214.6	1,224.3	1,236.7	1,238.8	1,229.2	1,217.5	1,204.9	1,188.5	1,226.2	1,275.9												
Local railroads and buslines.....	128.2	128.9	129.5	129.9	130.4	128.4	129.1	130.6	131.0	130.7	130.7	131.3	134.2	139.0												
Trucking and warehousing.....	728.3	734.0	765.3	768.1	773.1	767.6	753.8	748.4	749.3	745.5	743.0	743.9	714.6	675.6												
Other transportation and services.....	683.8	688.6	698.8	701.1	703.3	708.8	710.8	710.7	709.5	703.1	698.9	691.9	692.1	656.9												
Buslines, except local.....	49.2	50.8	51.2	51.7	52.2	53.1	53.2	53.5	52.9	52.1	51.9	51.4	52.4	53.0												
Air transportation (common carrier).....	102.3	103.7	104.6	104.7	104.7	104.8	105.1	104.9	104.6	102.0	101.1	100.8	95.6	85.2												
Communication.....	740	741	742	747	748	746	752	759	750	747	731	742	717	690												
Telephone.....	695.1	695.2	697.9	699.1	699.5	697.5	703.7	709.5	700.1	697.3	682.3	693.5	672.7	638.9												
Telegraph.....	45.2	46.6	47.2	47.1	47.7	47.7	47.6	48.3	48.9	48.9	48.1	47.9	48.6	50.1												
Other public utilities.....	570	571	571	572	573	573	578	584	582	575	566	564	565	555												
Gas and electric utilities.....	548.6	549.4	550.4	550.5	551.2	550.8	555.1	560.9	558.8	552.2	544.3	542.1	543.0	533.3												
Electric light and power utilities.....	(†)	(†)	(†)	246.8	247.2	247.2	249.5	251.6	250.8	248.2	245.0	244.7	244.3	240.4												
Gas utilities.....	(†)	(†)	(†)	128.1	128.8	128.7	129.6	131.5	130.8	128.9	126.0	124.8	126.5	126.4												
Electric light and gas utilities combined.....	(†)	(†)	(†)	175.5	175.2	174.9	176.0	177.8	177.2	175.1	173.0	172.6	172.2	171.3												
Local utilities, not elsewhere classified.....	22.0	21.9	22.0	22.0	22.2	22.1	22.5	23.0	22.4	21.9	22.1	22.0	21.5	21.7												
<b>Wholesale and retail trade</b> .....	10,252	10,250	10,365	11,310	10,772	10,611	10,464	10,334	10,355	10,415	10,348	10,314	10,284	10,251	10,013											
Wholesale trade.....	2,737	2,745	2,752	2,789	2,790	2,768	2,736	2,733	2,736	2,729	2,712	2,713	2,730	2,721	2,655											
Retail trade.....	7,515	7,505	7,613	8,521	7,982	7,843	7,728	7,601	7,619	7,686	7,636	7,601	7,554	7,530	7,359											
General merchandise stores.....	1,341.6	1,326.8	1,388.0	1,986.0	1,602.2	1,495.5	1,421.0	1,356.4	1,350.3	1,402.3	1,406.2	1,396.6	1,396.4	1,453.2	1,429.3											
Food and liquor stores.....	1,423.9	1,425.1	1,418.2	1,446.3	1,432.2	1,421.7	1,401.5	1,390.8	1,400.8	1,405.7	1,399.3	1,398.2	1,389.2	1,353.8	1,307.6											
Automotive and accessories dealers.....	841.5	845.1	854.1	869.2	858.3	854.2	849.1	851.4	845.6	839.2	829.2	820.0	812.9	779.5	763.7											
Apparel and accessories stores.....	561.0	554.0	576.3	711.8	621.4	608.4	586.1	542.1	551.9	594.7	594.8	593.2	585.7	584.0	575.4											
Other retail trade.....	3,346.7	3,353.6	3,376.1	3,507.5	3,467.5	3,463.2	3,470.4	3,459.9	3,470.3	3,444.3	3,406.4	3,392.7	3,369.9	3,359.1	3,282.4											
<b>Finance, insurance, and real estate</b> <sup>4</sup> .....	2,071	2,060	2,052	2,064	2,056	2,055	2,054	2,076	2,075	2,046	2,025	2,014	1,993	1,957	1,861											
Banks and trust companies <sup>4</sup> .....	521.2	516.1	515.8	513.7	512.0	511.8	518.9	519.3	506.8	499.1	499.0	496.7	480.0	431.0												
Security dealers and exchanges.....	62.3	62.0	62.3	62.6	62.8	62.8	64.5	65.2	64.9	65.2	65.0	64.9	64.5	63.7												
Insurance carriers and agents.....	771.1	767.1	768.9	763.9	761.5	755.8	760.6	757.5	744.6	737.2	735.5	732.3	707.2	671.4												
Other finance agencies and real estate.....	704.9	706.4	716.8	716.1	718.9	723.3	731.5	732.9	729.5	723.1	714.4	699.1	704.8	694.7												
<b>Service and miscellaneous</b> .....	5,251	5,225	5,224	5,272	5,303	5,336	5,393	5,409	5,413	5,397	5,357	5,307	5,225	5,280	5,207											
Hotels and lodging places.....	445.5	438.1	439.6	441.2	451.0	455.7	453.1	457.8	459.9	460.9	463.8	466.0	476.9	476.5												
Personal services:																										
Laundries.....	339.6	341.8	343.7	345.1	346.3	346.3	350.5	354.7	354.1	348.6	343.5	340.4	342.7	342.7												
Cleaning and dyeing plants.....	178.8	179.7	182.2	184.6	184.5	180.2	176.1	180.4	186.8	184.2	180.7	175.0	172.7	166.8												
Motion pictures.....	225.9	226.4	225.1	228.2	230.4	234.0	233.8	233.8	232.1	234.4	232.0	232.0	236.2	244.4												
<b>Government</b> <sup>4</sup> .....	6,749	6,725	6,746	6,999	6,740	6,749	6,663	6,449	6,478	6,638	6,669	6,653	6,666	6,633	6,373											
Federal <sup>4</sup> .....	2,156	2,164	2,173	2,470	2,191	2,195	2,220	2,248	2,271	2,285	2,282	2,304	2,324	2,403	2,261											
State and local <sup>4</sup> .....	4,593	4,561	4,573	4,529	4,549	4,554	4,443	4,201	4,207	4,353	4,387	4,349	4,342	4,230	4,112											

<sup>1</sup> The Bureau of Labor Statistics series of 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 1 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; in State and local government, to persons who received pay for any part of the pay period ending on, or immediately prior to, 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 1951 benchmark levels indicated by data from government social insurance programs. Revised data in all except the first 4 columns 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 with a job whether at work or not, proprietors, self-employed persons, unpaid family workers, and domestic servants.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> Beginning with January 1952, the data for Federal employment are not strictly comparable with those for prior years, primarily as a result of changes in definition. The following changes were made starting with that month: (1) data refer to the last day of the month rather than the first of the month; (2) employment of the Federal Reserve Banks and of the mixed-ownership banks of the Farm Credit Administration were transferred from the Federal total to the "Banks and Trust Companies" group of the "Finance, Insurance, and Real Estate" Division; (3) fourth-class postmasters, formerly excluded as nominal employees, are now included in the Federal total.

<sup>5</sup> State and local government data exclude, as nominal employees, paid volunteer firemen and elected officials of small local units.

†Computation of these data has been discontinued.

See NOTE on p. 576.

TABLE A-3: Production workers in mining and manufacturing industries <sup>1</sup>

[In thousands]

Industry group and industry	1954				1953								Annual average		
	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1952	1951
<b>Mining:</b>															
Metal.....		84.0	84.9	86.2	85.9	85.8	86.0	86.0	86.7	87.4	86.6	86.2	86.7	83.8	88.4
Iron.....		31.8	33.0	34.5	34.6	34.8	35.3	35.5	35.5	35.4	34.9	34.0	33.5	29.1	33.8
Copper.....		24.3	24.3	24.4	24.1	23.8	23.7	23.6	23.7	23.8	23.4	23.5	23.6	22.3	22.4
Lead and zinc.....		13.2	13.0	12.5	12.5	12.7	12.8	13.2	13.5	14.4	14.8	15.3	15.8	18.1	17.8
Anthracite.....		41.3	42.8	45.0	45.1	45.0	46.5	46.5	45.4	50.3	51.6	47.8	53.5	59.5	65.0
Bituminous-coal.....		245.3	254.1	259.8	264.4	261.6	269.5	269.0	238.0	277.1	277.9	286.7	295.8	309.9	348.0
Crude-petroleum and natural-gas production:															
Petroleum and natural-gas production (except contract services).....		125.6	125.	126.1	126.4	127.9	131.0	134.1	133.7	131.9	127.2	127.7	126.5	127.9	124.8
Nonmetallic mining and quarrying.....		82.2	82.3	87.1	89.1	90.5	91.9	92.0	91.2	90.8	89.0	88.2	85.0	88.6	89.2
<b>Manufacturing.....</b>	<b>12,541</b>	<b>12,683</b>	<b>12,793</b>	<b>13,107</b>	<b>13,317</b>	<b>13,627</b>	<b>13,832</b>	<b>13,851</b>	<b>13,666</b>	<b>13,787</b>	<b>13,699</b>	<b>13,758</b>	<b>13,831</b>	<b>13,044</b>	<b>13,135</b>
Durable goods <sup>2</sup> .....	7,238	7,375	7,477	7,651	7,767	7,941	8,016	8,054	8,056	8,190	8,179	8,215	8,211	7,481	7,459
Nondurable goods <sup>2</sup> .....	5,303	5,308	5,316	5,456	5,550	5,686	5,816	5,797	5,610	5,597	5,520	5,543	5,620	5,564	5,676
Ordnance and accessories.....	121.2	132.1	144.1	149.8	153.0	157.5	158.6	158.6	162.1	158.3	155.9	150.2	146.5	125.7	61.5
Food and kindred products.....	991.5	991.9	1,010.5	1,067.5	1,131.3	1,201.9	1,296.6	1,264.1	1,184.0	1,096.6	1,050.6	1,026.5	1,024.8	1,127.1	1,142.4
Meat products.....		234.6	242.6	253.0	258.2	249.1	241.7	240.1	239.5	237.0	233.2	232.7	237.7	245.6	242.9
Dairy products.....		77.0	76.3	77.2	79.0	82.1	87.6	92.5	94.2	93.5	87.1	83.1	79.7	85.1	87.3
Canning and preserving.....		113.2	120.3	136.0	168.3	232.1	342.1	316.2	243.7	165.4	145.9	133.9	122.7	188.8	201.6
Grain-mill products.....		89.7	89.7	89.1	89.6	92.7	93.7	93.3	93.4	93.9	89.3	87.7	89.3	94.0	91.6
Bakery products.....		173.7	174.0	177.4	181.2	183.0	182.5	182.8	183.9	184.0	181.0	178.5	179.7	181.9	181.4
Sugar.....		22.5	24.7	37.9	45.7	44.1	27.5	24.8	24.7	23.2	22.2	22.3	22.7	28.0	29.3
Confectionery and related products.....		66.8	69.0	75.6	78.4	78.8	75.3	68.9	61.3	64.0	62.0	65.5	70.2	71.6	73.0
Beverages.....		117.7	119.7	124.5	130.3	135.1	140.2	143.0	139.2	131.8	131.7	127.2	125.4	132.2	133.8
Miscellaneous food products.....		96.7	94.2	96.8	100.6	104.9	106.0	103.0	104.1	103.8	98.2	95.6	97.4	99.8	101.5
Tobacco manufactures.....	86.3	92.3	99.0	106.2	103.0	111.0	114.0	107.0	85.3	85.0	85.2	87.3	87.3	97.9	95.7
Cigarettes.....		28.8	28.9	28.8	28.9	28.6	28.7	28.5	27.7	28.5	28.5	28.2	27.5	27.5	26.3
Cigars.....		39.6	38.5	39.9	40.9	40.4	39.6	39.0	38.1	39.3	39.2	39.1	39.8	39.6	38.7
Tobacco and snuff.....		7.5	7.4	7.6	7.7	7.6	7.5	7.4	7.2	7.6	7.6	7.6	7.7	7.9	8.1
Tobacco stemming and redrying.....		16.4	24.2	29.9	25.5	34.4	38.2	32.1	12.3	9.6	9.7	10.0	11.6	22.9	22.6
Textile-mill products.....	999.8	1,003.1	1,003.6	1,035.9	1,054.0	1,076.0	1,097.1	1,102.0	1,093.8	1,121.6	1,116.7	1,119.2	1,134.3	1,105.8	1,175.8
Scouring and combing plants.....		4.6	4.7	5.3	5.1	5.8	6.4	6.5	6.6	6.4	6.2	6.1	6.0	5.9	6.3
Yarn and thread mills.....		121.0	123.8	129.2	131.2	134.5	140.0	142.7	140.2	144.4	142.9	143.0	146.0	143.6	154.2
Broad-woven fabric mills.....		445.7	447.7	458.8	467.0	475.2	484.0	486.0	490.2	497.1	494.4	493.8	498.8	498.7	545.8
Narrow fabrics and smallwares.....		28.4	28.6	29.5	30.1	30.8	31.0	30.8	30.5	31.1	31.0	30.2	31.4	29.5	31.2
Knitting mills.....		206.6	202.5	211.4	217.4	223.9	228.9	230.6	226.3	232.3	232.2	232.9	235.4	223.2	223.8
Dyeing and finishing textiles.....		79.2	78.7	81.1	81.3	81.9	82.8	82.7	81.0	82.9	82.9	84.7	85.8	83.4	83.8
Carpets, rugs, other floor coverings.....		43.6	43.5	44.5	44.9	45.7	46.6	45.3	43.9	47.9	47.7	49.7	50.1	46.2	51.0
Hats (except cloth and millinery).....		15.1	15.0	15.7	15.5	15.7	15.2	15.7	16.0	16.3	16.9	15.5	17.4	15.3	15.8
Miscellaneous textile goods.....		58.9	59.1	60.4	61.5	62.5	62.2	61.7	59.1	63.2	62.5	63.3	63.4	60.0	63.8
Apparel and other finished textile products.....	1,079.4	1,070.2	1,049.5	1,070.7	1,071.4	1,089.6	1,086.7	1,108.5	1,053.2	1,072.2	1,060.8	1,086.0	1,138.5	1,066.9	1,065.9
Men's and boys' suits and coats.....		124.0	122.9	124.3	125.2	127.9	129.1	128.8	117.8	126.9	124.9	123.9	125.8	119.3	128.8
Men's and boys' furnishings and work clothing.....		269.6	265.6	272.6	281.9	287.7	289.5	291.0	276.8	287.6	288.2	289.4	288.6	265.1	263.4
Women's outerwear.....		347.3	337.3	335.0	316.3	316.8	315.6	334.7	314.0	308.8	297.9	317.8	355.5	331.2	326.4
Women's, children's undergarments.....		93.3	91.0	93.2	97.4	98.6	96.3	95.5	94.1	96.3	99.0	101.2	101.5	95.0	91.1
Millinery.....		22.9	20.8	18.2	16.2	19.7	19.2	20.3	18.1	15.1	15.5	19.2	24.5	20.6	19.9
Children's outerwear.....		60.8	58.6	58.5	56.7	58.4	58.6	61.0	59.1	61.8	59.1	57.9	61.4	59.1	56.1
Fur goods.....		5.7	6.0	7.9	8.3	7.2	7.4	8.2	9.4	9.6	7.5	5.1	6.5	9.4	10.7
Miscellaneous apparel and accessories.....		51.6	50.2	54.6	56.9	58.7	58.9	58.6	55.8	57.3	57.3	58.0	58.0	57.8	61.0
Other fabricated textile products.....		95.0	97.1	106.4	112.5	114.6	112.1	110.4	108.1	108.8	111.4	113.5	116.7	109.5	108.5
Lumber and wood products (except furniture).....	612.3	620.6	615.7	649.5	687.8	705.3	712.6	722.3	717.8	730.9	712.5	700.5	688.0	713.3	766.8
Logging camps and contractors.....		59.6	52.0	63.3	77.8	79.3	80.6	83.4	80.4	83.8	77.9	70.3	66.9	78.5	95.8
Sawmills and planing mills.....		370.5	372.4	388.4	407.1	418.5	423.4	428.5	425.8	431.9	422.3	416.4	407.5	423.8	444.4
Millwork, plywood, and prefabricated structural wood products.....		90.8	91.5	94.7	98.0	101.0	101.0	101.3	101.8	104.4	102.4	104.0	102.4	100.8	108.4
Wooden containers.....		51.3	51.3	52.8	53.5	54.4	54.8	55.7	56.8	57.4	57.1	56.7	56.8	56.4	61.1
Miscellaneous wood products.....		48.4	48.5	50.3	51.4	52.1	52.8	53.4	53.0	53.4	52.8	53.1	54.4	53.9	57.1
Furniture and fixtures.....	285.5	290.1	293.2	301.4	308.4	312.3	315.3	315.0	314.5	317.4	322.1	328.5	332.7	309.1	310.6
Household furniture.....		207.9	208.5	215.8	223.4	226.1	228.1	228.0	228.0	231.5	236.5	242.3	247.0	225.5	226.0
Office, public-building, and professional furniture.....		30.6	31.0	31.3	31.1	31.6	32.3	32.5	32.0	32.0	32.6	33.1	33.1	33.0	33.8
Partitions, shelving, lockers, and fixtures.....		27.4	28.8	28.9	28.6	29.3	28.6	28.8	28.8	28.8	28.2	28.1	27.7	26.6	27.0
Screens, blinds, and miscellaneous furniture and fixtures.....		24.2	24.9	25.4	25.3	25.3	26.3	25.5	25.7	25.4	24.8	25.0	24.9	23.9	23.8

See footnotes at end of table.

TABLE A-3: Production workers in mining and manufacturing industries<sup>1</sup>—Continued

[In thousands]

Industry group and industry	1954				1953								Annual average		
	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1952	1951
<b>Manufacturing—Continued</b>															
Paper and allied products.....	442.4	441.1	441.7	446.4	449.7	451.7	453.5	450.3	442.0	445.6	439.7	439.5	439.3	422.5	434.3
Pulp, paper, and paperboard mills.....	224.8	224.5	226.6	226.6	225.9	226.4	228.2	226.6	224.8	225.2	222.2	221.8	222.6	219.4	223.4
Paperboard containers and boxes.....	115.5	116.6	118.8	118.8	123.5	123.6	121.9	120.2	118.0	117.8	115.6	116.3	116.2	107.4	111.7
Other paper and allied products.....	100.8	100.6	101.0	101.0	100.3	101.7	103.4	103.5	102.2	102.6	101.9	101.4	100.5	96.8	99.2
Printing, publishing, and allied industries.....	499.8	498.5	501.5	512.1	510.0	513.1	509.2	498.6	496.0	501.6	498.7	497.9	499.2	494.2	493.9
Newspapers.....	143.9	144.5	150.0	148.8	149.6	149.2	146.4	145.8	147.8	147.7	146.3	146.1	144.4	144.2	142.9
Periodicals.....	28.6	28.5	28.4	28.5	28.7	28.8	27.7	27.7	27.8	28.3	28.4	29.1	28.7	28.7	28.6
Books.....	28.2	28.0	27.9	28.0	28.5	28.6	27.7	27.7	27.1	27.5	27.2	27.5	27.8	27.1	27.3
Commercial printing.....	158.2	160.8	162.9	159.9	160.7	159.0	155.9	157.0	158.9	157.6	158.3	158.7	158.1	158.1	168.5
Lithographing.....	42.7	42.4	43.9	44.7	44.2	43.4	42.2	40.9	41.9	41.5	41.3	41.4	40.9	41.7	41.7
Greeting cards.....	12.7	12.4	14.3	15.4	15.6	15.2	15.0	14.5	14.3	13.2	12.7	13.1	13.8	14.1	14.1
Bookbinding and related industries.....	34.4	34.5	35.2	35.5	36.9	36.5	36.0	35.4	35.4	35.1	34.9	34.6	34.3	33.9	33.4
Miscellaneous publishing and printing services.....	49.8	50.4	49.5	49.2	48.9	48.5	47.7	47.6	48.0	48.1	48.5	48.4	47.5	47.5	47.5
Chemicals and allied products.....	495.5	497.7	499.9	500.6	508.1	512.8	515.1	510.6	508.3	513.1	516.9	525.8	525.9	515.5	520.5
Industrial inorganic chemicals.....	59.8	60.6	60.7	60.6	60.8	60.7	60.7	60.9	61.3	60.1	59.8	59.7	59.4	58.8	59.5
Industrial organic chemicals.....	177.3	182.4	185.1	187.4	189.6	193.3	196.2	195.0	195.0	192.3	190.9	190.4	185.6	192.0	192.0
Drugs and medicines.....	59.5	59.3	55.8	59.4	58.6	58.6	57.1	56.7	58.8	58.9	59.4	59.4	59.8	62.5	62.7
Soap, cleaning and polishing preparations.....	30.7	30.4	30.0	30.2	30.7	30.8	30.5	30.4	31.1	31.5	32.1	32.1	31.6	31.6	33.4
Paints, pigments, and fillers.....	46.1	46.3	46.7	46.7	47.0	47.6	48.3	48.9	48.4	47.9	47.9	47.5	46.6	47.5	47.5
Gum and wood chemicals.....	6.7	6.7	6.7	6.7	6.7	6.6	6.5	6.4	6.3	6.5	6.7	6.7	6.9	7.3	7.3
Fertilizers.....	29.9	24.9	23.3	22.9	24.6	25.0	23.5	22.6	25.2	30.8	37.9	36.6	28.3	28.7	28.7
Vegetable and animal oils and fats.....	30.5	32.0	33.4	34.3	34.4	32.6	27.1	25.5	26.3	27.3	29.2	31.8	32.7	36.2	36.2
Miscellaneous chemicals.....	57.2	57.3	58.9	59.9	60.5	60.0	60.6	61.5	61.9	61.9	62.0	61.6	62.5	62.1	62.1
Products of petroleum and coal.....	177.4	178.1	178.3	181.1	184.3	185.8	188.3	190.9	190.4	189.7	187.6	187.6	186.4	182.6	188.2
Petroleum refining.....	138.9	138.9	140.6	142.0	142.5	144.0	146.0	145.4	144.5	143.1	144.1	143.6	140.5	143.3	143.3
Coke and other petroleum and coal products.....	39.2	39.4	40.5	42.3	43.3	44.3	44.9	45.0	45.2	44.5	43.5	42.8	42.0	44.9	44.9
Rubber products.....	194.2	197.3	199.3	202.3	203.8	209.2	214.2	214.4	213.2	220.3	220.2	220.5	220.5	208.2	212.0
Tires and inner tubes.....	82.8	82.6	82.9	83.7	86.6	89.6	89.6	90.1	92.4	92.7	92.2	91.6	90.8	87.4	87.4
Rubber footwear.....	20.4	21.5	22.9	23.7	24.0	24.1	23.6	22.5	23.5	23.3	23.8	24.2	22.9	23.9	23.9
Other rubber products.....	94.1	95.2	96.5	96.4	98.6	100.5	101.2	100.6	104.4	104.2	104.5	104.7	94.6	100.7	100.7
Leather and leather products.....	336.3	337.6	332.2	332.9	334.2	335.0	341.3	350.5	344.0	350.9	343.5	354.5	363.3	343.1	338.7
Leather: tanned, curried, and finished.....	39.8	39.7	39.7	39.7	40.1	41.3	41.9	42.3	42.0	42.9	42.2	42.2	42.8	41.8	43.8
Industrial leather belting and packing.....	3.7	3.9	4.0	4.1	4.2	4.1	4.3	4.3	4.5	4.7	4.9	4.8	4.3	4.8	4.8
Boot and shoe cut stock and findings.....	16.1	15.8	15.6	14.8	14.4	14.4	15.6	15.8	16.1	15.0	16.2	16.9	15.6	15.0	15.0
Footwear (except rubber).....	226.3	223.5	220.3	216.0	213.8	220.9	228.1	224.4	230.5	225.7	231.7	237.7	223.2	218.4	218.4
Luggage.....	12.9	12.7	14.5	16.3	16.8	16.3	16.3	16.0	16.8	16.8	16.8	16.0	15.5	13.8	13.8
Handbags and small leather goods.....	27.0	25.5	25.8	27.7	27.7	26.6	26.6	25.1	23.6	23.9	26.6	29.1	25.8	26.0	26.0
Gloves and miscellaneous leather goods.....	11.8	11.1	13.0	15.2	16.8	17.1	17.3	16.4	16.5	16.1	16.1	16.0	16.8	17.5	17.5
Stone, clay, and glass products.....	425.5	425.2	426.3	445.5	456.4	462.7	465.3	463.4	456.2	465.4	460.6	462.3	459.2	448.4	475.1
Flat glass.....	30.0	31.1	31.9	31.8	31.7	31.9	31.5	31.1	31.0	31.2	31.5	31.5	28.9	29.7	29.7
Glass and glassware, pressed or blown.....	82.8	82.2	87.6	90.6	91.1	90.6	89.3	86.6	91.6	90.5	90.7	89.9	83.1	85.3	85.3
Glass products made of purchased glass.....	12.9	13.1	13.6	13.7	14.3	14.3	14.5	14.2	14.7	14.8	15.5	15.3	13.9	14.5	14.5
Cement, hydraulic.....	33.3	33.8	34.4	34.9	34.7	35.2	35.3	35.2	34.4	34.5	34.2	34.1	33.8	34.7	34.7
Structural clay products.....	63.3	64.6	67.9	69.5	70.4	70.5	71.1	71.8	72.1	69.8	69.1	68.6	72.7	77.5	77.5
Pottery and related products.....	46.1	44.2	46.3	47.4	48.7	48.2	47.1	42.5	48.3	48.9	50.1	50.8	51.1	56.9	56.9
Concrete, gypsum, and plaster products.....	77.4	77.4	82.1	85.5	87.5	89.2	89.8	89.5	87.4	86.1	85.4	83.0	82.3	84.7	84.7
Cut-stone and stone products.....	16.2	16.0	16.6	16.6	16.7	16.8	16.6	16.2	16.3	15.6	16.2	16.2	15.3	16.6	16.6
Miscellaneous nonmetallic products.....	63.2	63.9	65.1	66.4	67.6	68.6	68.2	69.1	69.6	69.2	69.6	69.8	68.7	75.1	75.1
Primary metal industries.....	990.7	1,013.7	1,035.1	1,061.1	1,075.7	1,099.4	1,117.1	1,127.9	1,133.7	1,143.1	1,137.9	1,143.5	1,144.8	1,039.7	1,132.1
Blast furnaces, steelworks, and rolling mills.....	512.2	522.2	534.0	542.2	554.9	560.8	572.4	570.5	567.2	561.8	562.4	563.6	486.5	560.2	560.2
Iron and steel foundries.....	188.2	190.6	194.4	195.8	201.9	208.0	207.8	213.6	219.5	221.1	224.1	224.2	223.4	237.1	237.1
Primary smelting and refining of non-ferrous metals.....	41.7	41.5	41.6	42.2	43.0	44.0	43.6	43.7	43.4	43.1	42.4	42.2	42.0	42.3	42.3
Secondary smelting and refining of non-ferrous metals.....	8.3	8.6	9.0	9.0	9.3	9.2	9.3	9.3	9.5	9.6	9.6	9.5	9.2	10.2	10.2
Rolling, drawing, and alloying of non-ferrous metals.....	88.9	92.8	95.6	96.8	98.9	98.7	98.8	97.9	100.5	100.8	100.4	99.4	90.1	90.8	90.8
Nonferrous foundries.....	66.9	69.1	72.5	74.3	75.0	77.1	77.5	79.4	80.6	79.5	82.0	82.9	74.9	72.8	72.8
Miscellaneous primary metal industries.....	107.5	110.3	114.0	115.4	116.4	119.3	118.5	119.3	122.4	122.0	122.6	123.0	113.7	118.9	118.9
Fabricated metal products (except ordnance, machinery, and transportation equipment).....	846.9	865.7	877.2	878.5	907.3	928.6	943.6	946.2	937.6	956.3	951.7	952.3	952.3	850.1	874.3
Tin cans and other tinware.....	46.5	47.3	27.0	49.0	52.2	55.9	57.0	54.0	52.7	50.9	50.3	50.1	49.7	50.8	50.8
Cutlery, handtools, and hardware.....	125.5	123.6	124.8	122.9	124.7	127.5	131.7	130.9	136.4	137.4	136.5	137.4	123.2	136.7	136.7
Heating apparatus (except electric) and plumbers' supplies.....	103.5	104.3	110.0	115.0	120.5	120.9	121.5	120.2	123.3	123.3	124.6	123.7	113.8	116.3	116.3
Fabricated structural metal products.....	207.1	208.7	214.5	217.1	218.8	220.8	218.4	214.2	216.1	211.5	210.0	210.7	196.0	188.1	188.1
Metal stamping, coating, and engraving.....	186.4	191.4	193.4	191.5	196.7	198.4	197.6	199.4	204.8	204.8	204.9	204.9	164.2	172.5	172.5
Lighting fixtures.....	37.2	38.0	39.0	39.1	39.6	40.5	41.3	40.6	41.1	41.3	41.9	41.9	36.9	39.8	39.8
Fabricated wire products.....	51.9	54.4	58.2	59.4	58.9	59.9	59.7	60.0	60.9	61.6	62.5	62.1	53.3	55.8	55.8
Miscellaneous fabricated metal products.....	107.6	109.5	111.6	113.3	117.2	119.7	119.0	118.3	121.0	120.9	121.6	121.5	113.1	114.3	114.3

TABLE A-3: Production workers in mining and manufacturing industries<sup>1</sup>—Continued

Industry group and industry	[In thousands]												Annual average		
	1954			1953									1952	1951	
	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1952	1951
<b>Manufacturing—Continued</b>															
Machinery (except electrical).....	1,173.6	1,187.5	1,193.3	1,202.4	1,204.5	1,218.9	1,228.4	1,235.0	1,264.2	1,300.0	1,306.6	1,320.5	1,334.6	1,262.5	1,245.1
Engines and turbines.....	60.7	61.6	64.2	65.7	66.2	66.4	65.2	68.8	70.2	70.5	70.9	71.7	71.7	65.9	60.8
Agricultural machinery and tractors.....	109.7	104.5	102.4	101.0	109.4	119.7	127.6	135.4	140.5	143.0	146.5	151.6	140.9	154.6	154.6
Construction and mining machinery.....	88.5	88.8	89.1	89.8	91.4	94.0	96.1	97.4	99.9	97.8	98.0	100.9	100.3	90.6	90.6
Metalworking machinery.....	214.3	218.2	219.6	221.6	223.1	224.3	221.3	221.6	227.1	227.3	227.6	228.1	224.4	209.6	209.6
Special-industry machinery (except metalworking machinery).....	131.6	132.1	134.3	134.0	134.1	134.0	135.2	136.6	140.6	140.0	141.1	142.1	142.6	150.1	150.1
General industrial machinery.....	156.9	160.1	163.2	164.0	164.7	163.0	163.8	165.7	167.2	166.0	165.5	167.0	164.3	163.2	163.2
Office and store machines and devices.....	88.3	88.9	90.2	90.1	91.0	89.9	88.9	89.9	90.7	91.5	91.7	91.5	90.0	88.8	88.8
Service-industry and household machines.....	152.3	150.3	149.0	147.8	148.2	146.2	145.1	155.7	166.4	172.4	177.9	180.1	144.3	142.6	142.6
Miscellaneous machinery parts.....	185.2	188.8	190.4	190.5	190.8	190.9	189.0	193.1	197.4	198.1	200.3	201.6	189.9	184.7	184.7
<b>Electrical machinery</b>	802.2	815.9	828.7	855.9	884.9	904.8	912.9	905.0	891.5	910.6	919.1	926.0	924.7	806.9	768.6
Electrical generating, transmission, distribution, and industrial apparatus.....	263.4	268.4	273.6	273.5	278.1	280.8	280.9	283.4	287.5	287.8	287.3	285.1	264.3	261.8	261.8
Electrical appliances.....	54.7	56.2	58.2	59.3	59.1	59.3	58.2	58.6	59.2	59.0	58.4	57.9	45.7	47.7	47.7
Insulated wire and cable.....	24.1	24.9	26.3	26.8	27.9	28.3	28.7	28.4	29.5	29.5	29.6	29.6	26.2	24.0	24.0
Electrical equipment for vehicles.....	68.1	68.4	68.9	69.1	69.0	71.2	70.6	72.3	75.3	75.8	76.1	75.5	63.5	64.3	64.3
Electric lamps.....	24.2	24.6	24.9	25.0	24.8	24.5	24.1	24.1	24.0	23.8	23.6	23.1	21.7	21.7	21.7
Communication equipment.....	347.4	352.6	368.4	393.5	407.3	410.3	404.6	387.8	398.8	407.3	414.8	418.3	349.5	307.1	307.1
Miscellaneous electrical products.....	34.0	33.6	35.6	37.7	38.6	38.5	37.9	36.9	36.3	35.9	36.2	35.2	36.1	36.8	36.8
<b>Transportation equipment</b>	1,374.7	1,400.0	1,441.1	1,460.1	1,423.1	1,479.1	1,492.7	1,521.4	1,533.4	1,548.3	1,556.1	1,575.9	1,573.6	1,320.5	1,219.8
Automobiles.....	666.2	695.6	726.2	703.2	732.3	732.3	737.7	775.1	796.0	803.4	816.1	830.7	820.6	647.1	707.9
Aircraft and parts.....	551.7	559.5	545.2	527.6	551.0	555.4	545.3	537.0	534.8	532.3	532.8	542.3	549.5	341.9	341.9
Aircraft.....	330.7	337.3	321.9	307.8	330.5	334.6	328.1	322.3	321.8	324.8	327.2	330.2	302.8	232.3	232.3
Aircraft engines and parts.....	118.1	118.2	120.1	119.7	122.5	121.5	119.6	118.9	118.3	114.5	112.6	119.1	95.9	63.7	63.7
Aircraft propellers and parts.....	11.8	12.0	12.2	12.1	12.1	12.2	11.8	12.0	12.1	12.1	12.2	12.3	10.0	7.6	7.6
Other aircraft parts and equipment.....	91.1	92.0	91.0	88.0	85.9	87.1	85.8	83.8	82.6	80.9	80.8	80.7	60.8	38.3	38.3
Ship- and boatbuilding and repairing.....	122.7	123.8	124.5	126.6	126.6	130.1	130.4	133.6	135.5	134.8	139.0	136.8	133.2	100.9	100.9
Shipbuilding and repairing.....	100.8	102.4	104.2	105.5	105.7	109.0	108.4	110.4	111.6	110.7	115.1	114.0	115.4	88.2	88.2
Boatbuilding and repairing.....	21.9	21.4	20.3	21.1	20.9	21.1	22.0	23.2	23.9	24.1	23.9	22.8	17.8	12.8	12.8
Railroad equipment.....	52.0	54.7	55.5	54.7	57.3	57.6	58.6	55.1	62.9	61.4	62.1	62.7	59.8	58.5	58.5
Other transportation equipment.....	7.4	7.5	8.7	11.0	11.9	11.9	12.0	11.7	11.7	11.5	11.3	11.2	10.9	10.6	10.6
<b>Instruments and related products</b>	220.6	231.2	235.7	239.9	242.1	240.8	241.4	239.3	241.2	245.1	243.6	244.3	244.4	227.6	216.7
Laboratory, scientific, and engineering instruments.....	32.4	33.0	33.4	33.8	33.7	33.5	31.1	33.5	33.8	33.6	34.1	34.3	32.0	25.8	25.8
Mechanical measuring and controlling instruments.....	55.8	55.9	57.4	57.8	56.8	56.8	57.6	57.7	59.6	59.3	59.2	59.6	53.1	52.5	52.5
Optical instruments and lenses.....	9.3	9.3	9.1	9.5	9.5	9.7	9.6	9.6	9.7	9.7	9.7	9.7	9.9	10.0	10.0
Surgical, medical, and dental instruments.....	26.3	27.2	27.8	28.2	28.4	28.9	29.1	29.1	29.5	29.4	29.4	29.4	28.6	29.2	29.2
Ophthalmic goods.....	22.7	22.9	23.2	22.8	22.2	22.6	22.5	22.3	22.8	23.1	23.4	23.6	22.7	23.7	23.7
Photographic apparatus.....	48.4	49.3	49.6	49.6	49.5	49.4	49.9	49.7	48.8	48.1	48.0	47.9	46.4	43.6	43.6
Watches and clocks.....	36.3	38.1	39.4	40.4	40.7	40.5	39.5	39.3	40.9	40.4	40.5	39.9	35.0	31.9	31.9
<b>Miscellaneous manufacturing industries</b>	385.2	393.2	386.5	406.4	423.6	431.6	428.0	419.8	403.3	414.9	412.5	411.2	409.9	376.7	388.3
Jewelry, silverware, and plated ware.....	47.2	46.7	47.9	49.1	48.5	47.1	45.2	42.8	44.7	44.1	44.4	44.6	41.1	44.7	44.7
Musical instruments and parts.....	15.2	15.4	15.6	15.6	15.7	15.9	15.7	15.3	15.6	15.6	15.7	15.9	13.8	14.1	14.1
Toys and sporting goods.....	59.9	57.4	64.5	74.5	80.8	80.2	78.8	74.9	75.7	75.5	73.0	69.8	64.8	64.5	64.5
Pens, pencils, and other office supplies.....	24.7	24.4	25.2	25.7	25.3	25.0	24.4	23.9	24.4	24.3	24.2	23.9	24.0	24.8	24.8
Costume jewelry, buttons, notions.....	57.5	54.6	56.3	59.2	60.4	59.9	60.4	57.1	57.2	55.5	56.3	58.3	51.6	53.7	53.7
Fabricated plastic products.....	58.4	60.0	61.5	63.4	64.4	64.5	63.8	61.8	63.0	63.1	63.1	62.4	55.8	67.0	67.0
Other manufacturing industries.....	130.3	128.0	135.4	136.1	136.5	135.4	131.5	127.5	134.3	134.4	134.5	135.0	125.6	129.5	129.5

<sup>1</sup> 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 record-keeping and other services closely associated with the above production operations.

<sup>2</sup> See footnote 2, table A-2.

<sup>3</sup> See footnote 3, table A-2.

See NOTE on p. 576.

TABLE A-4: Indexes of production-worker employment and weekly payrolls in manufacturing industries<sup>1</sup>

[1947-49=100]

Period	Employment	Weekly payroll	Period	Employment	Weekly payroll	Period	Employment	Weekly payroll
1939: Average	66.2	29.9	1949: Average	93.8	97.2	1953: July	110.5	148.9
1940: Average	71.2	34.0	1950: Average	99.6	111.7	August	112.0	151.6
1941: Average	87.9	49.3	1951: Average	106.2	129.6	September	111.8	150.9
1942: Average	103.9	72.2	1952: Average	105.5	135.3	October	110.2	149.3
1943: Average	121.4	99.0				November	107.7	145.6
1944: Average	118.1	102.8	1953: March	111.8	151.9	December	106.0	144.0
1945: Average	104.0	87.8	April	111.2	150.0			
1946: Average	97.9	81.2	May	110.8	149.9	1954: January	103.4	138.6
1947: Average	103.4	97.7	June	111.5	150.8	February	102.5	137.3
1948: Average	102.8	105.1				March	101.4	

<sup>1</sup> See footnote 1, tables A-2 and A-3.

See NOTE on p. 576.

TABLE A-5: Federal civilian employment by branch and agency group

[In thousands]

Year and month	All branches	Executive <sup>1</sup>				Legislative	Judicial
		Total	Department of Defense	Post Office Department*	Other agencies		
Continental United States <sup>2</sup>							
1952: Average	2,403	2,376.7	1,199.2	521.7	655.8	22.6	3.9
1953: February	2,343	2,316.4	1,197.7	486.0	632.7	22.5	3.8
March	2,324	2,297.3	1,181.0	486.0	630.3	22.5	3.8
April	2,304	2,278.0	1,160.6	486.0	631.4	22.5	3.9
May	2,282	2,256.1	1,140.4	486.0	629.7	22.3	3.9
June	2,285	2,258.8	1,138.1	486.0	634.7	22.3	3.9
July	2,271	2,244.5	1,128.2	488.2	628.1	22.2	3.9
August	2,248	2,221.6	1,113.0	484.6	624.0	22.2	3.9
September	2,220	2,194.6	1,094.4	487.0	613.2	21.9	3.8
October	2,195	2,169.0	1,076.5	487.5	605.0	21.8	3.9
November	2,191	2,165.7	1,069.0	493.9	602.8	21.7	3.9
December	2,470	2,444.2	1,063.5	782.4	598.3	21.7	3.9
1954: January	2,173	2,147.4	1,058.0	494.0	595.4	21.7	3.9
February	2,164	2,138.6	1,048.4	491.8	598.4	21.7	3.9
Washington, D. C. <sup>3</sup>							
1952: Average	257.4	235.9	92.8	8.7	134.4	20.8	0.7
1953: February	251.6	230.3	93.4	8.1	128.8	20.6	.7
March	249.4	228.0	92.8	8.1	127.1	20.7	.7
April	245.9	224.6	91.6	8.1	124.9	20.6	.7
May	242.7	221.6	90.2	8.1	123.3	20.4	.7
June	242.2	221.1	90.1	8.1	122.9	20.4	.7
July	238.3	217.3	89.6	8.0	119.7	20.3	.7
August	235.2	214.2	88.9	7.9	117.4	20.3	.7
September	232.7	211.9	89.6	7.8	114.5	20.1	.7
October	229.9	209.2	88.9	7.9	112.4	20.0	.7
November	229.0	208.3	88.6	7.8	111.9	19.9	.8
December	232.5	211.8	88.2	12.1	111.5	19.9	.8
1954: January	227.2	206.5	87.8	7.8	110.9	19.9	.8
February	226.4	205.7	87.1	7.8	110.8	19.9	.8

<sup>1</sup> Includes all executive agencies (except Central Intelligence Agency) and Government corporations. Civilian employment in navy yards, arsenals, hospitals, and on force-account construction is also included.

<sup>2</sup> Includes the 48 States and the District of Columbia.

<sup>3</sup> Includes all Federal civilian employment in Washington Standard Metropolitan Area (District of Columbia and adjacent Maryland and Virginia counties).

\*Post Office Department employment was not available beginning with February 1953; and the January figure was used through June. Beginning with July 1953, actual data are reported.

See NOTE on p. 576.



TABLE A-8: Insured unemployment under State unemployment insurance programs,<sup>1</sup> by geographic division and State

[In thousands]

Geographic division and State	1954		1953										1952	
	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	April	Mar.	Feb.	Feb.
Continental United States.....	2,169.3	2,033.8	1,508.9	1,115.1	840.0	779.4	816.1	861.1	832.7	899.0	960.6	1,014.5	1,083.6	1,284.1
New England.....	161.2	153.8	118.7	91.6	73.1	66.1	64.0	66.6	61.9	74.6	79.6	76.3	81.4	113.1
Maine.....	14.4	14.9	13.5	10.1	7.4	5.3	4.9	5.8	6.3	9.9	11.6	8.1	8.9	9.2
New Hampshire.....	9.4	10.2	9.3	8.8	8.4	7.2	5.5	5.8	6.2	7.0	7.2	6.0	5.4	7.0
Vermont.....	3.6	3.8	2.7	1.5	1.0	1.2	1.1	1.1	1.0	1.1	1.4	1.6	1.9	2.3
Massachusetts.....	78.3	75.7	60.3	45.9	36.8	34.5	31.4	34.7	32.7	38.0	39.4	39.3	42.5	61.0
Rhode Island.....	27.2	24.5	17.3	13.6	10.7	9.3	10.0	9.7	9.3	11.2	11.7	12.9	13.4	18.6
Connecticut.....	28.3	24.7	15.6	11.7	8.8	8.6	11.1	9.5	6.4	6.8	8.3	8.4	9.3	15.0
Middle Atlantic.....	575.6	563.9	430.1	331.3	246.2	251.2	257.0	283.8	275.0	289.1	313.5	301.4	310.9	373.2
New York.....	264.5	265.1	209.9	168.9	120.1	127.2	132.2	153.6	156.6	163.4	164.3	157.8	165.5	209.6
New Jersey.....	89.0	91.0	65.8	50.0	37.2	38.3	39.1	45.9	40.2	45.5	48.6	43.7	45.1	54.7
Pennsylvania.....	222.1	207.8	154.4	112.4	88.9	85.7	85.7	84.3	78.2	80.2	100.6	99.9	100.3	108.9
East North Central.....	472.3	426.1	318.1	233.2	179.3	152.4	155.8	140.2	130.0	124.8	121.2	122.3	138.3	226.1
Ohio.....	109.3	99.0	72.2	50.2	33.7	25.2	23.0	23.6	29.4	26.6	24.5	26.9	30.6	47.8
Indiana.....	65.8	60.4	40.7	28.4	20.9	14.7	14.6	14.8	14.4	11.8	11.5	12.9	15.2	23.8
Illinois.....	126.9	117.8	86.2	60.4	52.0	43.3	49.7	53.7	54.5	57.0	55.8	45.1	50.9	63.3
Michigan.....	127.8	107.0	83.3	69.4	56.0	52.4	53.1	30.6	22.7	20.9	19.9	24.4	27.0	73.7
Wisconsin.....	42.5	41.9	35.7	24.8	16.7	16.8	15.4	17.5	9.0	8.5	9.5	13.0	14.6	17.5
West North Central.....	127.8	119.7	81.9	56.0	39.8	32.3	31.1	38.1	39.0	42.6	53.6	68.9	74.3	76.1
Minnesota.....	35.3	33.5	19.8	9.8	6.2	5.8	6.7	7.6	8.0	12.3	19.8	25.1	26.5	26.7
Iowa.....	17.1	16.2	10.1	6.2	4.3	3.7	4.0	4.3	4.0	4.6	5.8	8.0	8.9	8.9
Missouri.....	42.0	40.2	32.9	28.8	21.6	16.4	14.2	19.0	20.1	18.2	17.2	18.6	20.2	24.3
North Dakota.....	5.4	4.2	2.4	.8	.2	.2	.2	.3	.5	.9	2.3	4.2	4.4	3.7
South Dakota.....	3.3	2.7	1.4	.4	.2	.2	.2	.2	.2	.4	.9	1.9	2.2	1.9
Nebraska.....	8.9	7.6	4.3	1.9	1.1	1.0	.9	1.1	1.2	1.8	2.6	4.7	5.9	5.1
Kansas.....	15.8	15.3	11.0	8.1	6.2	5.0	4.9	5.6	5.0	4.4	5.0	6.4	7.2	5.5
South Atlantic.....	221.5	213.6	148.2	113.9	93.8	91.7	101.8	112.5	105.2	108.5	101.0	104.1	105.6	106.8
Delaware.....	4.6	4.0	3.0	2.4	1.6	1.2	.8	.9	.9	.9	1.0	1.3	1.6	1.7
Maryland.....	27.5	24.8	16.5	12.6	8.6	8.2	9.7	10.7	10.3	12.2	12.5	10.6	12.1	11.6
District of Columbia.....	7.5	6.3	4.4	3.4	2.7	2.6	2.4	2.5	2.4	2.6	3.0	3.5	3.6	3.0
Virginia.....	22.4	21.6	14.3	10.3	8.0	8.4	10.7	13.7	14.8	11.3	7.5	9.3	9.4	9.3
West Virginia.....	36.3	32.5	20.5	15.4	12.3	12.4	14.2	16.6	15.3	15.3	16.6	17.6	17.3	15.7
North Carolina.....	54.1	54.6	36.6	28.9	22.4	21.3	20.9	24.5	25.8	27.3	28.2	28.3	27.0	28.4
South Carolina.....	21.1	22.4	15.9	12.6	10.3	9.3	11.0	12.3	10.1	10.6	10.3	10.8	10.6	12.2
Georgia.....	33.7	34.0	25.2	17.0	12.7	11.9	12.8	14.3	13.8	13.6	13.5	14.0	14.8	15.3
Florida.....	14.3	13.4	11.8	11.3	15.2	16.4	19.3	17.0	11.8	9.7	8.4	8.7	9.2	9.6
East South Central.....	151.5	139.7	103.2	77.4	59.7	52.5	58.7	60.9	57.5	66.2	69.3	71.3	75.0	79.1
Kentucky.....	45.3	40.3	30.9	23.0	19.3	14.9	17.0	17.0	17.3	19.6	20.2	20.0	19.6	19.7
Tennessee.....	56.3	52.6	36.9	28.8	21.2	19.3	19.3	21.2	18.4	21.6	23.0	22.9	26.0	31.4
Alabama.....	28.9	26.9	21.3	16.5	12.4	12.2	14.2	14.1	13.9	15.4	16.0	16.9	17.1	15.1
Mississippi.....	21.0	19.9	14.1	9.1	6.8	6.1	8.2	8.6	7.9	9.6	10.1	11.5	12.3	12.9
West South Central.....	107.9	94.1	64.8	47.2	38.5	37.3	45.1	46.2	44.2	48.0	51.0	58.2	61.2	63.3
Arkansas.....	22.1	19.8	13.1	9.2	7.3	5.7	7.5	7.6	7.2	8.9	10.8	12.9	14.5	15.5
Louisiana.....	25.0	22.2	13.9	9.4	7.8	8.8	11.2	12.2	11.8	12.9	13.2	15.6	16.7	21.5
Oklahoma.....	18.8	17.0	12.4	9.3	7.0	6.0	8.2	9.1	9.2	9.5	10.2	11.9	12.8	11.2
Texas.....	42.0	35.1	25.4	19.3	16.4	16.8	18.2	17.3	16.0	16.7	16.8	17.8	17.2	15.1
Mountain.....	60.0	51.6	33.9	19.5	12.8	11.0	12.7	12.7	12.8	15.1	21.1	29.1	33.5	31.9
Montana.....	8.4	6.9	3.2	1.3	.7	.6	.7	1.0	1.4	2.2	3.0	6.3	6.9	6.8
Idaho.....	11.8	11.0	7.9	3.8	1.5	1.2	1.3	1.4	1.5	2.2	4.0	6.1	8.1	7.3
Wyoming.....	3.7	2.2	1.1	.4	.2	.2	.2	.2	.3	.5	.7	1.4	1.7	1.5
Colorado.....	9.2	7.8	5.0	3.1	1.8	1.5	1.8	1.6	1.6	2.0	2.8	3.2	3.4	2.7
New Mexico.....	6.5	5.7	4.4	2.8	2.4	2.0	2.3	1.9	1.7	1.8	2.2	2.7	2.8	2.6
Arizona.....	6.5	6.0	4.6	3.8	3.4	3.3	3.8	3.5	3.2	3.2	3.3	3.6	3.6	3.2
Utah.....	10.0	8.7	5.2	2.7	1.7	1.5	1.8	2.1	2.3	2.4	3.1	4.4	5.3	5.8
Nevada.....	3.9	3.3	2.5	1.6	1.1	.7	.8	.8	.8	.8	1.1	1.4	1.7	2.0
Pacific.....	291.5	271.3	209.9	144.9	96.6	85.0	90.0	100.0	107.1	125.1	150.4	182.7	203.4	214.0
Washington.....	63.4	66.1	49.4	34.9	22.2	16.9	15.6	14.0	12.5	17.5	26.0	34.4	43.5	38.4
Oregon.....	42.3	43.9	36.2	23.8	13.0	9.6	10.1	9.6	8.9	11.6	16.6	24.2	31.2	27.6
California.....	185.8	161.3	124.3	86.2	61.4	58.5	64.3	76.4	85.7	96.0	107.8	124.1	128.7	148.0

<sup>1</sup> 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 (per 100 employees) in manufacturing industries, by class of turnover<sup>1</sup>

Class of turnover and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>Total separation:<sup>†</sup></b>												
1954.....	4.3	<sup>‡</sup> 3.6										
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
1952.....	4.0	3.9	3.7	4.1	3.9	3.9	5.0	4.6	4.9	4.2	3.5	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
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
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
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
1947.....	4.9	4.5	4.9	5.2	5.4	4.7	4.6	5.3	5.9	5.0	4.0	3.7
1946.....	6.8	6.3	6.6	6.3	6.3	5.7	5.8	6.6	6.9	6.3	4.9	4.5
1939.....	3.2	2.6	3.1	3.5	3.5	3.3		3.0	2.8	2.9	3.0	3.5
<b>Quit:</b>												
1954.....	1.1	<sup>‡</sup> 1.0										
1953.....	2.1	2.2	2.5	2.7	2.7	2.6	2.5	2.9	3.1	2.1	1.5	1.1
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
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
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
1949.....	1.7	1.4	1.6	1.7	1.6	1.5	1.4	1.8	2.1	1.5	1.2	.9
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
1947.....	3.5	3.2	3.5	3.7	3.5	3.1	3.1	4.0	4.5	3.6	2.7	2.3
1946.....	4.3	3.9	4.2	4.3	4.2	4.0	4.6	5.3	5.3	4.7	3.7	3.0
1939 <sup>‡</sup> .....	.9	.6	.8	.8	.7	.7	.7	.8	1.1	.9	.8	.7
<b>Discharge:</b>												
1954.....	.2	<sup>‡</sup> 2.2										
1953.....	.3	.4	.4	.4	.4	.4	.4	.4	.4	.4	.3	.2
1952.....	.3	.3	.3	.3	.3	.3	.3	.3	.4	.4	.4	.3
1951.....	.3	.3	.3	.4	.4	.4	.3	.4	.3	.4	.4	.3
1950.....	.2	.2	.2	.2	.3	.3	.3	.4	.4	.4	.3	.3
1949.....	.3	.3	.3	.2	.2	.2	.2	.3	.2	.2	.2	.2
1948.....	.4	.4	.4	.4	.3	.4	.4	.4	.4	.4	.4	.3
1947.....	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4
1946.....	.5	.5	.4	.4	.4	.3	.4	.4	.4	.4	.4	.4
1939.....	.1	.1	.1	.1	.1	.1	.1	.1	.1	.2	.2	.1
<b>Layoff:</b>												
1954.....	2.8	<sup>‡</sup> 2.3										
1953.....	.9	.8	.8	.9	1.0	.9	1.1	1.3	1.5	1.8	2.3	2.5
1952.....	1.4	1.3	1.1	1.3	1.1	1.1	2.2	1.0	.7	.7	.7	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
1950.....	1.7	1.7	1.4	1.2	1.1	.9	.6	.6	.7	.8	1.1	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
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
1947.....	.9	.8	.9	1.0	1.4	1.1	1.0	.8	.9	.9	1.8	.9
1946.....	1.8	1.7	1.8	1.4	1.5	1.2	.6	.7	1.0	1.0	.7	1.0
1939.....	2.2	1.9	2.2	2.6	2.7	2.5	2.5	2.1	1.6	1.8	2.0	2.7
<b>Miscellaneous including military:</b>												
1954.....	.3	<sup>‡</sup> 1.1										
1953.....	.4	.4	.3	.3	.3	.3	.3	.3	.3	.3	.3	.2
1952.....	.4	.4	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3
1951.....	.7	.6	.5	.5	.4	.4	.4	.4	.4	.4	.4	.3
1950.....	.1	.1	.1	.1	.1	.1	.2	.3	.4	.4	.3	.3
1949.....	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
1948.....	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
1947.....	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
1946.....	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.1	.1
<b>Total accession:</b>												
1954.....	2.8	<sup>‡</sup> 2.6										
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
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
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
1950.....	3.6	3.2	3.6	3.5	4.4	4.8	4.7	6.6	5.7	5.2	4.0	3.9
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
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
1947.....	6.0	5.0	5.1	5.1	4.8	5.5	4.9	5.3	5.9	5.5	4.8	3.6
1946.....	8.5	8.8	7.1	6.7	6.1	6.7	7.4	7.0	7.1	6.8	5.7	4.3
1939.....	4.1	3.1	3.3	2.9	3.3	3.9	4.2	5.1	6.2	5.9	4.1	2.8

<sup>1</sup> 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 and payroll reports, for the following reasons:

(1) Accessions and separations are computed 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 and payroll 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 stoppage is reflected, however, in the employment and payroll figures. Prior to 1943, rates relate to production workers only.

<sup>‡</sup> Preliminary.

<sup>†</sup> Prior to 1940, miscellaneous separations were included with quits.

<sup>‡</sup> Beginning with data for October 1952, components may not add to total because of rounding.

**NOTE:** 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 (per 100 employees) in selected groups and industries<sup>1</sup>

Industry group and industry	Separation										Total accession	
	Total		Quit		Discharge		Layoff		Misc., incl. military			
	Feb. 1954	Jan. 1954	Feb. 1954	Jan. 1954	Feb. 1954	Jan. 1954	Feb. 1954	Jan. 1954	Feb. 1954	Jan. 1954	Feb. 1954	Jan. 1954
<i>Manufacturing</i>												
All manufacturing.....	3.6	4.3	1.0	1.1	0.2	0.2	2.3	2.8	0.1	0.3	2.6	2.8
Durable goods <sup>1</sup> .....	4.0	4.7	.9	1.0	.2	.2	2.7	3.2	.2	.3	2.6	2.8
Nondurable goods <sup>1</sup> .....	2.9	3.0	1.1	1.3	.2	.2	1.4	2.0	.1	.3	2.5	2.8
Ordnance and accessories.....	8.4	4.7	.9	1.1	.3	.3	7.1	3.2	.1	.2	2.1	1.6
Food and kindred products.....	3.4	4.3	1.0	1.1	.2	.3	2.0	2.7	.1	.2	2.7	4.2
Meat products.....	5.1	5.5	.9	.8	.2	.2	3.7	4.2	.2	.3	3.1	4.9
Grain-mill products.....	2.8	2.3	1.1	1.1	.4	.4	1.1	.6	.2	.1	2.2	2.6
Bakery products.....	2.4	3.0	1.1	1.6	.3	.3	.8	.9	.1	.2	2.4	3.0
Beverages:												
Malt liquors.....	1.6	2.9	.3	.3	.1	.1	1.2	2.4	.1	.1	2.4	5.5
Tobacco manufactures.....	2.3	3.5	1.1	1.5	.2	.2	1.0	1.7	.1	.1	3.1	4.0
Cigarettes.....	2.0	1.7	.8	1.0	.2	.1	.8	.5	.1	.1	1.5	2.3
Cigars.....	2.7	5.3	1.4	2.0	.1	.2	1.2	3.1	.1	.1	4.7	5.9
Tobacco and snuff.....	1.7	1.7	.4	.9	.1	.1	.7	.1	.4	.7	1.9	1.4
Textile-mill products.....	3.4	4.5	1.1	1.3	.2	.2	2.0	2.7	.1	.3	2.8	2.4
Yarn and thread mills.....	3.4	5.9	1.0	1.5	.1	.2	2.2	4.1	.1	.1	2.8	2.1
Broad-woven fabric mills.....	3.3	4.1	1.2	1.3	.2	.2	1.8	2.3	.2	.3	2.6	2.3
Cotton, silk, synthetic fiber.....	3.2	3.7	1.2	1.3	.2	.2	1.6	1.9	.2	.3	2.2	2.2
Woolen and worsted.....	4.7	8.1	.7	.7	.1	.1	3.5	6.9	.4	.3	7.4	3.2
Knitting mills.....	3.2	4.4	1.2	1.5	.1	.1	1.8	2.7	.1	.1	3.1	2.4
Full-fashioned hosiery.....	2.4	2.5	1.1	1.7	.2	.1	1.1	.6	.1	.1	2.2	2.4
Seamless hosiery.....	3.2	5.4	1.1	1.5	.1	.1	1.8	3.6	.2	.1	3.0	2.1
Knit underwear.....	2.8	5.3	1.4	1.4	.1	.1	1.3	3.7	( <sup>1</sup> )	.1	3.2	1.6
Dyeing and finishing textiles.....	2.0	3.2	.5	1.2	.1	.2	1.1	1.7	.1	.1	2.5	1.7
Carpets, rugs, other floor coverings.....	2.3	2.6	.8	.9	.1	.1	1.1	1.1	.3	.5	1.8	2.9
Apparel and other finished textile products.....	3.5	4.5	2.3	2.4	.1	.2	1.1	1.8	.1	.1	3.5	4.1
Men's and boys' suits and coats.....	2.1	3.2	1.4	2.1	.1	.2	.5	.8	.1	.2	2.1	2.4
Men's and boys' furnishings and work clothing.....	4.2	5.7	2.6	2.7	.1	.1	1.5	2.8	.1	.1	3.6	4.9
Lumber and wood products (except furniture).....	3.6	5.1	.9	1.1	.2	.3	2.4	3.5	.2	.3	5.2	3.8
Logging camps and contractors.....	10.2	11.5	1.3	1.3	.1	.3	8.5	9.7	.3	.2	16.8	6.6
Sawmills and planing mills.....	2.5	4.2	.8	1.1	.2	.1	1.4	2.9	.1	.2	3.6	3.7
Millwork, plywood, and prefabricated structural wood products.....	2.9	3.4	.8	1.0	.1	.2	1.9	2.1	.1	.2	2.8	2.9
Furniture and fixtures.....	4.0	3.6	1.4	1.4	.3	.3	2.2	1.7	.1	.2	3.1	3.4
Household furniture.....	3.6	3.9	1.3	1.5	.4	.4	1.7	1.8	.2	.3	3.5	3.7
Other furniture and fixtures.....	5.2	3.1	1.5	1.3	.3	.2	3.3	1.4	.1	.2	2.0	3.0
Paper and allied products.....	1.8	2.8	.7	1.0	.2	.2	.8	1.3	.1	.3	1.8	2.0
Pulp, paper, and paperboard mills.....	1.1	1.8	.5	.7	.1	.1	.3	.7	.2	.3	1.1	1.4
Paperboard containers and boxes.....	3.2	4.2	1.0	1.5	.2	.4	1.7	2.0	.2	.3	1.5	1.8
Chemicals and allied products.....	2.0	2.1	.7	.7	.2	.1	1.1	1.1	.1	.2	1.6	1.2
Industrial inorganic chemicals.....	2.1	2.4	.9	1.0	.3	.3	.8	1.0	.1	.1	1.3	1.6
Industrial organic chemicals.....	3.2	2.4	.3	.4	.1	.1	1.7	1.7	.1	.2	1.1	.6
Synthetic fibers.....	3.2	2.7	.2	.3	( <sup>1</sup> )	( <sup>1</sup> )	2.7	2.2	.2	.2	2.2	.5
Drugs and medicines.....	1.0	1.6	.6	1.0	.1	.1	.2	.4	.1	.2	1.9	1.4
Paints, pigments, and fillers.....	2.1	1.7	.6	.7	.3	.1	1.0	.6	.1	.3	1.3	1.5
Products of petroleum and coal.....	.8	1.5	.3	.3	( <sup>1</sup> )	( <sup>1</sup> )	.2	.8	.3	.2	1.2	.5
Petroleum refining.....	.7	1.2	.2	.2	( <sup>1</sup> )	( <sup>1</sup> )	.3	.7	.2	.2	.4	.3
Rubber products.....	3.5	3.5	.8	.8	.1	.1	2.3	2.4	.1	.2	2.0	2.5
Tires and inner tubes.....	2.0	2.8	.6	.5	( <sup>1</sup> )	.1	1.2	2.0	.2	.2	1.8	2.3
Rubber footwear.....	7.1	6.5	1.4	1.4	.1	.2	5.5	4.7	.1	.2	1.3	1.2
Other rubber products.....	4.1	3.5	.9	.9	.3	.2	2.7	2.2	.1	.2	2.3	3.1
Leather and leather products.....	3.0	3.1	1.9	1.8	.3	.2	.8	.9	.2	.2	3.0	3.7
Leather.....	3.3	2.7	.7	.8	.2	.1	2.3	1.5	.2	.2	1.0	2.5
Footwear (except rubber).....	3.0	3.2	2.1	2.0	.3	.3	.5	.8	.2	.2	3.4	3.9
Stone, clay, and glass products.....	3.8	3.4	.6	.7	.1	.1	2.9	2.4	.1	.2	1.8	1.7
Glass and glass products.....	5.0	4.6	.5	.6	.1	.1	4.2	3.7	.3	.3	2.1	1.9
Cement, hydraulic.....	1.3	1.4	.5	.6	.2	.2	.3	.3	.3	.3	.7	.7
Structural clay products.....	2.8	4.3	1.0	1.0	.2	.2	1.5	2.9	.1	.1	2.4	2.0
Pottery and related products.....	1.5	2.1	.7	.9	.1	.2	.6	.8	.1	.2	1.7	2.2
Primary metal industries.....	2.9	3.5	.6	.7	.1	.1	1.9	2.5	.2	.3	1.8	1.6
Blast furnaces, steelworks, and rolling mills.....	2.2	2.8	.6	.7	.1	( <sup>1</sup> )	1.2	1.9	.3	.2	1.7	1.4
Iron and steel foundries.....	2.9	3.8	.7	.9	.2	.2	1.7	2.5	.2	.2	2.7	2.6
Gray-iron foundries.....	2.9	2.7	.7	1.0	.3	.2	1.7	1.4	.2	.2	2.5	2.7
Malleable-iron foundries.....	2.5	3.5	.9	1.4	.2	.3	1.1	1.6	.2	.2	3.5	5.3
Steel foundries.....	2.9	5.0	.6	.7	.2	.2	2.0	4.0	.2	.2	2.6	1.4
Primary smelting and refining of non-ferrous metals:												
Primary smelting and refining of copper, lead, and zinc.....	1.5	2.5	.3	.6	( <sup>1</sup> )	.1	.9	1.6	.2	.2	.6	.6
Rolling, drawing, and alloying of non-ferrous metals:												
Rolling, drawing, and alloying of copper.....	4.4	2.5	.3	.4	.1	.1	3.9	1.7	.1	.4	1.1	.8
Nonferrous foundries.....	6.2	6.7	.7	1.1	.2	.3	5.0	5.1	.3	.3	2.5	2.5
Other primary metal industries:												
Iron and steel forgings.....	3.7	5.0	.8	.9	.2	.1	2.6	3.7	.1	.4	1.0	1.4

See footnotes at end of table.

TABLE B-2: Monthly labor turnover rates (per 100 employees) in selected groups and industries<sup>1</sup>—Continued

Industry group and industry	Separation										Total accession	
	Total		Quit		Discharge		Layoff		Misc., incl. military			
	Feb. 1954	Jan. 1954	Feb. 1954	Jan. 1954	Feb. 1954	Jan. 1954	Feb. 1954	Jan. 1954	Feb. 1954	Jan. 1954	Feb. 1954	Jan. 1954
<i>Manufacturing—Continued</i>												
Fabricated metal products (except ordnance, machinery, and transportation equipment).....	4.6	6.2	0.9	1.1	0.2	0.3	3.2	4.6	0.2	0.2	2.9	3.6
Cutlery, handtools, and hardware.....	3.2	4.3	.9	1.2	.2	.3	1.9	2.5	.2	.3	2.0	2.3
Cutlery and edge tools.....	2.6	2.5	.6	.7	.3	.2	1.7	1.4	(4)	.1	1.8	1.8
Handtools.....	3.0	3.5	.7	.9	.2	.3	2.1	2.0	.1	.2	1.1	2.5
Hardware.....	3.4	5.3	1.0	1.5	.2	.2	1.9	3.1	.2	.5	2.3	2.4
Heating apparatus (except electric) and plumbers' supplies.....	5.4	5.0	1.2	1.2	.3	.3	3.7	3.4	.1	.1	3.1	5.8
Sanitary ware and plumbers' supplies.....	2.9	4.0	.7	.9	.2	.3	1.9	2.7	.1	.1	2.3	7.3
Oil burners, nonelectric heating and cooking apparatus, not elsewhere classified.....	7.6	5.9	1.6	1.4	.4	.4	5.4	4.0	.2	.2	3.7	4.5
Fabricated structural metal products.....	2.7	3.7	.8	.9	.3	.3	1.4	2.3	.1	.3	2.4	2.4
Metal stamping, coating, and engraving.....	6.5	10.1	.9	1.0	.3	.2	5.1	8.6	.2	.3	3.6	5.2
Machinery (except electrical).....	3.1	3.2	.8	.8	.2	.2	1.9	1.9	.2	.3	2.1	2.0
Engines and turbines.....	1.5	3.3	.6	.6	.2	.1	.6	2.4	.1	.1	2.4	2.3
Agricultural machinery and tractors.....	3.4	2.4	.9	.6	.2	.1	2.0	1.3	.3	.5	4.0	4.7
Construction and mining machinery.....	2.7	2.9	.7	.9	.2	.2	1.6	1.7	.1	.1	1.9	1.7
Metalworking machinery.....	4.0	3.2	.7	.9	.2	.2	2.8	1.9	.1	.1	1.3	1.4
Machine tools.....	4.6	2.9	.6	.7	.2	.2	3.6	1.8	.2	.2	.9	1.0
Metalworking machinery (except machine tools).....	2.6	2.5	.9	1.2	.2	.3	1.3	.8	.2	.2	1.4	1.8
Machine-tool accessories.....	3.7	4.9	.9	1.2	.3	.2	2.4	3.5	.2	.1	2.3	2.0
Special-industry machinery (except metalworking machinery).....	2.7	3.1	.9	.9	.3	.3	1.5	1.6	.1	.3	2.4	2.3
General industrial machinery.....	2.8	3.6	.7	.8	.2	.2	1.8	2.2	.1	.4	1.5	1.4
Office and store machines and devices.....	3.3	2.4	.9	.9	.2	.2	2.0	1.1	.2	.2	1.7	2.0
Service-industry and household machines.....	3.7	4.0	.9	.9	.3	.2	2.2	2.5	.3	.4	3.1	2.5
Miscellaneous machinery parts.....	2.4	3.3	.6	.8	.2	.2	1.5	2.0	.2	.2	1.5	1.2
Electrical machinery.....	3.8	4.0	1.1	1.2	.2	.2	2.3	2.3	.3	.3	2.5	2.1
Electrical generating, transmission, distribution, and industrial apparatus.....	2.1	2.7	.6	.8	.1	.1	1.1	1.6	.2	.2	1.3	1.5
Communication equipment.....	4.3	4.7	1.5	1.6	.2	.2	2.4	2.6	.2	.3	3.3	2.4
Radios, phonographs, television sets, and equipment.....	4.4	5.8	1.4	1.6	.2	.3	2.5	3.6	.3	.3	3.8	3.0
Telephone, telegraph, and related equipment.....	(5)	1.5	(5)	1.0	(5)	.2	(5)	(4)	(5)	.2	(5)	1.4
Electrical appliances, lamps, and miscellaneous products.....	6.3	5.9	1.1	1.2	.2	.2	4.7	4.1	.3	.3	2.6	2.8
Transportation equipment.....	5.3	6.8	1.0	1.1	.3	.2	3.8	5.1	.2	.4	2.7	3.8
Automobiles.....	6.8	9.9	.6	.8	.2	.1	5.8	8.4	.2	.5	2.4	4.1
Aircraft and parts.....	2.7	3.0	1.2	1.3	.3	.3	1.2	1.2	.2	.2	1.9	2.4
Aircraft.....	2.7	3.0	1.2	1.4	.2	.3	1.1	1.2	.2	.2	2.0	2.3
Aircraft engines and parts.....	2.3	2.5	1.1	1.1	.3	.3	.7	.9	.2	.2	1.6	2.5
Aircraft propellers and parts.....	(5)	3.2	(5)	1.0	(5)	.2	(5)	1.9	(5)	.1	(5)	1.4
Other aircraft parts and equipment.....	3.1	3.4	1.0	1.1	.4	.4	1.6	1.8	.1	.1	2.0	2.9
Ship- and boatbuilding and repairing.....	(5)	9.9	(5)	2.1	(5)	.5	(5)	7.1	(5)	.2	(5)	9.8
Railroad equipment.....	(5)	7.1	(5)	.9	(5)	.3	(5)	5.1	(5)	.8	(5)	3.2
Locomotives and parts.....	(5)	5.7	(5)	.4	(5)	(4)	(5)	3.9	(5)	1.3	(5)	1.2
Railroad and streetcars.....	6.8	8.1	1.5	1.2	.5	.4	4.2	5.9	.6	.5	4.7	4.8
Other transportation equipment.....	1.6	2.3	.6	.4	(4)	.1	.8	1.6	.2	.3	1.9	2.9
Instruments and related products.....	3.1	2.7	.8	.8	.1	.1	1.9	1.6	.2	.2	1.3	1.3
Photographic apparatus.....	(5)	1.2	(5)	.5	(5)	(4)	(5)	.5	(5)	.1	(5)	.9
Watches and clocks.....	3.9	3.8	1.1	1.2	.1	.1	2.4	2.3	.3	.3	1.2	1.5
Professional and scientific instruments.....	2.8	3.2	.7	.8	.1	.2	1.7	2.1	.2	.2	1.3	1.4
Miscellaneous manufacturing industries.....	4.1	5.6	1.5	1.9	.2	.3	2.1	3.0	.3	.4	3.4	5.1
Jewelry, silverware, and plated ware.....	3.2	3.3	1.6	1.7	.2	.3	1.1	1.2	.1	.1	2.5	2.9
<i>Nonmanufacturing</i>												
Metal mining.....	2.7	3.4	1.7	1.5	.3	.4	.5	1.1	.3	.4	2.3	3.3
Iron mining.....	1.2	2.8	.3	.3	.1	.2	.4	2.0	.3	.3	.7	.9
Copper mining.....	4.1	3.7	3.1	2.4	.5	.6	.3	.4	.3	.3	2.7	3.2
Lead and zinc mining.....	2.2	1.8	.8	.8	.1	.1	1.1	.8	.2	.1	.7	1.1
Anthracite mining.....	1.5	4.9	.4	1.0	(4)	.1	.9	3.7	.3	.2	1.3	1.1
Bituminous-coal mining.....	5.1	3.6	.7	.6	(4)	.1	4.2	2.6	.1	.2	.8	.8
Communication:												
Telephone.....	(5)	1.4	(5)	1.1	(5)	.1	(5)	.2	(5)	.1	(5)	1.2
Telegraph.....	(5)	2.3	(5)	.9	(5)	(4)	(5)	1.1	(5)	.2	(5)	.6

<sup>1</sup> See footnote 1, table B-1. Current month data subject to revision without notation; revised figures for earlier months will be indicated by footnotes.

<sup>2</sup> See footnote 2, table A-2.

<sup>3</sup> See footnote 3, table A-2. Printing, publishing, and allied industries are excluded.

<sup>4</sup> Less than 0.05.

<sup>5</sup> Data are not available.

<sup>6</sup> Data relate to domestic employees except messengers and those employees compensated entirely on a commission basis.

# C: Earnings and Hours

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees <sup>1</sup>

Year and month	Mining																	
	Metal												Coal					
	Total: Metal			Iron			Copper			Lead and zinc			Anthracite			Bituminous		
	Avg. wklly. earnings	Avg. wklly. hours	Avg. hrly. earnings	Avg. wklly. earnings	Avg. wklly. hours	Avg. hrly. earnings	Avg. wklly. earnings	Avg. wklly. hours	Avg. hrly. earnings	Avg. wklly. earnings	Avg. wklly. hours	Avg. hrly. earnings	Avg. wklly. earnings	Avg. wklly. hours	Avg. hrly. earnings	Avg. wklly. earnings	Avg. wklly. hours	Avg. hrly. earnings
1951: Average	\$74.56	43.6	\$1.71	\$72.68	42.5	\$1.71	\$78.54	46.2	\$1.70	\$76.11	43.0	\$1.77	\$66.66	30.3	\$2.20	\$77.79	35.2	\$2.21
1952: Average	81.65	43.9	1.86	80.34	43.9	1.83	85.75	45.6	1.88	81.60	42.5	1.92	71.19	31.5	2.26	78.32	34.2	2.29
1953: February	84.08	42.9	1.96	83.42	41.5	2.01	88.14	45.2	1.95	80.64	42.0	1.92	86.75	34.7	2.50	81.42	32.7	2.49
March	84.48	43.1	1.96	84.03	41.6	2.02	87.95	45.1	1.95	81.13	42.7	1.90	65.70	26.6	2.47	81.76	33.1	2.47
April	84.67	43.2	1.96	84.84	42.0	2.02	88.53	45.4	1.95	79.57	42.1	1.89	61.99	25.3	2.45	79.61	32.1	2.48
May	86.29	43.8	1.97	88.74	43.5	2.04	88.98	45.4	1.96	79.00	41.8	1.90	77.19	31.0	2.49	84.97	34.4	2.47
June	86.96	43.7	1.99	90.67	43.8	2.07	87.81	44.8	1.96	79.61	41.9	1.90	91.63	36.8	2.49	91.25	36.5	2.50
July	88.82	42.7	2.08	95.82	42.4	2.26	86.33	43.6	1.98	79.52	41.2	1.93	83.89	34.1	2.46	84.97	34.4	2.47
August	92.40	44.0	2.10	98.99	43.8	2.26	93.32	46.2	2.02	79.90	41.4	1.93	61.49	25.2	2.44	92.88	37.3	2.49
September	94.16	44.0	2.14	98.75	43.5	2.27	97.39	46.2	2.09	81.56	41.4	1.97	70.40	28.5	2.47	86.15	34.6	2.49
October	90.29	43.2	2.09	93.04	42.1	2.21	95.27	46.7	2.04	79.15	40.8	1.94	73.41	29.6	2.48	89.78	36.2	2.48
November	90.51	43.1	2.10	93.44	41.9	2.23	95.63	46.2	2.07	77.99	40.2	1.94	63.49	25.6	2.48	81.17	32.6	2.49
December	92.40	44.0	2.10	92.62	42.1	2.20	97.97	47.1	2.08	84.08	42.9	1.96	64.71	26.2	2.47	82.25	33.3	2.47
1954: January	92.00	43.6	2.11	90.45	41.3	2.19	99.22	46.8	2.12	84.32	42.8	1.97	70.93	28.6	2.48	82.34	33.2	2.48
February	85.90	41.9	2.05	85.39	39.9	2.14	90.23	43.8	2.06	75.95	40.4	1.88	70.15	30.1	2.53	78.47	31.9	2.46

Year and month	Mining—Continued																	
	Crude-petroleum and natural-gas production						Nonmetallic mining and quarrying						Contract construction					
	Petroleum and natural-gas production (except contract services)						Total: Contract construction						Nonbuilding construction					
	Avg. wklly. earnings	Avg. wklly. hours	Avg. hrly. earnings	Avg. wklly. earnings	Avg. wklly. hours	Avg. hrly. earnings	Avg. wklly. earnings	Avg. wklly. hours	Avg. hrly. earnings	Avg. wklly. earnings	Avg. wklly. hours	Avg. hrly. earnings	Avg. wklly. earnings	Avg. wklly. hours	Avg. hrly. earnings	Avg. wklly. earnings	Avg. wklly. hours	Avg. hrly. earnings
1951: Average	\$79.76	40.9	\$1.95	\$67.05	45.0	\$1.49	\$81.49	37.9	\$2.15	\$80.78	40.8	\$1.98	\$74.62	41.0	\$1.82	\$85.26	40.6	\$2.10
1952: Average	85.90	41.1	2.09	71.10	45.0	1.58	87.85	38.7	2.27	86.72	41.1	2.11	80.26	41.8	1.92	91.35	40.6	2.25
1953: February	88.29	40.5	2.18	70.85	43.2	1.64	89.01	37.4	2.38	85.10	38.9	2.19	77.22	39.2	1.97	90.02	38.8	2.32
March	88.73	40.7	2.18	72.77	44.1	1.65	88.67	37.1	2.39	84.26	38.3	2.20	75.42	37.9	1.99	89.55	38.6	2.32
April	88.13	40.8	2.16	74.37	44.8	1.66	89.15	37.3	2.39	85.02	39.0	2.18	77.62	39.4	1.97	90.02	38.8	2.32
May	88.99	41.2	2.16	75.94	45.2	1.68	90.58	37.9	2.39	87.20	40.0	2.18	81.61	40.4	2.02	91.71	39.7	2.31
June	87.02	40.1	2.17	76.78	45.7	1.68	92.25	38.6	2.39	91.34	41.9	2.18	88.10	43.4	2.03	94.19	40.6	2.32
July	92.74	41.4	2.24	77.63	45.4	1.71	91.82	38.1	2.41	92.16	41.7	2.21	88.37	42.9	2.06	95.65	40.7	2.35
August	93.83	41.7	2.25	79.41	45.9	1.73	94.18	38.6	2.44	96.05	42.5	2.26	87.97	41.3	2.13	93.27	38.7	2.41
September	92.39	40.7	2.27	79.20	45.0	1.76	90.77	36.9	2.46	90.97	39.9	2.28	86.11	43.8	2.16	99.80	40.9	2.44
October	90.27	40.3	2.24	80.33	45.9	1.75	96.11	38.6	2.49	97.48	42.2	2.31	94.61	40.5	2.14	94.18	38.6	2.44
November	94.39	41.4	2.28	76.99	44.5	1.73	93.00	37.2	2.50	90.62	39.4	2.30	81.87	38.8	2.11	95.50	39.3	2.43
December	90.45	40.2	2.25	76.12	44.0	1.73	92.37	36.8	2.51	89.93	39.1	2.30	81.87	38.8	2.11	95.50	39.3	2.43
1954: January	92.80	40.7	2.28	70.93	41.0	1.73	87.12	34.3	2.54	83.88	36.0	2.33	71.69	34.3	2.09	91.02	37.0	2.46
February	90.85	40.2	2.26	73.96	43.0	1.72	92.12	36.3	2.51	90.68	39.6	2.29	80.58	39.5	2.04	96.87	39.7	2.44

Year and month	Building construction																	
	Total: Building construction						Special-trade contractors											
	General contractors						Total: Special-trade contractors			Plumbing and heating			Painting and decorating			Electrical work		
	Avg. wklly. earnings	Avg. wklly. hours	Avg. hrly. earnings	Avg. wklly. earnings	Avg. wklly. hours	Avg. hrly. earnings	Avg. wklly. earnings	Avg. wklly. hours	Avg. hrly. earnings	Avg. wklly. earnings	Avg. wklly. hours	Avg. hrly. earnings	Avg. wklly. earnings	Avg. wklly. hours	Avg. hrly. earnings	Avg. wklly. earnings	Avg. wklly. hours	Avg. hrly. earnings
1951: Average	\$81.47	37.2	\$2.19	\$75.03	36.6	\$2.05	\$87.32	37.8	\$2.31	\$91.34	39.2	\$2.33	\$78.76	35.8	\$2.20	\$102.26	40.1	\$2.55
1952: Average	88.01	38.1	2.31	82.78	38.5	2.15	91.99	37.7	2.44	94.92	38.9	2.44	82.72	35.2	2.35	110.30	40.7	2.71
1953: February	89.78	37.1	2.42	86.71	38.2	2.27	92.20	36.3	2.54	95.00	38.0	2.50	82.96	34.0	2.44	109.97	39.7	2.77
March	89.79	36.8	2.44	85.79	37.3	2.30	92.82	36.4	2.55	96.39	38.1	2.53	84.18	34.5	2.44	110.21	39.5	2.79
April	90.04	36.9	2.44	86.71	37.7	2.30	92.57	36.3	2.55	96.39	38.1	2.53	84.28	34.4	2.45	109.09	39.1	2.79
May	91.01	37.3	2.44	87.40	38.0	2.30	94.21	36.8	2.56	97.41	38.2	2.55	85.61	34.8	2.46	109.98	39.0	2.82
June	91.99	37.7	2.44	88.55	38.5	2.30	94.98	37.1	2.56	97.67	38.3	2.55	87.75	35.1	2.50	110.21	39.5	2.79
July	91.64	37.1	2.47	87.14	37.4	2.33	95.20	36.9	2.58	97.01	37.6	2.58	88.35	35.2	2.51	109.48	39.1	2.80
August	93.62	37.6	2.49	89.68	38.0	2.36	96.98	37.3	2.60	98.68	38.1	2.59	89.06	35.2	2.53	112.29	39.4	2.85
September	90.97	36.1	2.52	86.03	36.3	2.37	95.04	36.0	2.64	96.42	36.8	2.62	88.32	34.5	2.56	108.46	37.4	2.90
October	95.76	37.7	2.54	90.58	37.9	2.39	99.75	37.5	2.66	101.78	38.7	2.63	91.85	35.6	2.58	117.49	40.1	2.93
November	93.59	36.7	2.55	88.45	36.7	2.41	97.62	36.7	2.66	101.08	38.0	2.66	88.41	34.4	2.57	114.17	39.1	2.92
December	93.29	36.3	2.57	87.85	36.3	2.42	97.19	36.4	2.67	102.94	38.7	2.66	88.67	34.5	2.57	116.11	39.9	2.91
1954: January	87.46	33.9	2.58	82.13	33.8	2.43	91.46	34.0	2.69	99.96	37.3	2.68	82.36	31.8	2.59	111.07	38.3	2.90
February	92.78	36.1	2.57	88.45	36.4	2.43	95.23	35.8	2.66	101.35	38.1	2.66	87.72	34.0	2.58	111.25	38.9	2.86

Year and month	Other special-trade contractors																	
	Masonry						Plastering and lathing			Carpentry			Roofing and sheet-metal work			Excavation and foundation work		
	Avg. wklly. earnings	Avg. wklly. hours	Avg. hrly. earnings	Avg. wklly. earnings	Avg. wklly. hours	Avg. hrly. earnings	Avg. wklly. earnings	Avg. wklly. hours	Avg. hrly. earnings	Avg. wklly. earnings	Avg. wklly. hours	Avg. hrly. earnings	Avg. wklly. earnings	Avg. wklly. hours	Avg. hrly. earnings	Avg. wklly. earnings	Avg. wklly. hours	Avg. hrly. earnings
	1951: Average	\$83.62	37.0	\$2.26	\$78.05	35.0	\$2.23	\$89.69	34.9	\$2.57	\$73.24	35.9	\$2.04	\$70.95	36.2	\$1.96	\$81.93	39.2
1952: Average	88.43	37.0	2.39	81.55	34.7	2.35	90.05	33.6	2.68	75.90	35.8	2.12	76.53	36.1	2.12	85.81	40.1	2.14
1953: February	87.25	34.9	2.50	79.36	32.0	2.48	95.24	33.3	2.86	79.12	34.7	2.28	74.14	33.1	2.24	83.25	37.5	2.22
March	88.10	35.1	2.51	81.50	32.6	2.50	95.99	33.1	2.90	78.30	34.8	2.25	75.94	33.9	2.24	83.78	37.4	2.24
April	88.10	35.1	2.51	81.00	32.4	2.50	96.57	33.3	2.90	76.05	33.8	2.25	76.05	33.8	2.25	82.73	37.1	2.23
May	90.36	36.0	2.51	86.50	34.6	2.50	97.15	33.5	2.90	77.70	35.0	2.22	79.74	35.6	2.24	85.36	38.8	2.20
June	91.98	36.5	2.52	89.00	35.6	2.50	96.19	33.4	2.88	82.44	36.0	2.29	82.58	36.7	2.25	89.82	40.1	2.24
July	92.46	36.4	2.54	89.86	35.8	2.51	96.72	33.7	2.87	82.70	35.8							

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees<sup>1</sup>—Continued

Year and month	Manufacturing																	
	Total: Manu- facturing			Durable goods <sup>2</sup>			Nondurable goods <sup>4</sup>			Total: Ordnance and accessories			Food and kindred products					
	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Total: Food and kindred products			Meat products <sup>3</sup>		
													Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings
1951: Average.....	\$64.71	40.7	\$1.59	\$69.47	41.6	\$1.67	\$58.46	39.5	\$1.48	\$74.12	43.6	\$1.70	\$59.92	41.9	\$1.43	\$65.78	41.9	\$1.57
1952: Average.....	67.97	40.7	1.67	73.04	41.5	1.76	60.98	39.6	1.54	77.22	42.9	1.80	63.23	41.6	1.52	70.30	41.6	1.69
1953: February.....	71.17	40.9	1.74	77.15	41.7	1.85	62.88	39.8	1.58	77.38	41.6	1.86	64.71	40.7	1.59	70.00	40.0	1.75
March.....	71.93	41.1	1.75	77.52	41.9	1.85	63.60	40.0	1.59	77.46	41.2	1.88	65.28	40.8	1.60	71.33	40.3	1.77
April.....	71.40	40.8	1.75	77.38	41.6	1.86	62.81	39.5	1.59	76.52	40.7	1.88	64.64	40.4	1.60	70.62	39.9	1.77
May.....	71.63	40.7	1.76	77.19	41.5	1.86	63.20	39.5	1.60	78.25	41.4	1.89	66.17	41.1	1.61	71.86	40.6	1.77
June.....	71.63	40.7	1.76	77.42	41.4	1.87	63.52	39.7	1.60	78.88	41.3	1.91	67.14	41.7	1.61	74.29	41.5	1.79
July.....	71.33	40.3	1.77	76.70	40.8	1.88	63.76	39.6	1.61	77.87	41.2	1.89	66.88	41.8	1.60	72.85	40.7	1.79
August.....	71.69	40.5	1.77	77.27	41.1	1.88	63.76	39.6	1.61	78.12	40.9	1.91	65.83	41.4	1.59	72.67	40.6	1.79
September.....	71.42	39.9	1.79	77.14	40.6	1.90	63.57	39.0	1.63	79.13	41.0	1.93	67.20	42.0	1.60	76.18	41.4	1.84
October.....	71.73	40.3	1.78	77.49	41.0	1.89	63.50	39.2	1.62	78.94	40.9	1.93	67.23	41.5	1.62	77.89	42.1	1.85
November.....	71.60	40.0	1.79	76.73	40.6	1.89	63.73	39.1	1.63	76.21	39.9	1.91	68.31	41.4	1.65	82.51	43.2	1.91
December.....	71.96	40.2	1.79	77.52	40.8	1.90	64.45	39.3	1.64	78.94	40.9	1.93	68.15	41.3	1.65	76.54	41.6	1.84
1954: January.....	70.92	39.4	1.80	76.59	40.1	1.91	63.53	38.5	1.65	77.60	40.0	1.94	68.71	40.9	1.68	76.78	41.5	1.85
February.....	70.88	39.6	1.79	76.38	40.2	1.90	63.63	38.8	1.64	78.00	40.0	1.95	67.64	40.5	1.67	72.65	39.7	1.83
Food and kindred products—Continued																		
	Meatpacking, wholesale			Sausages and casings			Dairy products <sup>2</sup>			Condensed and evaporated milk			Ice cream and ices			Canning and preserving <sup>3</sup>		
1951: Average.....	\$68.30	41.9	\$1.63	\$65.78	41.9	\$1.57	\$60.83	44.4	\$1.37	\$63.02	46.0	\$1.37	\$62.44	44.6	\$1.40	\$50.80	40.0	\$1.27
1952: Average.....	73.39	41.7	1.76	69.72	42.0	1.66	63.80	44.0	1.45	66.27	45.7	1.45	64.09	43.6	1.47	51.88	39.3	1.32
1953: February.....	72.40	40.0	1.81	70.00	40.7	1.72	67.61	43.9	1.64	68.55	45.7	1.50	66.19	42.7	1.55	53.20	38.0	1.40
March.....	73.71	40.5	1.82	71.23	40.7	1.75	65.97	43.4	1.62	68.55	45.4	1.51	66.19	42.7	1.55	53.02	37.6	1.41
April.....	73.02	39.9	1.83	71.05	40.6	1.75	66.10	43.2	1.63	69.77	45.9	1.52	65.41	42.2	1.55	51.61	38.6	1.41
May.....	74.15	40.3	1.84	73.01	42.2	1.73	67.32	44.0	1.53	69.92	46.0	1.52	67.86	43.5	1.56	52.26	37.6	1.39
June.....	76.63	41.2	1.86	74.56	43.1	1.73	68.39	44.7	1.53	72.05	47.4	1.52	68.61	43.7	1.57	51.44	38.1	1.35
July.....	75.52	40.6	1.86	74.55	42.6	1.75	69.73	44.7	1.56	72.22	47.2	1.53	70.68	43.9	1.61	54.14	40.4	1.34
August.....	75.33	40.5	1.86	74.03	42.3	1.75	68.51	44.2	1.55	69.92	46.0	1.52	68.85	43.3	1.59	54.14	40.1	1.35
September.....	80.06	41.7	1.92	74.46	41.6	1.79	69.84	44.2	1.58	72.23	46.6	1.55	71.83	43.8	1.64	55.34	41.3	1.34
October.....	82.22	42.6	1.93	73.51	41.3	1.78	68.26	43.2	1.58	68.25	44.9	1.52	69.80	42.3	1.65	54.54	40.1	1.36
November.....	87.20	43.6	2.00	76.68	42.6	1.80	67.94	43.0	1.58	68.25	44.9	1.52	68.88	42.0	1.64	49.95	37.0	1.35
December.....	80.03	41.9	1.91	74.34	41.3	1.80	68.73	43.5	1.58	69.00	45.1	1.53	71.28	43.2	1.65	53.44	37.9	1.41
1954: January.....	80.60	42.2	1.91	73.98	41.1	1.80	69.39	43.1	1.61	70.84	45.7	1.55	69.64	41.7	1.67	55.04	37.7	1.46
February.....	75.41	39.9	1.89	72.36	40.2	1.80	69.87	43.4	1.61	70.36	45.1	1.56	71.40	42.5	1.68	54.02	37.0	1.46
	Seafood, canned and cured			Canned fruits, vege- tables, and soups			Grain-mill products <sup>2</sup>			Flour and other grain-mill products			Prepared feeds			Bakery products <sup>3</sup>		
1951: Average.....	\$44.40	29.8	\$1.49	\$53.09	41.8	\$1.27	\$65.85	45.1	\$1.46	\$67.34	45.5	\$1.48	\$64.54	46.1	\$1.40	\$58.24	41.6	\$1.40
1952: Average.....	45.57	31.0	1.47	54.12	41.0	1.32	69.15	44.9	1.64	71.71	45.1	1.59	67.62	46.0	1.47	61.57	41.6	1.48
1953: February.....	46.96	30.1	1.56	56.56	40.4	1.40	68.21	42.9	1.59	71.45	43.3	1.65	65.38	43.3	1.51	63.04	41.2	1.63
March.....	41.44	28.0	1.48	56.52	39.8	1.42	69.60	43.5	1.60	72.27	43.8	1.65	67.63	44.2	1.53	63.65	41.6	1.63
April.....	46.04	29.7	1.49	53.86	38.2	1.41	69.39	43.1	1.61	70.38	42.4	1.66	68.99	44.8	1.54	63.45	41.2	1.54
May.....	40.23	27.0	1.49	55.86	39.9	1.40	71.60	44.2	1.62	73.48	44.0	1.67	69.92	45.4	1.54	64.02	41.3	1.55
June.....	43.33	30.3	1.43	54.10	39.2	1.38	72.32	45.2	1.60	74.59	44.4	1.68	70.97	47.0	1.51	65.36	41.9	1.56
July.....	56.92	35.8	1.59	54.78	41.5	1.32	72.74	44.9	1.62	76.84	45.2	1.70	69.77	45.9	1.52	65.73	41.6	1.58
August.....	50.38	32.5	1.55	55.35	41.0	1.35	72.37	44.4	1.63	77.74	45.2	1.72	69.45	45.1	1.54	65.41	41.4	1.58
September.....	41.04	28.5	1.44	56.97	42.2	1.35	73.80	45.0	1.64	79.90	45.4	1.76	70.99	45.8	1.55	66.88	41.8	1.60
October.....	42.03	29.6	1.42	57.13	41.7	1.37	73.26	44.4	1.65	80.78	45.9	1.76	69.44	44.8	1.55	65.67	41.3	1.59
November.....	40.17	26.6	1.51	52.80	39.4	1.34	71.61	43.4	1.65	79.20	45.0	1.76	68.77	43.8	1.57	65.60	41.0	1.60
December.....	47.17	29.3	1.61	55.16	39.4	1.40	72.38	43.6	1.66	77.26	44.4	1.74	70.18	44.7	1.57	66.42	41.0	1.62
1954: January.....	50.33	30.5	1.65	57.57	39.7	1.45	73.81	44.2	1.67	79.73	45.3	1.76	71.10	45.0	1.58	66.10	40.8	1.62
February.....	41.58	27.0	1.54	57.48	39.1	1.47	72.38	43.6	1.66	76.64	44.3	1.73	69.39	44.2	1.57	65.85	40.9	1.61
	Bread and other bakery products			Biscuits, crackers, and pretzels			Sugar <sup>2</sup>			Cane-sugar refining			Beet sugar			Confectionery and related products <sup>3</sup>		
1951: Average.....	\$59.63	41.7	\$1.43	\$53.41	41.4	\$1.29	\$60.15	41.2	\$1.46	\$63.14	41.0	\$1.54	\$61.24	41.1	\$1.49	\$49.97	40.3	\$1.24
1952: Average.....	63.38	41.7	1.52	56.17	41.3	1.36	64.41	42.1	1.53	66.58	41.1	1.62	65.94	42.0	1.57	52.27	39.9	1.31
1953: February.....	64.37	41.0	1.57	58.67	41.9	1.40	67.32	40.8	1.65	69.03	39.9	1.73	69.42	39.0	1.78	52.54	39.5	1.33
March.....	64.68	41.2	1.57	60.19	43.3	1.39	74.63	43.9	1.70	79.57	44.7	1.78	68.71	38.6	1.78	52.66	39.3	1.34
April.....	64.68	41.2	1.57	57.64	41.1	1.40	70.21	41.3	1.70	74.64	41.7	1.79	66.91	38.9	1.72	51.46	38.4	1.34
May.....	65.41	41.4	1.58	58.63	41.0	1.43	70.55	41.5	1.70	75.12	42.2	1.78	66.12	38.0	1.74	54.25	39.6	1.37
June.....	66.94	42.1	1.59	58.49	40.9	1.43	72.58	42.2	1.72	78.37	43.3	1.81	67.37	39.4	1.71	54.35	39.1	1.39
July.....	67.46	41.9	1.61	58.18	40.4	1.44	73.79	42.9	1.72	79.56	44.2	1.80	67.83	39.9	1.70	53.10	38.2	1.39
August.....	66.82	41.5	1.61	59.21	40.9	1.45	69.70	41.0	1.70	73.50	42.0	1.75	68.02	38.0	1.79	54.37	39.4	1.38
September.....	68.39	41.7	1.64	61.61	42.2	1.46	73.85	42.2	1.75	80.66	43.6	1.85	69.89	40.4	1.73	55.18	39.7	1.39
October.....	67.32	41.3	1.63	59.74	41.2	1.45	65.57	42.3	1.55	72.58	40.1	1.81	62.78	41.3	1.52	55.06	39.9	1.38
November.....	67.57	41.2	1.64	58.55	40.1	1.46	74.21	43.5	1.53	72.90	40.5	1.80	77.12	41.5	1.59	53.45	39.3	1.36
December.....	68.15	41.3	1.65	58.36	39.7	1.47	74.41	47.7	1.56	75.06	41.7	1.80	77.24	47.1	1.64	54.94	40.1	1.37
1954: January.....	67.49	40.9	1.65	60.20	40.4	1.49	73.44	42.7	1.72	73.78	40.1	1.84	78.85	44.8	1.76	54.60	39.0	1.40
February.....	67.08	40.9	1.64	60.79	40.8	1.49	71.17	40.9	1.74	71.78	38.8	1.85	75.36	42.1	1.79	55.16	39.4	1.40

See footnotes at end of table.

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees <sup>1</sup>—Continued

Year and month		Manufacturing—Continued																	
		Food and kindred products—Continued																	
		Confectionery			Beverages <sup>1</sup>			Bottled soft drinks			Malt liquors			Distilled, rectified, and blended liquors			Miscellaneous food products <sup>2</sup>		
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		
1951: Average	\$48.36	40.3	\$1.20	\$68.39	41.7	\$1.64	\$53.19	43.6	\$1.22	\$78.91	41.1	\$1.92	\$68.74	40.2	\$1.71	\$57.11	42.3	\$1.35	
1952: Average	50.67	39.9	1.27	71.14	41.6	1.71	55.73	43.2	1.29	82.20	41.1	2.00	70.88	39.6	1.79	59.78	42.1	1.42	
1953: February	50.30	39.3	1.28	71.51	40.4	1.77	57.12	42.0	1.36	82.40	40.0	2.06	69.93	37.8	1.85	61.54	41.3	1.49	
March	50.83	39.1	1.30	71.96	40.2	1.79	58.23	42.5	1.37	82.95	39.5	2.10	69.01	37.3	1.85	61.27	41.4	1.48	
April	49.66	38.2	1.30	73.49	40.6	1.81	57.40	41.9	1.37	85.46	40.5	2.11	71.24	38.3	1.86	61.39	41.2	1.49	
May	52.00	39.1	1.33	76.54	41.6	1.84	60.20	43.0	1.40	89.66	41.7	2.15	70.67	38.2	1.85	61.86	41.8	1.48	
June	52.13	38.9	1.34	79.66	42.6	1.87	63.05	44.4	1.42	94.98	42.4	2.24	72.91	39.2	1.86	61.86	41.8	1.48	
July	50.65	37.8	1.34	80.60	43.1	1.87	64.08	44.5	1.44	97.45	43.7	2.23	71.05	38.2	1.86	63.57	42.1	1.51	
August	52.14	39.2	1.33	79.19	41.9	1.89	61.35	42.9	1.43	93.68	42.2	2.22	72.94	38.8	1.88	63.57	42.1	1.51	
September	53.46	39.6	1.35	80.90	41.7	1.94	63.94	43.2	1.48	95.68	41.6	2.30	72.95	38.6	1.89	65.48	42.8	1.53	
October	52.93	39.8	1.33	77.33	40.7	1.90	60.03	41.4	1.45	91.13	40.5	2.25	72.52	39.2	1.85	64.11	41.9	1.53	
November	51.74	39.2	1.32	75.41	39.9	1.89	59.86	41.0	1.46	89.04	39.4	2.26	71.80	38.6	1.86	65.57	42.3	1.55	
December	53.47	40.2	1.33	75.39	40.1	1.88	60.01	41.1	1.46	90.05	40.2	2.24	70.12	37.7	1.86	64.53	41.9	1.54	
1954: January	52.65	39.0	1.35	75.06	39.3	1.91	58.51	39.8	1.47	88.20	39.2	2.25	73.34	38.4	1.91	66.20	41.9	1.58	
February	53.06	39.3	1.35	76.21	39.9	1.91	59.57	40.8	1.46	89.72	39.7	2.26	74.31	38.5	1.93	64.90	41.6	1.56	
Food and kindred products—Continued									Tobacco manufactures										
Corn sirup, sugar, oil, and starch			Manufactured ice			Total: Tobacco manufactures			Cigarettes			Cigars			Tobacco and snuff				
1951: Average	\$73.37	44.2	\$1.66	\$55.90	46.2	\$1.21	\$43.51	38.5	\$1.13	\$54.37	39.4	\$1.38	\$39.10	37.6	\$1.04	\$45.99	37.7	\$1.22	
1952: Average	77.00	43.5	1.77	59.80	46.0	1.30	44.93	38.4	1.17	56.45	39.2	1.44	40.13	37.5	1.07	47.87	37.4	1.28	
1953: February	77.78	42.5	1.83	60.21	44.6	1.35	45.39	36.9	1.23	54.75	37.5	1.46	41.51	37.4	1.11	49.48	37.2	1.33	
March	76.74	42.4	1.81	60.48	44.8	1.35	47.63	37.8	1.26	57.04	38.8	1.47	41.66	37.2	1.12	47.88	36.0	1.33	
April	78.86	42.4	1.86	60.62	44.9	1.35	47.62	37.2	1.28	57.37	38.5	1.49	41.25	36.5	1.13	49.48	37.2	1.33	
May	78.81	42.6	1.85	62.24	46.1	1.35	46.99	37.0	1.27	53.55	35.7	1.50	42.83	37.9	1.13	50.52	37.7	1.34	
June	81.65	43.2	1.89	62.15	45.7	1.36	46.99	37.0	1.27	54.45	36.3	1.50	42.22	37.7	1.12	51.03	37.8	1.35	
July	81.78	43.5	1.88	65.00	47.1	1.38	47.87	37.4	1.28	58.89	39.0	1.51	41.22	36.8	1.12	50.63	37.5	1.35	
August	80.56	42.4	1.90	65.55	47.5	1.38	47.46	38.9	1.22	62.68	40.7	1.54	42.60	37.7	1.13	52.25	38.7	1.35	
September	89.00	44.5	2.00	68.26	47.4	1.44	46.92	39.1	1.20	60.68	39.4	1.54	44.05	38.3	1.15	53.98	39.4	1.37	
October	86.57	43.5	1.99	64.61	45.5	1.42	48.07	39.4	1.22	63.49	40.7	1.56	44.23	38.8	1.14	52.85	38.3	1.38	
November	85.80	42.9	2.00	65.21	45.6	1.43	47.49	38.3	1.24	60.84	39.0	1.56	44.35	38.9	1.14	50.69	37.0	1.37	
December	82.52	42.1	1.96	65.00	46.1	1.41	49.00	39.2	1.25	63.96	41.0	1.56	43.66	38.3	1.14	51.34	37.2	1.38	
1954: January	81.95	41.6	1.97	65.04	45.8	1.42	45.97	36.2	1.27	58.40	37.2	1.57	40.57	35.9	1.13	50.18	36.1	1.39	
February	80.90	41.7	1.94	64.16	45.5	1.41	46.44	36.0	1.29	55.26	35.2	1.57	41.95	36.8	1.14	51.29	36.9	1.39	
Tobacco manufactures—Continued			Textile-mill products																
Tobacco stemming and redrying			Total: Textile-mill products			Scouring and combing plants			Yarn and thread mills <sup>1</sup>			Yarn mills			Thread mills				
1951: Average	\$38.02	39.2	\$0.97	\$51.60	38.8	\$1.33	\$57.82	39.6	\$1.46	\$47.86	38.6	\$1.24	\$48.13	38.5	\$1.25	\$48.64	38.6	\$1.26	
1952: Average	38.91	39.3	.99	53.18	39.1	1.36	62.80	40.0	1.57	49.15	38.7	1.27	49.15	38.7	1.27	49.79	38.6	1.29	
1953: February	37.80	35.0	1.08	54.94	40.1	1.37	63.02	40.4	1.56	50.18	39.2	1.29	50.18	39.2	1.28	52.78	40.6	1.30	
March	43.96	38.9	1.13	54.80	40.0	1.37	63.92	40.2	1.59	50.30	39.3	1.28	50.18	39.2	1.28	53.56	41.2	1.30	
April	42.34	36.5	1.16	53.84	39.3	1.37	61.30	38.8	1.58	48.77	38.4	1.27	48.51	38.2	1.27	50.29	39.6	1.27	
May	42.83	36.3	1.18	53.98	39.4	1.37	64.15	40.6	1.58	49.15	38.7	1.27	48.90	38.5	1.27	50.65	40.2	1.26	
June	42.13	35.7	1.18	53.72	39.5	1.36	65.35	41.1	1.59	49.66	39.1	1.27	49.53	39.0	1.27	50.42	39.7	1.27	
July	41.65	35.6	1.17	53.18	39.1	1.36	66.14	41.6	1.59	49.15	38.7	1.27	49.15	38.7	1.27	49.39	39.2	1.26	
August	39.19	38.8	1.01	53.04	39.0	1.36	63.12	39.7	1.59	48.51	38.2	1.27	48.26	38.0	1.27	49.40	38.9	1.27	
September	38.02	39.6	.96	51.65	37.7	1.37	64.24	38.7	1.66	46.85	36.6	1.28	46.70	36.2	1.29	48.26	38.3	1.26	
October	38.42	39.2	.98	52.33	38.2	1.37	54.24	33.9	1.60	46.00	36.8	1.25	45.75	36.6	1.25	45.97	36.2	1.27	
November	36.90	36.9	1.00	52.33	38.2	1.37	52.46	31.6	1.66	45.75	36.6	1.25	45.38	36.3	1.25	47.23	36.9	1.28	
December	40.87	39.3	1.04	52.61	38.4	1.37	60.29	38.4	1.57	45.26	36.5	1.24	44.76	36.1	1.24	47.00	37.3	1.26	
1954: January	37.63	35.5	1.06	50.86	37.4	1.36	58.78	37.2	1.58	44.13	35.3	1.25	43.25	34.6	1.25	46.61	36.7	1.27	
February	38.50	35.0	1.10	51.68	38.0	1.36	60.74	38.2	1.59	44.75	35.8	1.25	43.77	35.3	1.24	46.48	36.6	1.27	
Textile-mill products—Continued																			
Broad-woven fabric mills <sup>1</sup>			Cotton, silk, synthetic fiber									Woolen and worsted			Narrow fabrics and smallwares				
			United States			North			South										
1951: Average	\$51.74	39.2	\$1.32	\$50.70	39.3	\$1.29	\$53.54	38.8	\$1.38	\$49.25	39.4	\$1.25	\$57.87	39.1	\$1.48	\$51.48	39.6	\$1.30	
1952: Average	51.99	38.8	1.34	49.79	38.6	1.29	55.25	38.1	1.45	48.76	38.7	1.26	62.56	40.1	1.56	54.14	40.1	1.35	
1953: February	54.27	40.2	1.35	52.26	40.2	1.30	57.62	40.5	1.43	50.93	40.1	1.27	63.43	40.4	1.67	54.95	40.7	1.36	
March	53.60	40.0	1.34	52.13	40.1	1.30	57.23	40.3	1.42	50.93	40.1	1.27	61.93	39.7	1.56	55.22	40.6	1.36	
April	53.20	39.7	1.34	51.48	39.6	1.30	58.12	39.8	1.41	50.17	39.5	1.27	62.56	40.1	1.56	55.08	40.5	1.36	
May	53.73	40.1	1.34	52.00	40.0	1.30	56.40	40.0	1.41	50.80	40.0	1.27	63.34	40.6	1.56	55.20	40.0	1.38	
June	53.47	39.9	1.34	51.21	39.7	1.29	56.54	40.1	1.41	49.90	39.6	1.26	63.90	40.7	1.57	55.75	40.4	1.38	
July	52.93	39.5	1.34	50.70	39.3	1.29	55.86	39.9	1.40	49.27	39.1	1.26	64.06	40.8	1.57	53.96	39.1	1.38	
August	52.14	39.2	1.33	50.57	39.2	1.29	56.26	39.9	1.41	49.14	39.0	1.26	61.23	39.5	1.55	53.54	38.8	1.38	
September	50.79	37.9	1.34	49.14	37.8	1.30	55.41	39.3	1.41	47.50	37.4	1.27	59.75	38.3	1.56	53.84	39.3	1.37	
October	50.94	38.3	1.33	49.54	38.4	1.29	54.67	38.5	1.42	48.38	38.4	1.26	58.97	37.8	1.56	53.82	39.0	1.38	
November	51.21	38.5	1.33	49.92	38.7	1.29	54.81	38.6	1.42	48.76	38.7	1.26	57.88	37.1	1.56	53.54	38.8	1.38	
December	51.34	38.6	1.33	49.67	38.5	1.29	54.99	39.0	1.41	48.38	38.4	1.26	60.84	39.0	1.56	54.51	39.5	1.38	
1954: January	49.13	37.5	1.31	47.87	37.4	1.28	53.86	38.2	1.41	46.50	37.2	1.25	59.14	38.4	1.54	54.21	39.0	1.39	
February	49.65	37.9	1.31	48.38	37.8	1.28							59.36	38.8	1.53	54.39	39.7	1.37	

See footnotes at end of table.

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees <sup>1</sup>—Continued

Year and month	Manufacturing—Continued																				
	Textile-mill products—Continued																				
	Knitting mills <sup>2</sup>									Full-fashioned hosiery									Seamless hosiery		
	United States			North			South			United States			North			United States			North		
	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			
1951: Average	\$47.10	36.8	\$1.28	\$56.94	36.5	\$1.56	\$58.16	35.9	\$1.62	\$55.80	37.2	\$1.50	\$37.17	35.4	\$1.05	\$41.20	37.8	\$1.09			
1952: Average	49.02	38.3	1.28	57.61	37.9	1.52	57.00	37.5	1.52	55.06	38.2	1.52	40.39	37.4	1.08	43.62	38.6	1.13			
1953: February	50.05	38.5	1.30	59.44	38.6	1.54	58.45	38.2	1.53	59.91	38.9	1.54	41.25	37.5	1.10	44.81	38.3	1.17			
March	50.31	38.7	1.30	59.36	38.8	1.53	58.60	38.3	1.53	60.13	39.3	1.53	41.25	37.5	1.10	45.28	38.7	1.17			
April	48.49	37.3	1.30	56.46	36.9	1.53	56.61	37.0	1.53	56.30	36.8	1.53	39.63	35.7	1.11	45.16	38.6	1.17			
May	48.36	37.2	1.30	55.75	36.2	1.54	56.46	36.9	1.53	54.82	35.6	1.54	39.60	36.0	1.10	44.81	38.3	1.17			
June	48.38	37.5	1.29	54.66	36.2	1.51	55.78	36.7	1.52	53.91	35.7	1.51	40.07	37.1	1.08	45.05	38.5	1.17			
July	47.62	37.2	1.28	54.66	36.2	1.51	55.72	36.9	1.51	53.40	35.6	1.50	39.79	36.5	1.09	44.01	37.3	1.18			
August	48.63	37.7	1.29	55.72	36.9	1.51	55.42	36.7	1.51	56.02	37.1	1.51	39.85	36.9	1.08	44.11	37.7	1.18			
September	46.80	36.0	1.30	53.00	35.1	1.51	53.70	35.8	1.50	52.44	34.5	1.52	38.37	35.2	1.09	42.69	36.8	1.16			
October	49.26	37.6	1.31	57.23	37.9	1.51	57.45	38.3	1.50	56.63	37.5	1.51	40.26	36.6	1.10	43.19	36.6	1.18			
November	48.73	37.2	1.31	57.75	38.5	1.50	59.04	39.1	1.51	56.85	37.9	1.50	39.93	36.3	1.10	41.07	35.1	1.17			
December	48.60	37.1	1.31	57.98	38.4	1.51	59.89	39.4	1.52	56.63	37.5	1.51	40.26	36.6	1.10	41.18	35.5	1.16			
1954: January	47.78	36.2	1.32	55.95	37.3	1.50	56.78	37.6	1.51	55.65	37.1	1.50	39.18	35.3	1.11	40.80	34.0	1.20			
February	48.97	37.1	1.32	58.14	38.5	1.51							40.54	36.2	1.12						
	Seamless hosiery—Continued																				
	South			Knit outerwear			Knit underwear			Dyeing and finishing textiles <sup>3</sup>			Dyeing and finishing textiles (except wool)			Carpets, rugs, other floor coverings <sup>4</sup>					
1951: Average	\$36.09	34.7	\$1.04	\$47.23	38.4	\$1.23	\$42.78	37.2	\$1.15	\$56.77	39.7	\$1.43	\$56.23	39.6	\$1.42	\$63.44	39.9	\$1.59			
1952: Average	39.33	37.1	1.06	49.14	39.0	1.26	45.55	38.6	1.18	62.58	42.0	1.49	62.16	42.0	1.48	68.23	41.1	1.66			
1953: February	40.28	37.3	1.08	49.79	39.3	1.30	47.19	39.0	1.21	64.90	42.7	1.52	64.33	42.6	1.51	75.25	43.0	1.75			
March	40.18	37.2	1.08	50.57	38.9	1.30	46.80	39.0	1.20	63.12	41.8	1.51	62.40	41.6	1.50	72.83	42.1	1.73			
April	38.15	35.0	1.09	50.44	38.5	1.31	45.72	38.1	1.20	62.10	41.4	1.50	61.54	41.3	1.49	71.45	41.3	1.73			
May	38.23	35.4	1.08	50.70	38.7	1.31	45.96	38.3	1.20	60.79	40.8	1.49	60.24	40.7	1.48	68.46	39.8	1.72			
June	38.90	36.7	1.06	51.19	38.2	1.34	45.22	38.0	1.19	63.72	42.2	1.51	63.15	42.1	1.50	68.74	40.2	1.71			
July	38.84	36.3	1.07	50.25	37.5	1.34	44.96	38.1	1.18	60.64	40.7	1.49	60.09	40.6	1.48	69.20	40.0	1.73			
August	38.90	36.7	1.06	52.65	39.0	1.35	44.96	38.1	1.18	60.05	40.3	1.49	59.79	40.4	1.48	68.85	39.8	1.73			
September	37.24	34.8	1.07	49.28	36.5	1.35	45.01	37.2	1.21	57.96	38.9	1.49	57.87	39.1	1.48	69.37	40.1	1.73			
October	39.53	36.6	1.08	53.68	38.9	1.38	44.65	36.9	1.21	59.40	39.6	1.50	59.15	39.7	1.49	68.16	39.4	1.73			
November	39.89	36.6	1.09	52.30	37.9	1.38	42.23	34.9	1.21	61.56	40.5	1.52	61.46	40.7	1.51	69.72	40.3	1.73			
December	40.11	36.8	1.09	51.10	37.3	1.37	42.33	34.7	1.22	61.86	40.7	1.52	61.76	40.9	1.51	68.68	39.7	1.73			
1954: January	39.05	35.5	1.10	49.21	35.4	1.39	42.33	34.7	1.22	59.49	39.4	1.51	59.40	39.6	1.50	68.68	39.7	1.73			
February	46.61	38.5	1.10	50.87	36.6	1.39	43.08	35.6	1.21	62.02	40.8	1.52	61.91	41.0	1.51	70.00	40.0	1.75			
	Wool carpets, rugs, and carpet yarn																				
	Hats (except cloth and millinery)			Miscellaneous textile goods <sup>5</sup>			Felt goods (except women felts and hats)			Lace goods			Paddings and upholstery filling								
1951: Average	\$60.10	37.8	\$1.59	\$49.87	36.4	\$1.37	\$57.11	40.5	\$1.41	\$66.24	41.4	\$1.60	\$52.97	37.3	\$1.42	\$58.15	40.1	\$1.45			
1952: Average	65.74	39.6	1.66	53.20	37.2	1.43	60.09	40.6	1.48	67.70	40.3	1.68	57.22	38.4	1.49	64.17	41.4	1.55			
1953: February	74.52	42.1	1.77	57.87	39.1	1.48	61.65	41.1	1.50	71.38	41.5	1.72	60.21	39.1	1.54	64.43	41.3	1.56			
March	72.86	41.4	1.76	57.13	38.6	1.48	62.67	41.5	1.51	71.49	42.3	1.69	61.46	39.4	1.56	64.43	41.3	1.56			
April	70.53	40.3	1.75	51.80	35.0	1.48	62.73	41.0	1.53	71.48	41.8	1.71	62.49	39.3	1.59	65.16	41.5	1.57			
May	66.39	38.6	1.72	55.65	37.1	1.50	61.86	40.7	1.52	72.14	41.7	1.73	62.24	38.9	1.60	64.84	41.3	1.67			
June	66.91	38.9	1.72	57.83	38.3	1.51	62.47	41.1	1.52	70.86	41.2	1.72	63.43	39.4	1.61	63.24	40.8	1.55			
July	66.39	38.6	1.72	51.80	35.0	1.48	62.58	40.9	1.53	69.19	40.7	1.70	62.37	38.5	1.62	65.94	42.0	1.57			
August	67.64	39.1	1.73	60.68	38.9	1.56	62.68	40.7	1.54	68.34	40.2	1.70	62.81	38.3	1.64	65.93	40.7	1.62			
September	66.43	38.4	1.73	56.24	37.0	1.52	62.31	40.2	1.55	71.62	41.4	1.73	62.95	39.1	1.61	63.86	38.7	1.65			
October	67.34	38.7	1.74	55.87	37.0	1.51	62.62	40.4	1.55	71.81	40.8	1.76	63.24	38.8	1.63	66.58	41.1	1.62			
November	65.91	38.1	1.73	54.77	35.8	1.53	62.31	40.2	1.55	72.10	41.2	1.75	61.88	38.2	1.62	64.64	39.9	1.62			
December	68.38	39.3	1.74	56.70	37.3	1.52	62.99	40.9	1.54	70.76	40.9	1.73	61.92	38.7	1.60	66.02	40.5	1.63			
1954: January	66.95	38.7	1.73	54.53	36.6	1.49	61.75	40.1	1.54	67.94	39.5	1.72	57.24	36.0	1.59	69.55	41.9	1.66			
February	66.61	38.5	1.73	54.36	36.0	1.51	61.45	39.9	1.54	67.25	39.1	1.72	59.68	37.3	1.60	65.34	39.6	1.65			
	Textile-mill products—Continued																				
	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			Men's and boys' furnishings and work clothing <sup>6</sup>					
1951: Average	\$49.49	42.3	\$1.17	\$69.71	43.3	\$1.61	\$52.26	40.2	\$1.30	\$46.31	35.9	\$1.29	\$52.63	35.8	\$1.47	\$38.16	36.0	\$1.06			
1952: Average	51.24	42.7	1.20	75.58	44.2	1.71	53.06	39.6	1.34	47.45	36.5	1.30	52.15	35.0	1.49	40.50	37.5	1.08			
1953: February	51.72	43.1	1.20	77.09	43.8	1.76	54.14	40.1	1.35	49.98	37.3	1.34	57.30	37.7	1.52	41.31	37.9	1.09			
March	51.84	43.2	1.20	82.26	45.7	1.80	54.14	40.1	1.35	49.76	37.7	1.32	59.13	38.9	1.52	41.86	38.4	1.09			
April	51.97	42.6	1.22	81.81	45.2	1.81	53.19	39.4	1.35	47.73	37.0	1.29	56.78	37.6	1.51	41.58	37.8	1.10			
May	52.83	43.3	1.22	77.51	43.3	1.79	52.92	39.2	1.35	47.09	36.5	1.29	56.93	37.7	1.51	41.03	37.3	1.10			
June	51.91	42.9	1.21	81.45	45.0	1.81	53.99	39.7	1.36	48.05	36.4	1.32	58.67	36.9	1.59	41.51	37.4	1.11			
July	50.88	42.4	1.20	80.64	44.8	1.80	53.72	39.5	1.36	48.24	36.0	1.34	57.41	36.8	1.56	40.96	36.9	1.11			
August	51.73	42.4	1.22	80.36	44.4	1.81	53.99	39.7	1.36	49.78	36.6	1.36	60.59	37.4	1.62	41.78	37.3	1.12			
September	50.51	41.4	1.22	80.63	44.3	1.82	53.19	39.4	1.35	46.98	34.8	1.35	57.35	35.4	1.62	40.68	36.0	1.13			
October	51.24	42.0	1.22	78.62	43.2	1.82	52.90	38.9	1.36	49.10	36.1	1.36	58.64	36.2	1.62	41.84	36.7	1.14			
November	50.87	41.7	1.22	81.07	44.3	1.83	52.25	38.7	1.35	48.06	35.6	1.35	57.48	35.7							



TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees<sup>1</sup>—Continued

Year and month	Manufacturing—Continued																				
	Apparel and other finished textile products—Continued																				
	Shirts, collars, and nightwear			Separate trousers			Work shirts			Women's outerwear <sup>2</sup>			Women's dresses			Household apparel					
	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			
1951: Average	\$38.09	35.6	\$1.07	\$40.32	36.0	\$1.12	\$33.20	35.7	\$0.93	\$51.16	34.8	\$1.47	\$50.54	35.1	\$1.44	\$38.01	36.9	\$1.03			
1952: Average	39.96	37.0	1.08	42.86	37.6	1.14	35.15	37.8	.93	52.39	35.4	1.48	51.48	35.5	1.45	39.96	37.7	1.06			
1953: February	40.82	37.8	1.08	44.93	38.4	1.17	34.78	37.8	.92	55.09	36.4	1.53	53.34	35.8	1.49	40.84	37.7	1.07			
March	41.36	38.3	1.08	46.10	39.4	1.17	35.22	38.7	.91	54.45	36.3	1.50	54.75	36.5	1.50	41.69	38.6	1.08			
April	41.42	38.0	1.09	45.75	39.1	1.17	34.96	38.0	.92	51.84	36.0	1.44	55.78	36.7	1.52	40.45	37.8	1.07			
May	40.66	37.3	1.09	44.93	38.4	1.17	34.68	37.7	.92	50.34	35.2	1.43	52.60	35.3	1.49	39.74	36.8	1.08			
June	41.78	37.3	1.12	46.10	38.1	1.21	34.76	38.2	.91	50.66	34.7	1.46	49.16	33.9	1.45	39.53	36.6	1.08			
July	41.13	36.4	1.13	43.66	37.0	1.18	34.22	37.2	.92	52.59	34.6	1.52	48.76	34.1	1.43	38.45	35.6	1.07			
August	41.55	37.1	1.12	44.89	37.1	1.21	35.24	38.3	.92	54.72	35.3	1.55	53.45	35.4	1.61	38.31	35.8	1.08			
September	41.72	36.6	1.14	43.32	35.8	1.21	34.31	36.5	.94	49.25	32.4	1.52	49.53	32.8	1.51	37.37	34.6	1.08			
October	42.98	37.7	1.14	44.41	36.4	1.22	32.83	35.3	.93	51.83	34.1	1.52	52.02	34.0	1.53	39.46	36.2	1.09			
November	42.75	37.5	1.14	43.07	35.3	1.22	31.58	33.6	.94	50.76	34.3	1.48	51.15	34.1	1.50	39.53	36.6	1.08			
December	41.27	36.2	1.14	44.04	36.1	1.22	33.56	35.7	.94	53.61	35.5	1.51	52.80	35.2	1.50	40.77	37.4	1.09			
1954: January	39.45	34.3	1.15	44.16	36.2	1.22	31.39	32.7	.96	52.44	34.5	1.52	50.96	34.2	1.49	38.26	35.1	1.09			
February	41.50	36.4	1.14	46.24	37.9	1.22	34.73	35.8	.97	54.26	35.7	1.52	52.54	35.5	1.48	40.37	36.7	1.10			
	Women's suits, coats, and skirts			Women's and children's undergarments <sup>2</sup>			Underwear and nightwear, except corsets			Corsets and allied garments			Millinery			Children's outerwear					
1951: Average	\$63.83	32.9	\$1.94	\$41.22	36.8	\$1.12	\$39.74	36.8	\$1.08	\$43.79	36.8	\$1.19	\$57.60	36.0	\$1.60	\$41.38	36.3	\$1.14			
1952: Average	64.94	33.3	1.95	43.62	37.6	1.16	40.92	37.2	1.10	47.24	38.1	1.24	58.00	36.4	1.61	43.52	37.2	1.17			
1953: February	71.15	35.4	2.01	44.63	37.5	1.19	42.00	37.5	1.12	48.88	37.6	1.30	67.77	40.1	1.69	45.50	37.6	1.21			
March	63.77	32.7	1.95	44.86	37.7	1.19	42.22	37.7	1.12	49.52	37.8	1.31	66.66	40.4	1.65	44.51	37.4	1.19			
April	54.65	29.7	1.84	44.39	37.3	1.19	41.55	37.1	1.12	49.39	37.2	1.31	51.79	34.3	1.51	42.46	36.6	1.16			
May	55.02	29.9	1.84	44.04	36.7	1.20	40.77	36.4	1.12	48.73	37.2	1.31	44.40	30.0	1.48	43.17	36.9	1.17			
June	62.51	32.9	1.90	44.04	36.7	1.20	41.47	36.7	1.13	47.71	36.7	1.30	50.05	32.5	1.54	45.26	37.1	1.22			
July	68.34	34.0	2.01	41.54	35.5	1.17	39.29	35.4	1.11	44.50	35.6	1.25	58.55	35.7	1.64	45.51	37.0	1.23			
August	68.74	34.2	2.01	43.79	36.8	1.19	41.10	36.7	1.12	47.97	36.9	1.29	64.51	38.4	1.68	45.50	36.4	1.25			
September	60.50	30.4	1.99	43.08	36.2	1.19	41.02	36.3	1.13	46.57	36.1	1.29	58.14	34.2	1.70	42.46	33.7	1.26			
October	62.69	31.5	1.99	45.13	37.3	1.21	43.13	37.5	1.15	48.47	37.0	1.31	59.20	36.1	1.64	44.76	36.1	1.24			
November	60.96	31.1	1.96	44.77	37.0	1.21	42.67	37.1	1.15	48.21	36.8	1.31	51.48	33.0	1.56	44.27	35.7	1.24			
December	65.86	33.6	1.96	44.04	36.4	1.21	41.38	36.3	1.14	48.18	36.5	1.32	58.08	36.3	1.60	44.98	35.7	1.26			
1954: January	66.80	33.4	2.00	42.33	34.7	1.22	39.79	34.9	1.14	45.89	34.5	1.33	59.29	36.6	1.62	45.59	35.9	1.27			
February	67.60	33.8	2.00	43.68	36.1	1.21	41.25	36.5	1.13	47.08	35.4	1.33	65.63	39.3	1.67	47.25	37.5	1.26			
	Apparel and other finished textile products—Continued															Lumber and wood products (except furniture)					
	Miscellaneous apparel and accessories			Other fabricated textile products <sup>2</sup>			Curtains, draperies, and other house-furnishings			Textile bags			Canvas products			Total: Lumber and wood products (except furniture)					
1951: Average	\$42.44	36.9	\$1.15	\$44.49	37.7	\$1.18	\$39.89	36.6	\$1.09	\$44.93	38.4	\$1.17	\$47.12	39.6	\$1.19	\$59.98	40.8	\$1.47			
1952: Average	43.15	37.2	1.16	46.46	38.4	1.21	42.67	38.1	1.12	47.60	38.7	1.23	49.88	39.9	1.25	63.45	41.2	1.54			
1953: February	44.13	37.4	1.18	47.63	37.8	1.26	42.90	37.3	1.15	48.01	37.8	1.27	51.22	38.8	1.32	63.96	41.0	1.66			
March	44.72	37.9	1.18	48.64	38.3	1.27	43.82	38.1	1.15	48.13	37.6	1.28	49.67	38.5	1.29	64.21	40.9	1.57			
April	44.01	37.3	1.18	47.75	37.6	1.27	42.80	36.9	1.16	47.88	37.7	1.27	50.70	39.0	1.30	65.19	41.0	1.59			
May	43.54	36.9	1.18	47.38	37.6	1.26	41.61	36.5	1.14	49.66	38.2	1.30	52.26	40.2	1.30	66.10	40.8	1.62			
June	44.27	37.2	1.19	48.13	37.6	1.28	41.15	36.1	1.14	49.13	37.5	1.31	53.32	40.7	1.31	67.48	41.4	1.63			
July	43.07	36.5	1.18	47.37	37.3	1.27	40.18	36.2	1.11	49.52	37.8	1.31	52.66	40.2	1.31	66.34	40.7	1.63			
August	45.25	37.4	1.21	47.88	37.7	1.27	42.56	38.0	1.12	50.30	38.4	1.31	50.30	38.4	1.31	66.67	40.9	1.63			
September	44.41	36.4	1.22	46.86	36.9	1.29	41.92	37.1	1.13	49.78	38.0	1.31	49.27	37.9	1.30	66.33	40.2	1.65			
October	46.13	37.5	1.23	49.67	38.5	1.29	43.28	38.3	1.13	52.27	39.3	1.33	51.22	38.8	1.32	67.08	40.9	1.64			
November	44.77	36.4	1.23	48.50	37.6	1.29	42.41	37.2	1.14	50.14	37.7	1.33	49.37	37.4	1.32	64.96	40.1	1.62			
December	44.41	36.7	1.21	47.21	36.6	1.29	40.71	35.4	1.15	51.32	38.3	1.34	50.41	37.9	1.33	64.08	40.3	1.59			
1954: January	42.83	35.4	1.21	45.92	35.6	1.29	39.56	34.1	1.16	50.41	37.9	1.33	50.01	37.6	1.33	62.25	39.4	1.58			
February	43.55	36.6	1.19	47.09	36.5	1.29	41.06	35.7	1.15	48.01	36.1	1.33	50.27	37.8	1.33	63.99	40.5	1.58			
	Lumber and wood products (except furniture)—Continued																				
	Logging camps and contractors			Sawmills and planing mills <sup>2</sup>			Sawmills and planing mills, general									Millwork, plywood, and prefabricated structural wood products <sup>2</sup>					
							United States			South			West								
1951: Average	\$71.53	39.3	\$1.82	\$59.13	40.5	\$1.46	\$59.54	40.5	\$1.47	\$41.36	42.2	\$0.98	\$76.04	38.6	\$1.97	\$64.02	42.4	\$1.51			
1952: Average	77.68	41.1	1.89	63.24	40.8	1.55	63.65	40.8	1.56	43.03	42.6	1.01	81.51	39.0	2.09	66.94	42.1	1.59			
1953: February	77.74	40.7	1.91	63.34	40.6	1.56	63.99	40.5	1.58	42.84	42.0	1.02	82.26	38.8	2.12	69.21	42.2	1.64			
March	77.18	40.2	1.92	63.43	40.4	1.57	64.08	40.3	1.59	42.53	41.7	1.02	82.47	38.9	2.12	69.63	42.2	1.65			
April	79.78	39.3	2.03	64.71	40.7	1.59	65.37	40.6	1.61	43.76	42.9	1.02	82.64	38.8	2.13	69.63	42.2	1.65			
May	80.55	39.1	2.06	65.61	40.5	1.62	66.42	40.5	1.64	43.16	41.9	1.03	84.24	39.0	2.16	69.89	42.1	1.66			
June	84.46	40.8	2.07	67.16	41.2	1.63	67.98	41.2	1.65	43.76	42.9	1.02	85.46	39.2	2.18	69.89	42.1	1.66			
July	83.84	40.5	2.07	65.85	40.4	1.63	66.66	40.4	1.65	43.98	42.7	1.03	83.11	38.3	2.17	68.31	41.4	1.65			
August	78.17	38.7	2.02	67.40	41.1	1.64	68.23	41.1	1.66	44.30	42.6	1.04	86.33	39.6	2.18	68.15	41.3	1.65			
September	81.97	39.6	2.07	67.06	40.4	1.66	67.87	40.4	1.68	44.08	42.8	1.03	85.14	38.7	2.20	66.47	39.8	1.67			
October	77.79	38.7	2.01	67.40	41.1	1.64	68.23	41.1	1.66	45.24	43.5	1.04	85.06	39.2	2.17	69.55	41.4	1.68			
November	75.85	38.5	1.97	65.36	40.1	1.63	66.17	40.1	1.65	43.99											

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees<sup>1</sup>—Continued

Year and month	Manufacturing—Continued																	
	Lumber and wood products (except furniture)—Continued															Furniture and fixtures		
	Millwork			Plywood			Wooden containers <sup>2</sup>			Wooden boxes, other than cigar			Miscellaneous wood products			Total: Furniture and fixtures		
	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
1951: Average	\$61.89	42.1	\$1.47	\$68.10	43.1	\$1.58	\$48.85	41.4	\$1.18	\$49.37	42.2	\$1.17	\$51.24	42.0	\$1.22	\$57.27	41.2	\$1.39
1952: Average	65.83	42.2	1.56	70.62	42.8	1.65	50.39	41.3	1.22	50.82	42.0	1.21	53.63	41.9	1.20	60.59	41.5	1.46
1953: February	68.36	42.2	1.62	73.65	44.1	1.67	51.41	41.8	1.23	51.97	42.6	1.22	54.60	42.0	1.28	62.67	41.5	1.51
March	68.36	42.2	1.62	73.68	43.6	1.69	51.96	41.9	1.24	53.20	42.9	1.24	54.89	41.9	1.31	63.65	41.6	1.63
April	68.79	42.2	1.63	73.25	43.6	1.68	52.25	41.8	1.25	53.38	42.7	1.25	55.15	42.1	1.31	63.19	41.3	1.53
May	68.88	42.0	1.64	73.18	43.3	1.69	51.58	41.6	1.24	52.58	42.4	1.24	55.44	42.0	1.32	62.58	40.9	1.53
June	69.86	42.6	1.64	72.16	42.7	1.69	51.88	41.5	1.25	52.08	42.0	1.24	55.99	42.1	1.33	62.73	41.0	1.63
July	68.72	41.9	1.64	69.89	41.6	1.68	51.28	40.7	1.26	51.25	41.0	1.25	55.06	41.4	1.33	60.89	39.8	1.53
August	68.55	41.8	1.64	69.05	41.1	1.68	50.78	40.3	1.26	50.10	40.4	1.24	55.59	41.8	1.33	62.58	40.9	1.53
September	67.23	40.5	1.66	67.60	40.0	1.69	49.52	39.3	1.26	49.00	39.2	1.25	55.35	41.0	1.35	62.78	40.5	1.55
October	69.72	42.0	1.66	69.29	41.0	1.69	51.18	40.3	1.27	50.25	40.2	1.25	56.43	41.8	1.35	64.12	41.1	1.66
November	67.98	41.2	1.65	69.43	40.6	1.71	49.72	40.1	1.24	48.56	39.8	1.22	54.54	40.7	1.34	63.49	40.7	1.56
December	68.89	41.5	1.66	71.48	41.8	1.71	50.10	40.4	1.24	49.04	40.2	1.22	55.34	41.3	1.34	63.74	40.6	1.57
1954: January	67.80	40.6	1.67	72.53	42.1	1.73	47.72	38.8	1.23	47.46	38.9	1.22	53.07	39.9	1.33	61.78	39.6	1.56
February	68.80	41.2	1.67	74.38	42.5	1.75	48.71	39.6	1.23	47.70	39.1	1.22	54.67	40.8	1.34	62.56	40.1	1.56

Year and month	Furniture and fixtures—Continued																	
	Household furniture <sup>3</sup>			Wood household furniture (except upholstered)			Wood household furniture, upholstered			Mattresses and bed-springs			Office, public-building, and professional furniture <sup>4</sup>			Wood office furniture		
	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
1951: Average	\$55.08	40.8	\$1.35	\$50.80	41.3	\$1.23	\$58.11	39.8	\$1.46	\$60.45	40.3	\$1.50	\$66.53	43.2	\$1.54	\$62.34	43.9	\$1.42
1952: Average	58.93	41.5	1.42	53.38	41.7	1.28	64.58	41.4	1.56	64.87	40.8	1.59	68.36	42.2	1.62	60.86	41.4	1.47
1953: February	61.01	41.5	1.47	55.04	41.7	1.32	66.08	41.3	1.60	68.39	41.2	1.66	70.22	41.8	1.68	62.10	41.4	1.50
March	61.57	41.6	1.48	56.28	42.0	1.34	66.98	41.6	1.61	67.23	40.5	1.66	71.40	42.0	1.70	62.51	41.4	1.51
April	61.09	41.0	1.49	55.76	41.3	1.35	66.26	40.9	1.62	66.33	40.2	1.65	71.40	42.0	1.70	61.95	41.3	1.50
May	60.24	40.7	1.48	55.74	41.6	1.34	64.48	39.8	1.62	64.12	39.1	1.64	70.55	41.5	1.70	61.95	41.3	1.50
June	60.24	40.7	1.48	55.61	41.5	1.34	64.55	39.6	1.63	66.07	39.8	1.66	70.81	41.9	1.69	60.70	40.2	1.51
July	58.21	39.6	1.47	54.40	40.9	1.33	61.56	38.0	1.62	64.68	39.2	1.65	69.26	40.5	1.71	59.28	39.0	1.52
August	60.38	40.8	1.48	55.89	41.4	1.35	63.84	39.9	1.60	67.40	40.6	1.66	69.70	41.0	1.70	62.73	41.0	1.53
September	59.90	40.2	1.49	54.41	40.3	1.35	65.36	40.1	1.63	66.90	40.3	1.66	72.66	42.0	1.73	61.05	39.9	1.53
October	61.35	40.9	1.50	56.03	41.2	1.36	67.24	41.0	1.64	65.51	39.7	1.65	72.38	41.6	1.74	61.51	40.2	1.53
November	61.00	40.4	1.51	55.35	40.7	1.36	66.58	40.6	1.64	63.69	38.6	1.65	71.80	41.5	1.73	60.89	39.8	1.53
December	60.70	40.2	1.51	54.68	40.5	1.35	68.80	41.2	1.67	63.25	38.1	1.66	73.08	42.0	1.74	61.86	40.7	1.52
1954: January	58.41	39.2	1.49	53.60	40.0	1.34	60.10	37.1	1.62	64.08	38.6	1.66	71.10	41.1	1.73	59.60	40.0	1.49
February	59.30	39.8	1.49	54.14	40.4	1.34	63.57	39.0	1.63	65.90	39.7	1.66	70.18	40.8	1.72	59.55	39.7	1.50

Year and month	Furniture and fixtures—Continued																	
	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			Paperboard containers and boxes <sup>5</sup>		
	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
1951: Average	\$69.14	41.9	\$1.65	\$69.06	41.6	\$1.66	\$53.43	41.1	\$1.30	\$65.51	43.1	\$1.52	\$71.04	44.4	\$1.60	\$60.19	41.8	\$1.44
1952: Average	72.80	41.6	1.75	71.17	40.9	1.74	57.69	41.5	1.39	68.91	42.8	1.61	73.68	43.6	1.69	64.45	42.4	1.52
1953: February	75.58	41.3	1.83	73.03	40.8	1.79	60.90	42.0	1.45	71.81	43.0	1.67	77.26	43.9	1.76	66.83	42.3	1.58
March	76.59	41.4	1.85	73.16	41.1	1.78	61.59	41.9	1.47	72.31	43.3	1.67	77.44	44.0	1.76	68.37	43.0	1.59
April	76.59	41.4	1.85	73.51	41.3	1.78	63.34	42.8	1.48	71.81	43.0	1.67	77.62	44.1	1.76	67.10	42.2	1.59
May	74.59	40.1	1.86	73.03	40.8	1.79	62.46	42.2	1.48	72.24	43.0	1.68	77.44	44.0	1.76	67.84	42.4	1.60
June	75.03	41.0	1.83	73.03	40.8	1.79	63.33	42.5	1.49	72.41	43.1	1.68	78.68	44.2	1.78	68.00	42.5	1.60
July	72.71	39.3	1.85	70.56	39.2	1.80	61.42	41.5	1.48	73.44	43.2	1.70	80.10	44.5	1.80	67.36	42.1	1.60
August	68.81	37.6	1.83	74.93	41.4	1.81	61.27	41.4	1.48	73.61	43.3	1.70	79.92	44.4	1.80	69.17	42.7	1.62
September	79.15	42.1	1.88	73.71	40.5	1.82	61.84	41.5	1.49	74.30	42.7	1.74	80.85	43.7	1.85	68.88	42.0	1.64
October	77.93	40.8	1.91	75.81	41.2	1.84	63.15	42.1	1.50	73.96	43.0	1.72	79.72	43.8	1.82	69.50	42.9	1.62
November	77.71	40.9	1.90	76.26	41.0	1.86	63.57	42.1	1.51	73.36	42.9	1.71	80.08	44.0	1.82	68.26	42.4	1.61
December	78.09	41.1	1.90	74.93	40.5	1.85	64.90	42.7	1.52	73.62	42.8	1.72	80.08	44.0	1.82	66.65	41.4	1.61
1954: January	77.11	40.8	1.89	75.14	40.4	1.86	62.47	40.3	1.55	72.07	41.9	1.72	78.55	43.4	1.81	65.36	40.1	1.63
February	76.55	40.5	1.89	75.33	40.5	1.86	62.73	41.0	1.53	72.07	41.9	1.72	78.37	43.3	1.81	65.20	40.0	1.63

Year and month	Paper and allied products—Continued																	
	Paperboard boxes			Fiber cans, tubes, and drums			Other paper and allied products			Total: Printing, publishing, and allied industries			Newspapers			Periodicals		
	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
1951: Average	\$59.92	41.9	\$1.43	\$64.84	41.3	\$1.57	\$59.77	41.8	\$1.43	\$77.21	38.8	\$1.99	\$83.45	36.6	\$2.28	\$79.20	39.8	\$1.99
1952: Average	64.18	42.5	1.51	65.44	40.9	1.60	62.40	41.6	1.50	81.48	38.8	2.10	87.12	36.3	2.40	83.60	40.0	2.09
1953: February	66.41	42.3	1.57	71.32	42.2	1.69	64.90	41.6	1.56	83.76	38.6	2.17	87.82	35.7	2.46	86.80	40.0	2.17
March	67.94	43.0	1.58	72.50	42.4	1.71	65.68	42.1	1.56	85.24	39.1	2.18	89.28	36.0	2.48	87.64	40.2	2.18
April	66.68	42.2	1.58	71.57	42.1	1.70	65.31	41.6	1.57	85.19	38.9	2.19	91.36	36.4	2.51	83.92	39.4	2.13
May	67.58	42.5	1.59	69.80	41.3	1.69	65.31	41.6	1.57	85.80	39.0	2.20	92.85	36.7	2.53	83.71	39.3	2.13
June	67.73	42.6	1.59	69.55	41.4	1.68</												

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees <sup>1</sup>—Continued

Year and month	Manufacturing—Continued																	
	Printing, publishing, and allied industries—Continued																	
	Books			Commercial printing			Lithographing			Greeting cards			Bookbinding and related industries			Miscellaneous publishing and printing services		
	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
1951: Average	\$67.32	39.6	\$1.70	\$75.20	40.0	\$1.88	\$75.79	40.1	\$1.89	\$43.47	37.8	\$1.15	\$62.24	39.9	\$1.56	\$91.42	38.9	\$2.35
1952: Average	71.24	39.8	1.79	80.00	40.2	1.99	81.61	40.2	2.03	45.84	38.2	1.20	62.33	39.2	1.59	98.25	39.3	2.50
1953: February	71.92	39.3	1.83	82.19	39.9	2.06	84.44	40.4	2.09	46.62	37.0	1.26	65.11	39.7	1.64	103.36	39.6	2.61
March	74.77	40.2	1.86	83.84	40.5	2.07	84.24	40.5	2.08	48.51	38.2	1.27	65.76	40.1	1.64	106.37	40.6	2.62
April	74.03	39.8	1.86	84.02	40.2	2.09	85.06	40.7	2.09	48.63	37.7	1.29	65.74	39.6	1.66	102.56	39.6	2.59
May	74.99	40.1	1.87	83.81	40.1	2.09	85.07	40.9	2.08	48.50	37.6	1.29	66.63	39.9	1.67	101.39	39.3	2.58
June	73.45	39.7	1.85	84.00	40.0	2.10	85.46	40.5	2.11	46.75	37.1	1.26	66.70	39.7	1.68	102.83	39.4	2.61
July	72.35	38.9	1.86	83.60	40.0	2.09	87.34	41.2	2.12	45.23	35.9	1.26	65.86	39.2	1.68	103.23	39.4	2.62
August	74.96	40.3	1.86	83.81	40.1	2.09	86.30	40.9	2.11	47.00	37.3	1.26	66.70	39.7	1.68	105.73	39.6	2.67
September	74.80	40.0	1.87	84.80	40.0	2.12	86.71	40.9	2.12	47.21	36.6	1.29	65.69	39.1	1.68	106.65	39.5	2.70
October	73.82	39.9	1.85	85.63	40.2	2.13	85.26	40.6	2.10	50.95	38.6	1.32	66.70	39.7	1.68	105.86	39.5	2.68
November	73.68	39.4	1.87	85.41	40.1	2.13	84.65	40.5	2.09	51.34	38.6	1.33	67.49	39.7	1.70	105.20	39.4	2.67
December	74.84	39.6	1.89	86.67	40.5	2.14	85.44	40.3	2.12	52.22	38.4	1.36	68.51	39.6	1.73	106.66	39.8	2.68
1954: January	74.49	39.0	1.91	85.79	39.9	2.15	83.07	39.0	2.13	51.61	37.4	1.38	67.16	38.6	1.74	104.41	39.4	2.65
February	74.11	38.8	1.91	84.32	39.4	2.14	84.53	39.5	2.14	52.92	37.8	1.40	67.47	39.0	1.73	102.68	38.6	2.66
Chemicals and allied products																		
	Total: Chemicals and allied products			Industrial inorganic chemicals <sup>2</sup>			Alkalies and chlorine			Industrial organic chemicals <sup>2</sup>			Plastics, except synthetic rubber			Synthetic rubber		
1951: Average	\$67.81	41.6	\$1.63	\$74.88	41.6	\$1.80	\$74.93	41.4	\$1.81	\$71.98	40.9	\$1.76	\$72.66	42.0	\$1.73	\$78.31	41.0	\$1.91
1952: Average	70.45	41.2	1.71	77.08	41.0	1.88	76.52	40.7	1.88	75.11	40.6	1.85	76.31	41.7	1.83	80.20	40.3	1.99
1953: February	73.10	41.3	1.77	80.86	41.0	1.96	79.71	41.3	1.93	77.38	40.3	1.92	81.13	42.7	1.90	85.68	40.8	2.10
March	73.87	41.5	1.78	80.56	41.1	1.96	79.90	41.4	1.93	79.15	40.8	1.94	81.66	42.7	1.91	85.86	40.5	2.12
April	74.29	41.5	1.79	81.56	41.4	1.97	81.32	41.7	1.95	79.76	40.9	1.95	81.94	42.9	1.91	86.51	41.0	2.11
May	75.12	41.5	1.81	81.77	41.3	1.98	80.75	41.2	1.96	79.73	41.1	1.94	83.42	43.0	1.94	87.34	41.2	2.12
June	75.35	41.4	1.82	84.00	42.0	2.00	87.60	43.8	2.00	80.36	41.0	1.96	83.85	43.0	1.95	86.71	40.9	2.12
July	76.78	41.5	1.85	83.21	41.4	2.01	84.64	41.9	2.02	81.59	41.0	1.99	82.68	42.4	1.95	87.91	40.7	2.16
August	75.85	41.0	1.85	83.23	40.8	2.04	83.03	40.9	2.03	80.79	40.6	1.99	83.92	42.6	1.97	88.29	40.5	2.18
September	77.61	41.5	1.87	85.90	41.1	2.09	84.86	40.8	2.08	84.05	40.8	2.06	84.80	42.4	2.00	90.50	40.4	2.24
October	75.81	41.2	1.84	83.23	40.6	2.05	81.81	40.5	2.02	80.60	40.1	2.01	82.35	41.8	1.97	86.80	40.0	2.17
November	76.59	41.4	1.85	84.05	41.0	2.05	82.62	40.9	2.02	81.20	40.4	2.01	83.58	42.0	1.99	87.82	40.1	2.19
December	77.19	41.5	1.86	85.28	41.4	2.06	83.64	40.8	2.05	81.81	40.7	2.01	82.94	42.1	1.97	88.51	40.6	2.18
1954: January	76.45	41.1	1.86	84.87	41.0	2.07	83.23	41.0	2.03	81.41	40.5	2.01	81.32	41.7	1.95	88.29	40.5	2.18
February	76.63	41.2	1.86	84.66	40.9	2.07	82.22	40.5	2.03	81.61	40.4	2.02	82.52	42.1	1.96	89.10	40.5	2.20
	Synthetic fibers			Explosives			Drugs and medicines			Soap, cleaning and polishing preparations <sup>2</sup>			Soap and glycerin			Paints, pigments, and fillers <sup>2</sup>		
1951: Average	\$62.65	39.4	\$1.59	\$67.77	40.1	\$1.69	\$62.47	41.1	\$1.52	\$70.89	41.7	\$1.70	\$77.19	41.5	\$1.86	\$68.55	41.8	\$1.64
1952: Average	66.47	39.8	1.67	70.09	39.6	1.77	63.44	39.9	1.59	73.93	41.3	1.79	81.14	41.4	1.96	71.38	41.5	1.72
1953: February	66.89	39.0	1.71	71.00	38.8	1.83	68.39	41.2	1.66	78.35	41.9	1.87	85.28	41.6	2.05	74.64	41.7	1.79
March	68.85	39.8	1.73	73.47	39.5	1.86	68.06	41.0	1.66	78.81	41.7	1.89	86.11	41.4	2.08	75.42	41.9	1.80
April	68.68	39.7	1.73	74.07	39.4	1.88	68.23	41.1	1.66	77.68	41.1	1.89	85.28	41.0	2.08	76.02	42.0	1.81
May	69.37	40.1	1.73	73.87	39.5	1.87	68.06	41.0	1.66	76.89	40.9	1.88	84.04	40.6	2.07	78.32	42.8	1.83
June	69.77	40.1	1.74	73.53	39.7	1.90	66.90	40.3	1.66	77.08	41.0	1.88	83.84	40.7	2.06	76.20	42.1	1.81
July	71.38	40.1	1.78	76.02	39.8	1.91	68.28	40.4	1.69	76.70	40.8	1.88	83.43	40.5	2.06	76.31	41.7	1.83
August	70.62	39.9	1.77	76.02	39.8	1.91	68.38	40.7	1.68	79.27	41.5	1.91	86.31	41.1	2.10	74.98	41.2	1.82
September	75.20	40.0	1.88	77.76	40.5	1.92	70.04	41.2	1.70	79.68	41.5	1.92	87.35	41.4	2.11	76.41	41.3	1.85
October	68.71	38.6	1.78	76.04	39.4	1.93	71.55	41.6	1.72	79.54	41.0	1.94	87.54	41.1	2.13	76.54	41.6	1.84
November	69.24	38.9	1.78	77.38	40.3	1.92	71.97	41.6	1.73	79.90	41.4	1.93	87.77	41.4	2.12	76.54	41.6	1.84
December	71.56	40.2	1.78	77.78	40.3	1.93	72.66	42.0	1.73	79.32	41.1	1.93	87.76	41.2	2.13	76.59	41.4	1.85
1954: January	71.60	40.0	1.79	77.78	40.3	1.93	72.28	41.3	1.75	79.93	41.2	1.94	86.07	40.6	2.12	76.26	41.0	1.86
February	69.42	39.0	1.78	78.76	40.6	1.94	72.63	41.5	1.75	78.96	40.7	1.94	88.18	41.4	2.13	76.67	41.0	1.87
	Paints, varnishes, lacquers, and enamels			Gum and wood chemicals			Fertilizers			Vegetable and animal oils and fats <sup>2</sup>			Vegetable oils			Animal oils and fats		
1951: Average	\$67.72	41.8	\$1.62	\$56.55	42.2	\$1.34	\$52.33	42.2	\$1.24	\$59.34	46.0	\$1.29	\$55.22	46.4	\$1.19	\$68.40	45.0	\$1.52
1952: Average	70.47	41.7	1.69	59.36	42.1	1.41	56.23	42.6	1.32	61.51	45.9	1.34	57.07	46.4	1.23	70.34	44.8	1.57
1953: February	73.57	41.8	1.78	61.09	41.0	1.49	57.24	42.4	1.35	61.74	45.4	1.36	56.75	45.4	1.25	73.39	45.3	1.62
March	74.76	42.0	1.78	61.80	41.2	1.50	59.00	43.7	1.35	62.83	45.2	1.39	58.11	45.4	1.28	73.02	44.8	1.63
April	75.54	42.2	1.79	61.65	41.1	1.50	60.69	44.3	1.37	63.35	44.3	1.43	58.21	44.1	1.32	73.02	44.8	1.63
May	77.65	42.9	1.81	64.22	41.7	1.54	60.63	42.7	1.42	65.86	44.2	1.49	59.62	43.2	1.38	75.41	45.7	1.65
June	74.76	42.0	1.78	64.02	41.3	1.55	59.08	41.9	1.41	67.49	44.4	1.52	62.35	43.3	1.44	75.28	45.9	1.64
July	74.70	41.5	1.80	66.50	42.9	1.55	59.92	42.2	1.42	67.18	44.2	1.52	61.92	42.7	1.45	73.92	46.2	1.60
August	73.75	41.2	1.79	65.14	42.3	1.54	58.79	41.4	1.42	65.97	43.4	1.52	60.35	42.2	1.43	74.13	45.2	1.64
September	73.98	41.1	1.80	69.21	42.2	1.64	60.90	42.0	1.45	65.52	46.8	1.40	59.72	47.4	1.26	76.32	45.7	1.67
October	75.17	41.3	1.82	64.83	42.1	1.54	57.95	41.1	1.41	65.35	47.7	1.37	61.00	48.8	1.25	75.48	45.2	1.67
November	75.53	41.5	1.82	65.10	42.0	1.55	57.54	41.1	1.40	66.58	47.9	1.39	62.10	48.9	1.27	76.44	45.5	1.

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees <sup>1</sup>—Continued

Year and month	Manufacturing—Continued																		
	Chemicals and allied products—Continued									Products of petroleum and coal									
	Miscellaneous chemicals <sup>2</sup>			Essential oils, perfumes, cosmetics			Compressed and liquified gases			Total: Products of petroleum and coal			Petroleum refining			Coke and other petroleum and coal 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	
1951: Average	\$63.50	41.5	\$1.53	\$51.74	38.9	\$1.33	\$72.42	42.6	\$1.70	\$80.98	40.9	\$1.98	\$84.66	40.7	\$2.08	\$69.39	41.8	\$1.66	
1952: Average	65.35	41.1	1.59	54.49	39.2	1.39	73.92	42.0	1.76	84.85	40.6	2.09	88.44	40.2	2.20	73.74	41.9	1.76	
1953: February	68.88	41.0	1.68	55.54	38.5	1.45	80.65	42.9	1.88	87.45	40.3	2.17	91.03	40.1	2.27	75.62	41.1	1.84	
March	69.38	41.3	1.68	57.18	38.9	1.47	79.95	42.3	1.89	87.89	40.5	2.17	91.71	40.4	2.27	75.30	40.7	1.85	
April	68.95	40.8	1.69	56.83	38.4	1.48	79.38	42.0	1.89	88.29	40.5	2.18	91.88	40.3	2.28	76.45	41.1	1.86	
May	68.95	40.8	1.69	56.92	38.2	1.49	78.73	42.1	1.87	89.60	41.1	2.18	92.57	40.6	2.28	79.48	42.5	1.87	
June	69.70	41.0	1.70	57.37	38.5	1.49	79.38	42.0	1.89	88.94	40.8	2.18	91.94	40.5	2.27	78.58	41.8	1.88	
July	69.60	40.7	1.71	56.17	37.7	1.49	81.18	42.5	1.91	92.32	41.4	2.23	96.00	41.2	2.33	80.60	42.2	1.91	
August	69.77	40.8	1.71	57.30	38.2	1.50	81.75	42.8	1.91	92.06	41.1	2.24	95.00	40.6	2.34	82.60	42.8	1.93	
September	70.76	40.9	1.73	58.26	39.1	1.49	83.57	43.3	1.93	94.12	41.1	2.29	97.68	40.7	2.40	83.07	42.6	1.95	
October	71.17	40.9	1.74	60.74	39.7	1.53	81.02	42.2	1.92	91.80	40.8	2.25	94.71	40.3	2.35	81.83	42.4	1.93	
November	70.99	40.8	1.74	60.44	39.5	1.53	80.67	41.8	1.93	92.62	40.8	2.27	96.46	40.7	2.37	78.72	41.0	1.92	
December	71.05	40.6	1.75	60.13	39.3	1.53	80.10	41.5	1.93	91.98	40.7	2.26	96.05	40.7	2.36	77.36	40.5	1.91	
1954: January	70.75	40.2	1.76	59.44	38.1	1.56	81.67	42.4	1.94	91.53	40.5	2.26	95.58	40.5	2.36	77.57	40.4	1.92	
February	71.46	40.6	1.76	61.54	39.2	1.57	80.67	41.8	1.93	91.30	40.4	2.26	94.87	40.2	2.36	78.31	41.0	1.91	
	Rubber products									Leather and leather products									
	Total: Rubber products			Tires and inner tubes			Rubber footwear			Other rubber products			Total: Leather and leather products			Leather: tanned, curried, and finished			
	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	
1951: Average	\$68.61	40.6	\$1.69	\$78.01	39.6	\$1.97	\$57.81	41.0	\$1.41	\$63.19	41.3	\$1.53	\$46.86	36.9	\$1.27	\$60.61	39.1	\$1.55	
1952: Average	74.48	40.7	1.83	85.65	40.4	2.12	62.22	40.4	1.54	66.58	41.1	1.62	50.69	38.4	1.32	64.48	39.8	1.62	
1953: February	79.30	41.3	1.92	91.80	40.8	2.25	67.57	41.2	1.64	71.06	41.8	1.70	53.19	39.4	1.35	67.70	40.3	1.68	
March	80.29	41.6	1.93	93.83	41.7	2.25	67.57	41.2	1.64	71.72	41.7	1.72	53.84	39.3	1.37	67.03	39.9	1.68	
April	79.32	41.1	1.93	91.58	40.7	2.25	67.82	41.1	1.65	71.21	41.4	1.72	51.79	37.8	1.37	67.60	40.0	1.69	
May	78.18	40.3	1.94	91.30	40.4	2.26	60.31	37.0	1.63	70.93	41.0	1.73	51.61	37.4	1.38	69.19	40.7	1.70	
June	78.55	40.7	1.93	89.20	40.0	2.23	68.06	41.0	1.66	71.28	41.2	1.73	52.33	38.2	1.37	69.26	40.5	1.71	
July	78.98	40.5	1.95	90.45	40.2	2.25	68.64	41.1	1.67	70.64	40.6	1.74	51.82	38.1	1.36	68.46	39.8	1.72	
August	76.81	39.8	1.93	87.58	39.1	2.24	65.53	40.2	1.63	70.30	40.4	1.74	51.79	37.8	1.37	69.03	39.9	1.73	
September	74.88	39.0	1.92	83.54	37.8	2.21	64.24	39.9	1.61	69.65	39.8	1.75	48.99	35.5	1.38	67.86	39.0	1.74	
October	75.07	39.1	1.92	83.16	37.8	2.20	62.86	39.8	1.62	70.70	40.4	1.75	49.68	36.0	1.38	67.99	39.3	1.73	
November	75.65	39.4	1.92	85.09	38.5	2.21	63.57	39.0	1.63	70.53	40.3	1.75	49.82	36.1	1.38	68.38	39.3	1.74	
December	75.66	39.2	1.93	82.43	37.3	2.21	65.44	39.9	1.64	72.45	40.7	1.78	52.03	37.7	1.38	69.43	39.9	1.74	
1954: January	74.69	38.7	1.93	82.88	37.5	2.21	62.98	38.4	1.64	70.62	39.9	1.77	51.89	37.6	1.38	68.68	39.7	1.73	
February	75.46	39.1	1.93	83.54	37.8	2.21	65.84	39.9	1.65	70.58	40.1	1.76	52.72	38.2	1.38	68.51	39.6	1.73	
	Leather and leather products—Continued																		
	Industrial leather belting and packing			Boot and shoe cut stock and findings			Footwear (except rubber)			Luggage			Handbags and small leather goods			Gloves and miscellaneous leather goods			
	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	
1951: Average	\$64.50	43.0	\$1.50	\$46.25	37.6	\$1.23	\$44.28	36.0	\$1.23	\$53.72	39.5	\$1.36	\$43.59	37.9	\$1.15	\$42.67	37.1	\$1.15	
1952: Average	64.12	41.1	1.56	49.40	38.9	1.27	48.26	38.0	1.27	56.84	40.6	1.40	45.08	38.2	1.18	44.15	37.1	1.19	
1953: February	70.09	43.0	1.63	51.22	39.4	1.30	51.61	39.4	1.31	56.16	39.0	1.44	48.09	39.1	1.23	44.28	36.9	1.20	
March	71.94	43.6	1.65	51.35	39.2	1.31	52.00	39.1	1.33	59.28	40.6	1.46	48.31	39.6	1.22	44.03	37.0	1.19	
April	68.22	41.6	1.64	50.29	38.1	1.32	49.10	37.2	1.32	58.75	40.8	1.44	45.87	37.6	1.22	44.77	37.0	1.21	
May	67.39	41.6	1.62	49.37	37.4	1.32	48.81	36.7	1.33	57.60	40.0	1.44	44.04	36.4	1.21	43.92	36.3	1.21	
June	64.88	40.3	1.61	51.74	38.9	1.33	49.90	37.8	1.32	55.57	37.8	1.47	46.36	38.0	1.22	44.17	36.5	1.21	
July	63.68	39.8	1.60	50.95	38.6	1.32	49.65	37.9	1.31	56.26	38.8	1.45	45.99	37.7	1.22	42.83	35.4	1.21	
August	68.72	41.9	1.64	50.67	38.1	1.33	49.24	37.3	1.32	55.73	38.7	1.44	47.48	38.6	1.23	44.17	36.5	1.21	
September	67.90	41.4	1.64	47.22	35.5	1.33	45.41	34.4	1.32	58.65	39.1	1.50	44.65	36.3	1.23	42.94	35.2	1.22	
October	66.50	40.8	1.63	47.44	35.4	1.34	45.67	34.6	1.32	59.49	39.4	1.51	48.38	38.7	1.25	44.53	36.5	1.22	
November	66.02	40.5	1.63	48.33	35.8	1.35	45.80	34.7	1.32	58.02	39.2	1.48	49.13	39.3	1.25	44.41	36.4	1.22	
December	70.39	41.9	1.68	51.72	38.6	1.34	49.10	37.2	1.32	53.40	35.6	1.50	48.24	38.9	1.24	44.53	36.5	1.22	
1954: January	69.22	41.2	1.68	50.65	37.8	1.34	49.37	37.4	1.32	53.10	35.4	1.50	46.38	37.1	1.25	43.54	35.4	1.23	
February	66.07	39.8	1.66	51.05	38.1	1.34	50.67	38.1	1.33	51.70	34.7	1.49	49.25	39.4	1.25	44.14	35.6	1.24	
	Stone, clay, and glass products																		
	Total: Stone, clay, and glass products			Flat glass			Glass and glassware, pressed or blown <sup>2</sup>			Glass containers			Pressed and blown glass			Glass products made of purchased glass			
	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	
1951: Average	\$63.91	41.5	\$1.54	\$83.85	40.9	\$2.05	\$59.20	40.0	\$1.48	\$60.55	40.1	\$1.51	\$57.46	39.9	\$1.44	\$53.19	40.6	\$1.31	
1952: Average	66.17	41.1	1.61	86.05	40.4	2.13	62.09	39.8	1.56	63.12	39.7	1.59	60.89	39.8	1.53	56.30	40.8	1.38	
1953: February	69.29	41.0	1.69	98.18	41.6	2.36	66.23	39.9	1.66	66.63	39.9	1.67	65.27	30.8	1.64	60.20	42.1	1.43	
March	70.21	41.3	1.70	98.47	41.9	2.35	67.80	40.6	1.67	69.05	41.1	1.68	66.40	40.0	1.66	61.17	41.9	1.46	
April	70.28	41.1	1.71	97.63	41.9	2.33	67.89	39.7	1.71	70.58	40.1	1.76	64.68	39.2	1.65	59.57	40.8	1.46	
May	70.86	41.2	1.72	101.52	42.3	2.40	68.46	39.8	1.72	71.46	40.6	1.76	64.57	38.9	1.66	59.18	41.1	1.44	
June	70.69	41.1	1.72	95.65	40.7	2.35	68.40	40.0	1.71	71.23									

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees<sup>1</sup>—Continued

Year and month		Manufacturing—Continued																	
		Stone, clay, and glass products—Continued																	
		Cement, hydraulic			Structural clay products <sup>2</sup>			Brick and hollow tile			Floor and wall tile			Sewer pipe			Clay refractories		
		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
1951: Average	\$65.21	41.8	\$1.56	\$60.03	41.4	\$1.45	\$57.92	42.9	\$1.35	\$60.25	39.9	\$1.51	\$58.15	40.1	\$1.45	\$63.76	40.1	\$1.69	
1952: Average	67.72	41.8	1.62	60.09	40.6	1.48	58.51	42.4	1.38	62.64	39.9	1.57	59.98	39.2	1.53	61.60	38.5	1.60	
1953: February	70.55	41.5	1.70	61.05	39.9	1.53	57.13	41.4	1.38	65.44	39.9	1.64	60.68	38.9	1.56	64.43	37.9	1.70	
March	71.40	42.0	1.70	62.37	40.5	1.54	59.50	42.2	1.41	66.33	40.2	1.65	62.81	39.5	1.59	65.32	38.2	1.71	
April	71.23	41.9	1.70	63.09	40.7	1.55	60.92	42.6	1.43	66.40	40.0	1.66	64.88	40.3	1.59	64.26	37.8	1.70	
May	72.38	41.6	1.74	63.24	40.8	1.55	60.35	42.2	1.43	66.80	40.0	1.67	64.88	40.3	1.61	65.28	38.4	1.70	
June	73.99	41.8	1.77	64.74	41.5	1.56	62.64	43.2	1.45	67.97	40.7	1.67	66.01	41.0	1.61	66.13	38.9	1.70	
July	76.26	41.9	1.82	65.41	41.4	1.58	62.35	43.0	1.45	68.64	41.1	1.67	66.91	41.3	1.62	68.20	38.1	1.79	
August	75.18	42.0	1.79	65.83	41.4	1.59	63.36	43.1	1.47	67.97	40.7	1.67	66.02	40.5	1.63	69.63	38.9	1.79	
September	77.75	41.8	1.86	65.37	40.6	1.61	62.60	42.3	1.48	68.28	40.4	1.69	64.94	39.6	1.64	69.09	38.6	1.79	
October	74.82	41.8	1.79	66.56	41.6	1.60	64.96	43.6	1.49	69.77	40.8	1.71	66.91	40.8	1.64	67.28	37.8	1.78	
November	72.75	41.1	1.77	65.92	41.2	1.60	64.22	43.1	1.49	68.95	40.8	1.69	67.23	40.5	1.66	67.79	38.3	1.77	
December	73.46	41.5	1.77	65.03	40.9	1.59	63.77	42.8	1.49	66.90	40.3	1.66	64.55	39.6	1.63	67.79	37.7	1.78	
1954: January	73.51	41.3	1.78	62.81	39.5	1.59	59.13	40.5	1.46	66.36	39.5	1.68	63.20	39.5	1.60	67.11	37.7	1.78	
February	73.87	41.5	1.78	64.15	40.6	1.58	61.77	42.6	1.45	65.13	39.0	1.67	64.56	40.1	1.61	67.11	37.7	1.78	
		Pottery and related products			Concrete, gypsum, and plaster products <sup>3</sup>			Concrete products			Cut-stone and stone products			Miscellaneous non-metallic mineral products <sup>4</sup>			Abrasive products		
1951: Average	\$57.91	38.1	\$1.52	\$68.25	45.2	\$1.51	\$67.50	45.0	\$1.50	\$58.93	41.5	\$1.42	\$68.46	42.0	\$1.63	\$72.28	41.3	\$1.75	
1952: Average	61.15	38.7	1.58	70.65	45.0	1.57	70.22	45.3	1.55	60.01	41.1	1.46	69.83	40.6	1.72	73.45	39.7	1.85	
1953: February	63.96	39.0	1.64	70.79	43.7	1.62	69.64	43.8	1.59	62.17	40.9	1.52	73.62	40.9	1.80	80.54	41.3	1.95	
March	64.35	39.0	1.65	70.63	43.6	1.62	69.64	43.8	1.59	62.27	40.7	1.53	74.29	41.5	1.79	82.88	42.5	1.95	
April	62.87	38.1	1.65	72.32	44.1	1.64	71.16	44.2	1.61	62.88	41.1	1.53	74.57	41.2	1.81	81.51	41.8	1.95	
May	61.92	37.3	1.66	71.88	44.1	1.63	71.16	44.2	1.61	64.90	41.6	1.56	75.30	41.6	1.81	82.52	42.1	1.96	
June	61.09	36.8	1.66	73.54	44.3	1.66	72.82	44.4	1.64	64.17	41.4	1.55	73.67	40.7	1.81	78.59	40.4	1.97	
July	60.76	36.6	1.66	73.37	44.2	1.66	71.72	44.0	1.63	64.02	41.3	1.55	73.35	40.3	1.82	78.01	39.6	1.97	
August	60.06	36.4	1.65	75.71	44.8	1.69	74.70	45.0	1.66	65.57	42.3	1.55	74.34	40.4	1.84	79.20	39.8	1.99	
September	60.23	36.5	1.65	74.21	43.4	1.71	71.81	43.0	1.67	63.71	41.1	1.55	74.74	40.4	1.85	77.62	39.2	1.98	
October	63.20	38.3	1.65	76.37	44.4	1.72	74.93	44.6	1.68	65.60	42.6	1.54	74.15	40.3	1.84	78.41	39.4	1.99	
November	62.04	37.6	1.65	73.35	43.4	1.69	71.28	43.2	1.65	64.06	41.6	1.54	72.86	39.6	1.84	79.20	40.0	1.98	
December	61.46	36.8	1.67	73.25	43.6	1.68	71.94	43.6	1.65	66.34	42.8	1.55	74.56	40.3	1.85	77.42	39.0	1.96	
1954: January	59.79	35.8	1.67	70.31	42.1	1.67	68.30	41.9	1.63	61.29	39.8	1.54	72.68	39.5	1.84	76.44	39.0	1.96	
February	61.62	36.9	1.67	72.58	43.2	1.68	70.47	43.5	1.62	63.55	41.0	1.55	73.08	39.5	1.85	77.42	39.7	1.95	
		Stone, clay, and glass products—Con.									Primary metal industries								
		Asbestos products			Nonclay refractories			Total: Primary metal industries			Blast furnaces, steelworks, and rolling mills <sup>5</sup>			Blast furnaces, steelworks, and rolling mills, except electrometallurgical products			Electrometallurgical products		
1951: Average	\$69.44	43.4	\$1.60	\$66.78	38.6	\$1.73	\$75.12	41.5	\$1.81	\$77.30	40.9	\$1.89	\$77.30	40.9	\$1.89	\$74.46	41.6	\$1.79	
1952: Average	71.57	42.6	1.68	65.70	36.3	1.81	77.33	40.7	1.90	79.60	40.0	1.99	79.60	40.0	1.99	76.04	41.1	1.85	
1953: February	72.91	41.9	1.74	74.65	37.7	1.98	83.21	41.4	2.01	85.89	40.9	2.10	85.89	40.9	2.10	80.51	41.5	1.94	
March	75.08	42.9	1.75	71.20	36.7	1.94	84.23	41.7	2.02	85.80	40.9	2.10	85.89	40.9	2.10	79.30	41.3	1.92	
April	76.72	43.1	1.78	72.36	37.3	1.94	83.22	41.2	2.02	84.63	40.3	2.10	84.63	40.3	2.10	79.10	41.2	1.92	
May	78.04	43.6	1.79	71.00	36.6	1.94	83.84	41.3	2.03	86.72	41.1	2.11	86.72	41.1	2.11	79.95	41.0	1.95	
June	77.43	43.5	1.78	68.35	35.6	1.92	84.87	41.4	2.05	87.53	40.9	2.14	87.53	40.9	2.14	79.95	41.0	1.95	
July	77.51	43.3	1.79	70.72	35.9	1.97	85.07	40.9	2.08	89.76	40.8	2.20	89.76	40.8	2.20	83.82	41.7	2.01	
August	76.80	42.2	1.82	72.00	36.0	2.00	85.28	41.0	2.08	90.20	41.0	2.20	90.20	41.0	2.20	81.79	41.1	1.99	
September	77.41	42.3	1.83	73.16	36.4	2.01	85.63	40.3	2.08	88.04	40.2	2.19	88.04	40.2	2.19	77.62	39.6	1.96	
October	78.14	42.7	1.83	70.69	35.7	1.98	83.82	40.3	2.08	88.04	40.2	2.19	88.04	40.2	2.19	78.99	40.3	1.96	
November	77.04	42.1	1.83	67.97	34.5	1.97	82.78	39.8	2.08	86.33	39.6	2.18	86.33	39.6	2.18	78.40	40.0	1.96	
December	76.44	42.0	1.82	73.00	36.5	2.00	82.78	39.8	2.08	85.46	39.2	2.18	85.46	39.2	2.18	77.41	39.9	1.94	
1954: January	75.07	40.8	1.84	71.64	36.0	1.99	81.74	39.3	2.08	84.80	38.9	2.18	84.80	38.9	2.18	78.00	40.0	1.95	
February	75.81	41.2	1.84	69.29	34.3	2.02	79.31	38.5	2.06	81.06	37.7	2.15	81.06	37.7	2.15	77.42	39.7	1.95	
		Primary metal industries—Continued																	
		Iron and steel foundries <sup>6</sup>			Gray-iron foundries			Malleable-iron foundries			Steel foundries			Primary smelting and refining of nonferrous metals <sup>7</sup>			Primary smelting and refining of copper, lead, and zinc		
1951: Average	\$71.66	42.4	\$1.69	\$70.05	42.2	\$1.66	\$72.07	41.9	\$1.72	\$75.86	43.1	\$1.76	\$69.97	41.4	\$1.69	\$69.38	41.3	\$1.68	
1952: Average	72.22	40.8	1.77	69.89	40.4	1.73	70.56	39.2	1.80	77.70	42.0	1.85	75.48	41.7	1.81	75.06	41.7	1.80	
1953: February	76.63	41.2	1.86	73.49	40.6	1.81	80.79	42.3	1.91	81.29	41.9	1.94	79.65	41.7	1.91	79.15	42.1	1.88	
March	78.96	42.0	1.88	76.49	41.8	1.83	81.60	42.5	1.92	82.29	42.2	1.95	79.65	41.7	1.91	79.15	42.1	1.88	
April	78.40	41.7	1.88	77.10	41.9	1.84	79.68	41.5	1.92	80.95	41.3	1.96	79.46	41.6	1.91	78.35	41.9	1.87	
May	77.27	41.1	1.89	75.81	41.2	1.87	79.23	41.7	1.90	79.58	40.6	1.96	79.46	41.6	1.91	78.35	41.9	1.87	
June	78.44	41.5	1.89	76.78	41.5	1.85	79.52	41.2	1.93	81.95	41.6	1.97	80.10	41.5	1.93	79.61	41.9	1.90	
July	77.33	40.7	1.90	75.89	40.8	1.86	78.09	41.1	1.90	79.19	40.2	1.97	80.34	41.2	1.95	79.84	41.8	1.91	
August	76.55	40.5	1.89	74.70	40.6	1.84	75.60	40.0	1.89	80.40	40.4	1.99	81.16	41.2	1.97	80.87	41.9	1.93	
September	77.33	39.5	1.90	73.84	39.7	1.86	73.14	38.7	1.89	78.80	39.4	2.00	84.67	41.3	2.05	84.20	42.1	2.00	
October	75.05	39.3	1.89	74.03	39.8	1.86	73.90	39.1	1.89	75.83	38.3	1.98	82.39	41.4	1.99	81.48	42.0	1.94	
November	74.28	39.1	1.89	73.47	39.5	1.86	71.63	37.9	1.89	76.63	38.7	1.98	83.18	41.8	1.99	82.45	42.5	1.94	
December	73.90	39.7	1.90	74.40	40.0	1.86	73.34	38.6	1.90	78.80	39.6	1.99	82.54	41.9	1.97	81.60	42.5	1.92	
1954: January	75.43	39.9	1.91	73.51	39.1	1.88	72.77	38.1	1.91	76.43	38.6	1.98	82.98	41.7	1.99	82.49	42.3	1.95	
February	74.30	38.9	1.89	71.42	38.4	1.86	69.92	36.8	1.90	77.62	39.2	1.98	79.98	40.6	1.97	78.31	41.0	1.91	

See footnotes at end of table.

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees <sup>1</sup>—Continued

Year and month		Manufacturing—Continued																	
		Primary metal industries—Continued																	
		Primary refining of aluminum			Secondary smelting and refining of nonferrous metals			Rolling, drawing, and alloying of nonferrous metals <sup>2</sup>			Rolling, drawing, and alloying of copper			Rolling, drawing, and alloying of aluminum			Nonferrous foundries		
		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
1951: Average	\$70.97	41.5	\$1.71	\$64.94	41.1	\$1.58	\$68.78	40.7	\$1.69	\$70.76	40.9	\$1.73	\$64.22	39.4	\$1.63	\$73.74	41.9	\$1.76	
1952: Average	76.08	41.8	1.82	68.15	41.3	1.65	74.88	41.6	1.80	76.49	41.8	1.83	69.95	40.2	1.74	77.79	41.6	1.87	
1953: February	80.98	40.9	1.98	72.91	41.9	1.74	82.75	43.1	1.92	85.50	43.4	1.97	78.68	42.3	1.86	82.10	42.1	1.95	
March	79.38	40.5	1.96	74.62	42.4	1.76	83.57	43.3	1.93	86.09	43.7	1.97	79.29	42.4	1.87	82.71	42.2	1.96	
April	80.59	40.7	1.98	74.03	42.3	1.75	83.38	43.2	1.93	87.32	44.1	1.98	77.42	41.4	1.87	80.56	41.1	1.96	
May	80.57	40.9	1.97	74.69	42.2	1.77	83.42	43.0	1.94	89.20	44.6	2.00	74.59	40.1	1.86	80.34	41.2	1.95	
June	80.79	40.6	1.99	73.22	41.6	1.76	85.26	43.5	1.96	90.25	44.9	2.01	77.27	41.1	1.88	80.97	41.1	1.97	
July	80.00	40.0	2.00	71.69	40.5	1.77	82.29	42.2	1.95	86.37	43.4	1.99	75.60	40.0	1.89	80.59	40.7	1.98	
August	80.99	39.7	2.04	73.51	41.3	1.78	83.16	42.0	1.98	86.20	43.1	2.00	77.03	39.5	1.95	79.38	40.5	1.96	
September	85.32	39.5	2.16	73.80	41.0	1.80	83.22	41.2	2.02	83.64	41.2	2.03	80.80	40.2	2.01	80.60	40.5	1.99	
October	83.01	40.1	2.07	73.51	41.3	1.78	82.17	41.5	1.98	81.99	41.2	1.99	80.16	40.9	1.96	81.60	40.8	2.00	
November	85.06	40.7	2.09	72.92	41.2	1.77	80.38	40.8	1.97	81.39	40.9	1.99	76.82	39.6	1.94	80.00	40.0	2.00	
December	84.25	40.9	2.06	75.36	42.1	1.79	80.78	40.8	1.98	81.20	40.6	2.00	77.79	40.1	1.94	81.61	40.6	2.01	
1954: January	84.66	40.9	2.07	73.62	40.9	1.80	78.21	39.7	1.97	77.21	38.8	1.99	77.99	40.2	1.94	80.40	40.0	2.01	
February	82.80	40.0	2.07	73.21	40.9	1.79	78.01	39.6	1.97	75.83	38.3	1.98	78.57	40.5	1.94	80.60	40.1	2.01	
Year and month		Manufacturing—Continued																	
		Primary metal industries—Continued																	
		Miscellaneous primary metal industries <sup>1</sup>			Iron and steel forgings			Wire drawing			Welded and heavy-ripped pipe			Total fabricated metal products (except ordnance, machinery, and transportation equipment)			Tin cans and other tinware		
		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
1951: Average	\$80.65	42.9	\$1.88	\$84.87	43.3	\$1.96	\$80.41	43.0	\$1.87	\$75.07	40.8	\$1.84	\$68.81	41.7	\$1.65	\$66.49	41.3	\$1.61	
1952: Average	82.15	41.7	1.97	85.09	42.2	2.04	80.54	41.3	1.95	81.14	41.4	1.96	72.38	41.6	1.74	69.72	41.5	1.68	
1953: February	89.03	42.6	2.09	83.96	43.3	2.17	84.87	41.4	2.05	86.73	42.1	2.06	76.80	42.2	2.02	73.39	41.0	2.01	
March	90.09	42.9	2.10	84.61	43.2	2.19	86.93	42.2	2.06	87.36	42.0	2.07	77.59	42.4	2.03	73.21	40.9	2.01	
April	88.41	42.3	2.09	82.65	42.5	2.18	86.11	41.8	2.06	85.91	41.5	2.07	77.23	42.2	2.03	73.80	41.0	2.01	
May	86.74	41.5	2.09	80.92	41.9	2.17	85.49	41.5	2.06	82.01	40.4	2.03	77.04	42.1	2.03	74.16	41.2	2.01	
June	86.94	41.6	2.09	89.44	41.6	2.15	86.73	41.9	2.07	81.59	39.8	2.05	77.28	42.0	2.04	75.24	41.8	2.01	
July	85.89	40.9	2.10	88.99	41.2	2.16	84.45	40.6	2.08	82.18	39.7	2.07	76.41	41.3	1.85	78.32	42.8	1.83	
August	87.34	41.2	2.12	90.27	41.6	2.20	85.27	40.8	2.09	83.39	39.9	2.09	76.59	41.4	1.85	79.30	43.1	1.84	
September	86.46	40.4	2.14	88.66	40.3	2.20	83.79	39.9	2.10	82.56	39.5	2.09	75.70	40.7	1.86	78.02	42.4	1.84	
October	87.12	40.9	2.13	89.95	40.7	2.21	82.19	39.9	2.06	85.67	40.6	2.11	77.23	41.3	1.87	74.89	40.7	1.84	
November	85.63	40.2	2.13	90.13	40.6	2.22	81.12	39.0	2.08	84.42	40.2	2.10	76.67	41.0	1.87	75.70	40.7	1.86	
December	86.05	40.4	2.13	90.35	40.7	2.22	82.78	39.8	2.08	85.84	40.3	2.13	78.02	41.5	1.88	77.93	41.9	1.86	
1954: January	83.95	39.6	2.12	88.40	40.0	2.21	81.14	39.2	2.07	83.37	39.7	2.10	76.73	40.6	1.89	77.79	40.1	1.94	
February	83.56	39.6	2.11	86.72	39.6	2.19	82.37	39.6	2.08	81.95	39.4	2.08	76.92	40.7	1.89	79.54	41.0	1.94	
Year and month		Manufacturing—Continued																	
		Fabricated metal products—Continued																	
		Cutlery, handtools, and hardware <sup>1</sup>			Cutlery and edge tools			Handtools			Hardware			Heating apparatus (except electric) and plumbers' supplies <sup>2</sup>			Sanitary ware and plumbers' supplies		
		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
1951: Average	\$66.30	41.7	\$1.59	\$60.74	41.6	\$1.46	\$69.70	42.5	\$1.64	\$66.49	41.3	\$1.61	\$68.71	40.9	\$1.68	\$75.24	41.8	\$1.80	
1952: Average	69.05	41.1	1.68	63.55	41.0	1.55	69.38	41.3	1.68	70.69	41.1	1.72	70.99	40.8	1.74	73.60	40.0	1.84	
1953: February	74.69	42.2	1.77	66.49	41.3	1.61	74.58	41.9	1.78	77.11	42.6	1.81	71.80	38.6	1.86	74.69	38.9	1.92	
March	74.69	42.2	1.77	66.40	41.5	1.60	75.78	42.1	1.80	76.93	42.5	1.81	74.21	41.0	1.81	76.73	40.6	1.89	
April	74.87	42.3	1.77	66.65	41.4	1.61	75.54	42.2	1.79	77.71	42.7	1.82	74.21	41.0	1.81	76.76	40.4	1.90	
May	75.12	42.2	1.78	66.08	41.3	1.60	75.00	41.9	1.79	78.14	42.7	1.83	74.48	40.7	1.83	77.38	40.3	1.92	
June	75.36	42.1	1.79	65.92	41.2	1.60	75.96	42.2	1.80	78.02	42.4	1.84	73.31	40.5	1.81	76.19	40.1	1.90	
July	73.39	41.0	1.79	65.29	40.3	1.62	74.34	41.3	1.80	75.03	41.0	1.83	72.98	40.1	1.82	74.26	39.5	1.88	
August	72.45	40.7	1.78	67.48	41.4	1.63	73.08	40.6	1.80	73.71	40.5	1.82	72.98	40.1	1.82	74.09	39.2	1.89	
September	72.27	40.6	1.78	68.89	41.5	1.66	73.62	40.9	1.80	72.76	40.2	1.81	72.80	40.0	1.82	74.67	39.3	1.90	
October	72.67	40.6	1.79	69.22	41.7	1.66	73.49	40.6	1.81	73.16	40.2	1.82	71.76	39.0	1.84	72.58	37.8	1.92	
November	73.39	41.0	1.79	69.39	41.8	1.66	74.03	40.9	1.81	74.26	40.8	1.82	74.56	40.3	1.85	76.43	39.6	1.93	
December	74.39	41.1	1.81	67.89	40.9	1.64	74.07	40.7	1.82	77.00	41.4	1.86	72.31	39.3	1.84	76.04	39.4	1.93	
1954: January	73.16	40.2	1.82	64.12	39.1	1.64	73.57	40.2	1.83	76.33	40.6	1.88	71.80	38.6	1.86	74.69	38.9	1.92	
February	73.75	40.3	1.83	65.84	39.9	1.65	74.74	40.4	1.85	75.76	40.3	1.88	73.10	39.3	1.86	74.88	39.0	1.92	
Year and month		Manufacturing—Continued																	
		Fabricated metal products—Continued																	
		Oil burners, nonelectric heating and cooking apparatus, not elsewhere classified			Fabricated structural metal products <sup>2</sup>			Structural steel and ornamental metal-work			Metal doors, sash, frames, molding, and trim			Boiler-shop products			Sheet-metal work		
		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
1951: Average	\$66.18	40.6	\$1.63	\$71.49	42.3	\$1.69	\$71.49	42.3	\$1.69	\$71.57	42.1	\$1.70	\$71.90	42.8	\$1.68	\$70.39	41.9	\$1.68	
1952: Average	69.87	41.1	1.70	74.87	42.3	1.77	75.05	42.4	1.77	74.23	41.7	1.78	74.80	42.5	1.76	75.18	42.0	1.79	
1953: February	73.16	41.1	1.78	79.24	42.6	1.86	79.18	42.8	1.85	77.49	41.0	1.89	79.79	42.9	1.86	79.29	42.4	1.87	
March	73.34	41.2	1.78	79.79	42.9	1.86	79.92	43.2	1.85	80.56	42.4	1.90	79.55	43.0	1.85	79.10	42.3	1.87	
April	73.21	40.9	1.79	79.61	42.8	1.86	79.55	43.0	1.85	78.58	41.8	1.88	80.35	43.2	1.86	80.33	42.5	1.89	
May	72.27	40.6	1.78	79.85	42.7	1.87	80.35	43.2	1.86	79.34	42.2	1.88	79.85	42.7	1.87	79.99	42.1	1.90	
June	72.32	40.4	1.79	80.46	42.8	1.88	81.97	43.6	1.88	81.13	42.7	1.90	80.09	42.6	1.88	78.81	41.7	1.89	
July	72.50	40.5	1.79	79.00	41.8	1.89	79.71	42.4	1.88	78.44	41.5	1.89	80.98	42.4	1.91	75.79	40.1	1.89	
August	72.14	40.3	1.79	81.60	42.5	1.92	82.32	43.1	1.91	77.71	40.9	1.90	82.22	42.6	1.93	82.71	42.2	1.96	
September	71.31	39.4	1.81	80.48	41.7	1.93	80.26	41.8	1.92	76.95	40.5	1.90	82.22	42.6	1.93	80.03	41.9	1.91	
October	73.71	40.5	1.82	83.03	42.8	1.94	84.39	43.5	1.94	76.67	41.0	1.87	82.88	42.5	1.95	82.71	42.2	1.96	
November	71.13	39.3	1.81	81.87	42.2	1.94	83.23	42.9	1.94	76.52	40.7	1.88	81.48	42.0	1.94	80.90	41.7	1.94	
December	72.80	40.0	1.82	83.23	42.9	1.94	85.17	43.9	1.94	79.61									

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees <sup>1</sup>—Continued

Year and month	Manufacturing—Continued																	
	Fabricated metal products (except ordnance, machinery, and transportation equipment)—Continued																	
	Metal stamping, coating, and engraving <sup>2</sup>			Vitreous-enameled products			Stamped and pressed metal products			Lighting fixtures			Fabricated wire products			Miscellaneous fabricated metal products <sup>3</sup>		
	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
1951: Average	\$38.38	40.7	\$1.68	\$52.92	37.8	\$1.40	\$70.58	40.8	\$1.73	\$64.64	40.4	\$1.60	\$65.03	40.9	\$1.59	\$72.11	43.7	\$1.65
1952: Average	74.29	41.5	1.79	53.86	37.4	1.44	77.33	41.8	1.85	68.00	40.0	1.70	68.30	40.9	1.67	73.02	42.7	1.71
1953: February	79.10	42.3	1.87	58.89	39.0	1.51	82.18	42.8	1.92	75.12	41.5	1.81	73.22	41.6	1.76	79.10	43.7	1.81
March	79.52	42.3	1.88	59.49	39.4	1.51	82.41	42.7	1.93	74.40	41.8	1.78	73.63	41.6	1.77	80.44	44.2	1.82
April	79.29	42.4	1.87	57.08	37.8	1.51	82.18	42.8	1.92	71.10	40.4	1.76	72.51	41.2	1.76	80.70	44.1	1.83
May	79.15	42.1	1.88	57.53	38.1	1.51	81.83	42.4	1.93	70.98	40.1	1.77	72.16	41.0	1.76	79.97	43.7	1.83
June	78.58	41.8	1.88	58.22	38.3	1.52	81.67	42.1	1.94	70.98	40.1	1.77	72.16	41.0	1.76	77.78	42.5	1.83
July	78.88	41.3	1.91	63.45	41.2	1.54	82.15	41.7	1.97	71.42	39.9	1.79	72.55	40.7	1.79	77.59	42.4	1.83
August	77.71	40.9	1.90	59.60	38.7	1.54	80.95	41.3	1.96	68.64	39.0	1.76	71.82	39.9	1.80	76.18	41.4	1.84
September	76.78	40.2	1.91	57.15	36.4	1.57	79.59	40.4	1.97	69.74	39.4	1.77	73.89	40.6	1.82	76.78	41.5	1.85
October	78.91	41.1	1.92	58.83	38.2	1.54	81.77	41.3	1.98	73.67	40.7	1.81	73.12	40.4	1.81	76.78	41.5	1.85
November	78.12	40.9	1.91	59.59	38.2	1.56	80.36	41.0	1.96	72.90	40.5	1.80	73.12	40.4	1.81	77.52	41.9	1.85
December	79.90	41.4	1.93	60.60	38.6	1.57	81.97	41.4	1.98	75.58	41.3	1.81	73.02	39.9	1.83	74.70	40.6	1.84
1954: January	81.16	41.2	1.97	61.88	38.2	1.62	83.63	41.4	2.02	72.58	40.1	1.81	73.02	39.9	1.83	74.70	40.6	1.84
February	79.95	41.0	1.95	61.76	38.6	1.60	83.01	41.3	2.01	70.67	39.7	1.78	72.44	39.8	1.82	75.44	41.0	1.84
Fabricated metal products (except ordnance, machinery, and transportation equipment)—Continued																		
Machinery (except electrical)																		
Metal shipping barrels, drums, kegs, and pails			Steel springs			Bolts, nuts, washers, and rivets			Screw-machine products			Total: Machinery (except electrical)			Engines and turbines <sup>3</sup>			
1951: Average	\$71.91	42.3	\$1.70	\$73.43	42.2	\$1.74	\$74.02	43.8	\$1.69	\$74.75	45.3	\$1.65	\$76.38	43.4	\$1.76	\$79.12	43.0	\$1.84
1952: Average	79.61	43.5	1.83	74.26	40.8	1.82	72.83	42.1	1.73	76.37	44.4	1.72	79.61	42.8	1.86	82.26	42.4	1.94
1953: February	80.10	41.5	1.93	85.65	43.7	1.96	79.17	43.5	1.82	82.17	45.4	1.81	83.03	42.8	1.94	84.23	41.7	2.03
March	80.10	41.5	1.93	85.89	43.6	1.97	81.70	44.4	1.84	84.18	46.0	1.83	84.05	43.1	1.95	83.42	41.5	2.01
April	82.06	42.3	1.94	84.28	43.0	1.96	80.78	43.9	1.84	84.00	45.9	1.83	83.46	42.8	1.95	83.43	41.3	2.02
May	84.44	43.3	1.95	84.71	43.0	1.97	81.77	44.2	1.85	83.27	45.5	1.83	82.88	42.5	1.95	84.66	41.5	2.04
June	83.61	43.1	1.94	83.69	42.7	1.96	81.03	43.8	1.85	83.25	45.0	1.85	82.29	42.2	1.95	84.67	41.3	2.05
July	82.62	42.1	1.96	82.12	41.9	1.96	78.26	42.3	1.85	79.97	43.7	1.83	81.73	40.4	1.81	84.04	40.6	2.07
August	83.95	42.4	1.98	79.93	41.2	1.94	78.31	42.1	1.86	78.99	43.4	1.82	81.93	41.8	1.96	85.06	40.7	2.09
September	82.42	40.8	2.02	79.40	40.1	1.98	77.00	41.4	1.86	77.78	42.5	1.83	82.37	41.6	1.99	86.52	41.2	2.10
October	83.43	41.3	2.02	81.61	40.6	2.01	76.63	41.2	1.86	78.38	42.6	1.84	83.58	42.0	1.99	85.26	40.6	2.10
November	82.21	40.7	2.02	81.81	40.7	2.01	75.85	41.0	1.85	78.75	42.8	1.84	82.78	41.9	2.00	87.98	41.5	2.12
December	83.84	41.1	2.04	84.22	41.9	2.07	77.19	41.5	1.86	78.75	42.8	1.84	83.80	41.9	2.00	85.48	40.9	2.09
1954: January	81.41	40.3	2.02	81.40	40.7	2.00	74.00	40.0	1.85	75.76	41.4	1.83	82.40	41.2	2.00	87.98	40.9	2.09
February	81.61	40.2	2.03	79.00	40.1	1.97	75.33	40.5	1.86	75.95	41.5	1.83	82.40	41.2	2.00	85.89	40.9	2.10
Machinery (except electrical)—Continued																		
Steam engines, turbines, and water wheels			Diesel and other internal combustion engines, not elsewhere classified			Agricultural machinery and tractors <sup>1</sup>			Tractors			Agricultural machinery (except tractors)			Construction and mining machinery <sup>2</sup>			
1951: Average	\$83.27	42.7	\$1.95	\$78.26	43.0	\$1.82	\$73.26	40.7	\$1.80	\$75.67	40.9	\$1.85	\$70.88	40.5	\$1.75	\$75.82	44.6	\$1.70
1952: Average	89.02	42.8	2.08	80.37	42.3	1.90	75.41	39.9	1.89	77.02	39.7	1.94	73.97	40.2	1.84	77.61	43.6	1.78
1953: February	96.78	43.4	2.23	81.36	41.3	1.97	78.59	40.3	1.95	80.80	40.0	2.02	76.73	40.6	1.89	79.71	42.4	1.88
March	86.90	40.8	2.13	82.57	41.7	1.98	78.78	40.4	1.95	80.60	39.9	2.02	77.11	40.8	1.89	81.65	43.2	1.89
April	86.90	40.8	2.13	82.39	41.4	1.99	79.18	40.4	1.96	80.20	39.9	2.01	78.12	40.9	1.91	80.28	42.7	1.88
May	98.08	43.4	2.26	81.59	41.0	1.99	77.41	39.9	1.94	79.20	39.6	2.00	75.58	40.2	1.88	80.51	42.6	1.89
June	87.94	40.9	2.15	83.63	41.4	2.02	76.81	39.8	1.93	77.22	39.0	1.98	74.45	39.9	1.87	78.47	41.3	1.90
July	83.98	38.0	2.21	83.43	41.3	2.02	75.85	39.3	1.93	77.22	39.0	1.98	74.64	39.7	1.88	77.52	40.8	1.90
August	99.39	43.4	2.29	80.00	39.8	2.01	77.01	39.9	1.93	77.81	39.1	1.99	73.70	39.2	1.88	76.21	39.9	1.91
September	96.30	42.8	2.25	82.01	40.2	2.04	75.66	39.2	1.92	77.81	39.1	1.99	73.28	39.4	1.86	78.14	40.7	1.92
October	97.58	42.8	2.28	83.64	40.8	2.05	75.46	39.3	1.92	79.00	39.5	2.00	72.52	39.2	1.85	78.55	40.7	1.93
November	94.24	41.7	2.26	82.62	40.3	2.05	75.46	39.3	1.95	79.79	39.5	2.02	73.70	39.2	1.88	79.54	41.0	1.94
December	99.72	42.8	2.33	84.87	41.2	2.06	76.64	39.3	1.95	80.19	39.7	2.02	74.47	39.4	1.89	79.76	40.9	1.95
1954: January	97.02	42.0	2.31	82.42	40.6	2.03	77.03	39.5	1.95	80.19	39.7	2.02	74.47	39.4	1.89	80.54	41.3	1.95
February	97.75	42.5	2.30	82.62	40.5	2.04	78.01	39.6	1.97	79.78	39.3	2.03	76.02	39.8	1.91	80.54	41.3	1.95
Construction and mining machinery (except for oilfields)																		
Oilfield machinery and tools			Metalworking machinery <sup>2</sup>			Machine tools			Metalworking machinery (except machine tools)			Machine-tool accessories						
1951: Average	\$75.04	44.4	\$1.69	\$77.29	45.2	\$1.71	\$85.74	46.6	\$1.84	\$84.85	47.4	\$1.79	\$82.26	45.2	\$1.82	\$87.98	46.8	\$1.88
1952: Average	76.64	43.3	1.77	79.48	44.4	1.79	81.87	46.4	1.98	89.96	47.1	1.91	86.14	45.1	1.91	95.53	46.6	2.05
1953: February	79.15	42.1	1.89	80.97	43.3	1.87	96.67	46.7	2.07	94.74	46.9	2.02	90.45	45.0	2.01	100.75	47.3	2.13
March	81.46	43.1	1.89	82.40	43.6	1.89	98.23	47.0	2.09	96.02	47.3	2.03	90.65	45.1	2.01	102.56	47.7	2.15
April	80.51	42.6	1.89	79.79	42.9	1.88	97.60	46.7	2.09	96.08	47.1	2.04	91.76	45.2	2.03	101.27	47.1	2.15
May	80.75	42.5	1.90	80.65	42.9	1.88	97.44	46.4	2.10	95.27	46.7	2.04	90.34	44.5	2.03	101.99	47.0	2.17
June	80.22	42.0	1.91	82.18	42.8	1.92	94.89	45.4	2.09	93.43	45.8	2.04	90.09	44.6	2.02	97.61	45.4	2.15
July	77.90	41.0	1.90	80.22	42.0	1.91	93.18	44.8	2.08	91.15	44.9	2.03	89.93	44.3	2.03	96.30	45.0	2.14
August	76.76	40.4	1.89	80.03	41.9	1.91	94.55	45.0	2.11	91.55	45.1	2.03	89.76	44.0	2.04	99.21	45.3	2.10
September	76.59	40.1	1.91	74.86	39.4	1.90	96.30	45.0	2.14	95.68	46.0	2.08	86.90	42.6	2.04	100.33	45.4	2.21
October	76.78	40.2	1.91	81.09	41.8	1.94	98.04	45.6	2.15	96.56	46.2	2.09	87.92	43.1	2.04	103.71	46.3	2.21
November	77.18	40.2	1.92	81.93	41.8	1.96	95.66	44.7	2.14	95.10								





TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees<sup>1</sup>—Continued

Manufacturing—Continued																			
Electrical machinery																			
Year and month	Total: Electrical machinery			Electrical generating, transmission, distribution, and industrial apparatus <sup>2</sup>			Wiring devices and supplies			Carbon and graphite products (electrical)			Electrical indicating, measuring, and recording instruments			Motors, generators, and motor-generator sets			
	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	
1951: Average	\$64.84	41.3	\$1.57	\$70.31	42.1	\$1.67	\$63.15	42.1	\$1.50	\$69.43	40.6	\$1.71	\$69.44	42.6	\$1.63	\$75.36	42.1	\$1.70	
1952: Average	68.64	41.1	1.67	73.99	41.8	1.77	64.78	41.0	1.58	75.58	41.3	1.83	71.48	41.8	1.71	80.22	42.0	1.91	
1953: February	71.28	41.2	1.73	76.91	41.8	1.84	67.40	41.1	1.64	78.91	42.2	1.87	74.11	41.4	1.79	84.40	42.2	2.00	
March	72.21	41.5	1.74	77.89	42.1	1.85	67.90	41.4	1.64	78.96	42.0	1.88	74.11	41.4	1.79	85.20	42.6	2.00	
April	71.86	41.3	1.74	77.70	42.0	1.85	68.72	41.4	1.66	78.58	41.8	1.88	72.75	41.1	1.77	85.00	42.5	2.00	
May	70.99	40.8	1.74	76.59	41.4	1.85	68.06	41.0	1.66	77.98	41.7	1.87	72.27	40.6	1.78	82.78	41.6	1.99	
June	71.40	40.8	1.75	77.19	41.5	1.86	67.89	40.9	1.66	77.83	41.4	1.88	72.92	41.2	1.77	84.42	42.0	2.01	
July	70.58	40.1	1.76	76.30	40.8	1.87	67.37	40.1	1.68	78.44	41.5	1.89	72.90	40.5	1.80	82.62	40.9	2.02	
August	71.63	40.7	1.76	77.27	41.1	1.88	68.78	40.7	1.69	77.11	40.8	1.89	73.03	40.8	1.79	83.22	41.2	2.02	
September	71.69	40.5	1.77	77.90	41.0	1.90	68.91	40.3	1.71	79.27	41.5	1.91	74.16	41.2	1.80	84.25	40.9	2.06	
October	71.51	40.4	1.77	77.11	40.8	1.89	69.32	40.3	1.72	76.70	40.8	1.88	75.76	41.4	1.83	82.62	40.5	2.04	
November	71.96	40.2	1.79	77.30	40.9	1.89	68.74	40.2	1.71	75.58	40.2	1.88	73.89	40.6	1.82	84.05	41.2	2.04	
December	72.36	40.2	1.80	77.90	41.0	1.90	69.60	40.7	1.71	77.11	40.8	1.89	74.66	40.8	1.83	84.67	41.3	2.05	
1954: January	70.74	39.3	1.80	76.00	40.0	1.90	67.20	39.3	1.71	75.39	40.1	1.88	71.92	39.3	1.83	82.62	40.5	2.04	
February	72.00	40.0	1.80	76.76	40.4	1.90	67.55	39.5	1.71	76.70	40.8	1.88	73.16	40.2	1.82	83.64	40.8	2.05	
Electrical machinery—Continued																			
Year and month	Power and distribution transformers			Switchgear, switchboard, and industrial controls			Electrical welding apparatus			Electrical appliances			Insulated wire and cable			Electrical equipment for vehicles			
	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	
1951: Average	\$68.95	40.8	\$1.69	\$69.28	42.5	\$1.63	\$84.18	45.5	\$1.85	\$67.32	39.6	\$1.70	\$64.87	42.4	\$1.53	\$69.08	40.4	\$1.71	
1952: Average	72.04	40.7	1.77	72.16	42.2	1.71	91.28	46.1	1.98	72.32	40.4	1.79	72.11	43.7	1.65	72.98	40.1	1.82	
1953: February	75.48	40.8	1.85	74.34	42.0	1.77	87.84	43.7	2.01	78.25	41.4	1.89	73.70	43.1	1.71	79.15	42.1	1.86	
March	77.42	41.4	1.87	75.29	42.3	1.78	89.04	44.3	2.01	78.58	41.8	1.89	73.78	43.4	1.70	77.93	41.9	1.88	
April	76.63	41.2	1.86	75.90	42.4	1.79	86.28	42.5	2.03	77.83	41.4	1.88	73.63	43.0	1.71	78.96	42.0	1.88	
May	77.46	41.2	1.88	74.82	41.8	1.79	84.80	42.4	2.00	76.89	40.9	1.88	73.87	43.2	1.71	77.15	41.5	1.86	
June	76.45	41.1	1.86	74.46	41.6	1.79	83.78	42.1	1.99	74.80	40.0	1.87	72.93	42.4	1.72	77.90	41.0	1.90	
July	75.58	40.2	1.88	75.12	41.5	1.81	84.82	42.2	2.01	75.36	40.3	1.87	70.86	41.2	1.72	75.20	40.0	1.88	
August	75.98	40.2	1.89	76.49	41.8	1.83	86.25	42.7	2.02	75.62	39.8	1.90	69.14	40.2	1.72	75.20	40.0	1.88	
September	76.59	40.1	1.91	77.28	42.0	1.84	86.09	42.2	2.04	76.80	40.0	1.92	71.51	40.4	1.77	74.28	39.3	1.89	
October	76.00	40.0	1.90	75.95	41.5	1.83	83.36	42.1	1.98	78.55	40.7	1.93	70.69	41.1	1.72	75.43	39.7	1.90	
November	76.81	39.8	1.93	76.54	41.6	1.84	81.77	41.3	1.98	77.76	40.5	1.92	69.60	40.7	1.71	76.00	40.0	1.90	
December	76.63	39.5	1.94	76.91	41.8	1.84	81.38	41.1	1.98	76.21	39.9	1.91	69.77	40.8	1.71	74.84	39.6	1.89	
1954: January	75.85	39.1	1.94	75.11	40.6	1.85	78.21	39.7	1.97	74.87	39.2	1.91	67.20	39.3	1.71	75.06	39.3	1.91	
February	77.22	39.6	1.95	75.48	40.8	1.85	77.61	39.8	1.95	76.02	39.8	1.91	68.63	39.9	1.72	74.86	39.4	1.90	
Electrical machinery—Continued																			
Year and month	Electric lamps			Communication equipment <sup>2</sup>			Radios, phonographs, television sets, and equipment			Radio tubes			Telephone, telegraph, and related equipment			Miscellaneous electrical products <sup>2</sup>			
	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	
1951: Average	\$58.20	40.7	\$1.43	\$60.27	41.0	\$1.47	\$58.32	40.5	\$1.44	\$55.06	41.4	\$1.33	\$77.33	43.2	\$1.79	\$60.60	40.4	\$1.50	
1952: Average	58.89	39.0	1.51	64.21	40.9	1.57	62.12	40.6	1.53	57.49	40.2	1.43	82.03	43.4	1.89	65.93	40.7	1.62	
1953: February	67.39	41.6	1.62	65.77	40.6	1.62	63.92	40.2	1.59	62.51	41.4	1.61	82.26	42.4	1.94	67.03	39.9	1.68	
March	66.49	41.3	1.61	66.67	40.9	1.63	64.24	40.4	1.59	63.69	41.9	1.62	82.88	42.5	1.95	67.03	39.9	1.68	
April	66.49	41.3	1.61	66.18	40.6	1.63	64.00	40.0	1.60	62.67	41.5	1.61	82.29	42.2	1.95	67.30	40.3	1.67	
May	65.85	40.9	1.61	65.53	40.2	1.63	63.36	39.6	1.60	62.21	41.2	1.61	82.71	42.2	1.96	67.47	40.4	1.67	
June	63.12	39.7	1.59	65.66	40.4	1.65	64.64	39.9	1.62	62.73	41.0	1.63	82.91	42.3	1.96	68.04	40.5	1.68	
July	61.78	39.1	1.58	65.34	39.6	1.65	63.50	39.2	1.62	62.22	40.4	1.64	77.59	40.2	1.93	67.70	40.3	1.68	
August	63.52	39.7	1.60	67.73	40.8	1.66	65.36	40.1	1.63	64.06	41.6	1.64	83.66	42.9	1.95	68.95	40.8	1.69	
September	66.58	40.6	1.64	67.06	40.4	1.66	64.71	39.7	1.63	63.65	40.8	1.66	83.42	43.0	1.94	68.06	39.8	1.71	
October	66.42	40.5	1.64	66.97	40.1	1.67	65.44	39.9	1.64	60.37	39.2	1.64	83.69	42.7	1.96	68.51	40.3	1.70	
November	65.85	40.4	1.63	67.26	39.8	1.69	66.23	39.9	1.66	58.19	37.3	1.66	82.71	42.2	1.96	68.00	40.0	1.70	
December	65.44	39.9	1.64	67.49	39.7	1.70	67.03	39.9	1.68	59.19	37.7	1.67	81.12	41.6	1.95	68.11	39.6	1.72	
1954: January	64.12	39.1	1.64	65.96	38.8	1.70	65.02	38.7	1.68	59.72	37.8	1.68	77.78	40.3	1.93	68.03	39.1	1.74	
February	65.18	39.5	1.65	68.06	39.8	1.71	67.03	39.9	1.68	61.78	39.1	1.68	79.98	40.6	1.97	68.90	39.6	1.74	
Electrical machinery—Continued																			
Year and month	Storage batteries			Primary batteries (dry and wet)			X-ray and non-radio electronic tubes			Total: Transportation equipment			Automobiles <sup>1</sup>			Motor vehicles, bodies, parts, and accessories			
	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	
1951: Average	\$66.17	40.1	\$1.65	\$53.99	39.7	\$1.36	\$74.58	45.2	\$1.65	\$75.67	40.9	\$1.85	\$75.45	39.5	\$1.91	\$76.04	39.4	\$1.93	
1952: Average	73.16	41.1	1.78	56.66	39.9	1.42	72.93	42.9	1.70	\$1.56	41.4	1.97	83.03	40.5	2.05	\$3.84	40.5	2.07	
1953: February	73.35	40.3	1.82	58.40	40.0	1.46	73.39	41.0	1.79	85.60	41.8	2.05	87.99	41.7	2.11	89.03	41.8	2.13	
March	74.30	40.6	1.83	58.69	40.2	1.46	72.14	40.3	1.79	85.49	41.7	2.05	88.20	41.8	2.11	89.25	41.9	2.13	
April	75.81	41.2	1.84	58.80	40.0	1.47	71.78	40.1	1.79	85.70	41.6	2.06	88.63	41.9	2.12	89.67	41.9	2.14	
May	75.62	41.1	1.84	60.38	40.8	1.48	69.77	40.1	1.74	84.67	41.3	2.05	87.15	41.5	2.10	88.19	41.6	2.12	
June	78.54	42.0	1.87	58.40	40.0	1.46	67.73	38.7	1.75	85.70	41.2	2.08	89.23	41.5	2.15	90.06	41.5	2.17	
July	79.76	42.2	1.89	57.17	39.7	1.44	68.11	38.7	1.76	84.86	40.8	2.08	87.91	40.7	2.16	88.32	40.7	2.17	
August	79.80	42.0	1.90	60.05	40.3	1.49	71.56	40.2	1.78	85.70	41.2	2.08	86.58	41.2	2.15	89.21	41.3	2.16	
September	79.32	41.1	1.93	58.86	39.5	1.49	73.49	40.6	1.81	84.23	40.3	2.09	86.58	39.9	2.17	87.38	39.9	2.19	
October	76.73	40.6	1.89	59.95	39.7	1.51	75.14	40.4	1.86	85.89	40.9	2.10	88.13	40.8	2.16	89.16	40.9	2.18	
November	76.95	40.5	1.90	60.19	39.6	1.52	73.63	39.8	1.85	84.84	40.4	2.10	87.02	40.1	2.17	87.82	40.1	2.19	
December	75.83	39.7	1.91	60.74	39.7	1.53	74.74	40.4	1.85	85.88	40.7	2.11	87.42	40.1	2.18	88.22	40.1	2.20	
1954: January	76.22	39.7	1.92	59.13	38.9	1.52	74.64	39.7	1.88	85.86	4								

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees<sup>1</sup>—Continued

Year and month	Manufacturing—Continued																	
	Transportation equipment—Continued																	
	Truck and bus bodies			Trailers (truck and automobile)			Aircraft and parts <sup>1</sup>			Aircraft			Aircraft engines and parts			Aircraft propellers and parts		
	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
1951: Average	\$66.50	40.8	\$1.63	\$65.19	41.0	\$1.59	\$78.40	43.8	\$1.79	\$75.78	43.3	\$1.75	\$85.81	45.4	\$1.89	\$89.17	46.2	\$1.93
1952: Average	70.18	40.8	1.72	70.76	40.9	1.73	81.70	43.0	1.90	79.66	42.6	1.87	86.92	43.9	1.98	92.25	45.0	2.05
1953: February	73.03	40.8	1.79	72.90	40.5	1.80	85.14	43.0	1.98	82.91	42.3	1.96	89.49	44.3	2.02	91.08	44.0	2.07
March	75.21	41.1	1.83	72.72	40.4	1.80	84.18	42.3	1.99	82.17	41.5	1.98	87.84	43.7	2.01	83.82	41.7	2.01
April	74.85	40.9	1.83	74.98	41.2	1.82	83.16	42.0	1.98	82.17	41.5	1.98	85.40	42.7	2.00	83.84	41.3	2.03
May	72.94	40.3	1.81	73.93	40.4	1.83	82.57	41.7	1.98	80.18	40.7	1.97	84.84	42.0	2.02	84.67	41.1	2.06
June	72.18	40.1	1.80	73.16	40.2	1.82	81.99	41.2	1.99	80.57	40.9	1.97	86.68	42.7	2.03	84.66	41.5	2.04
July	73.12	40.4	1.81	71.74	39.2	1.83	82.59	41.5	1.99	82.39	41.4	1.99	86.90	42.6	2.04	85.70	41.6	2.06
August	75.48	41.7	1.81	73.84	39.7	1.86	83.60	41.8	2.00	80.99	40.7	1.99	87.54	42.7	2.05	85.49	41.7	2.05
September	74.85	40.9	1.83	71.98	38.7	1.86	83.21	41.4	2.01	82.61	41.1	2.01	87.55	42.5	2.06	84.67	41.3	2.05
October	73.89	40.6	1.82	74.80	40.0	1.87	84.03	41.6	2.02	82.61	41.1	2.01	86.93	42.2	2.06	85.28	41.4	2.06
November	74.70	40.6	1.84	75.95	40.4	1.88	84.03	41.6	2.02	83.43	41.1	2.03	87.96	42.2	2.06	85.08	41.3	2.06
December	78.77	41.9	1.88	75.79	40.1	1.89	85.27	41.8	2.04	83.21	40.1	2.05	84.67	41.3	2.05	78.28	38.0	2.06
1954: January	75.58	40.2	1.88	72.74	38.9	1.87	83.23	40.6	2.05	82.21	40.1	2.05	84.67	41.1	2.08	83.84	40.7	2.06
February	71.00	38.8	1.83	73.87	39.5	1.87	85.08	41.1	2.07	85.08	41.1	2.07	85.49	41.1	2.08	83.84	40.7	2.06
	Other aircraft parts and equipment			Ship- and boatbuilding and repairing <sup>1</sup>			Shipbuilding and repairing			Boatbuilding and repairing			Railroad equipment <sup>1</sup>			Locomotives and parts		
1951: Average	\$78.66	43.7	\$1.80	\$69.83	39.9	\$1.75	\$71.42	39.9	\$1.79	\$60.95	40.1	\$1.52	\$76.48	40.9	\$1.87	\$81.12	41.6	\$1.95
1952: Average	81.22	43.2	1.88	75.17	40.2	1.87	76.75	40.2	1.91	66.23	39.9	1.66	77.74	40.7	1.91	81.14	41.4	1.95
1953: February	85.65	43.7	1.96	76.60	38.3	2.00	78.11	38.1	2.05	68.11	39.6	1.72	79.98	40.6	1.97	79.56	40.8	1.95
March	86.29	43.8	1.97	78.79	39.2	2.01	80.73	39.0	2.07	69.49	40.4	1.72	81.41	40.5	2.01	84.46	41.4	2.04
April	85.10	43.2	1.97	80.19	39.7	2.02	81.95	39.4	2.08	71.86	41.3	1.74	81.61	40.2	2.03	85.07	40.9	2.08
May	83.30	42.5	1.96	80.19	39.7	2.02	81.74	39.3	2.08	72.28	41.3	1.75	79.79	39.5	2.02	80.55	39.1	2.06
June	83.75	42.3	1.98	79.40	39.5	2.01	81.14	39.2	2.07	70.41	40.7	1.73	81.20	40.0	2.03	85.06	40.7	2.09
July	84.38	42.4	1.99	80.57	39.5	2.04	82.53	39.3	2.10	70.93	40.3	1.76	77.99	38.8	2.01	78.16	38.5	2.03
August	84.80	42.4	2.00	80.98	39.5	2.05	82.92	39.3	2.11	70.93	40.3	1.76	78.36	38.6	2.03	81.97	39.6	2.07
September	85.04	42.1	2.02	78.49	38.1	2.06	80.60	38.2	2.11	67.86	37.7	1.80	80.94	39.1	2.07	82.56	39.5	2.09
October	86.05	42.6	2.02	79.90	38.6	2.07	81.41	38.4	2.12	70.92	39.4	1.80	81.77	39.5	2.07	81.16	39.4	2.06
November	85.45	42.3	2.02	78.45	37.9	2.07	80.30	37.7	2.13	69.66	38.7	1.80	80.70	38.8	2.08	81.54	39.2	2.08
December	87.95	42.9	2.05	82.37	39.6	2.08	83.92	39.4	2.13	73.62	40.9	1.80	83.16	39.6	2.10	84.35	39.6	2.13
1954: January	85.07	41.7	2.04	78.49	38.1	2.06	80.14	37.8	2.12	70.53	39.4	1.79	82.32	39.2	2.10	82.89	39.1	2.12
February	83.64	41.2	2.03	81.14	39.2	2.07	83.67	39.1	2.14	70.27	39.7	1.77	84.00	40.0	2.10	86.72	41.1	2.11
	Transportation equipment—Continued									Instruments and related products								
	Railroad and streetcars			Other transportation equipment			Total: Instruments and related products			Laboratory, scientific, and engineering instruments			Mechanical measuring and controlling instruments			Optical instruments and lenses		
1951: Average	\$70.40	40.0	\$1.76	\$68.53	42.3	\$1.62	\$68.20	42.1	\$1.62	\$36.85	45.0	\$1.93	\$68.69	42.4	\$1.62	\$72.07	42.9	\$1.68
1952: Average	74.00	40.0	1.85	73.02	42.7	1.71	72.07	41.9	1.72	93.11	45.2	2.06	71.66	42.4	1.69	76.50	42.5	1.80
1953: February	80.40	40.4	1.99	72.04	40.7	1.77	73.39	41.7	1.76	92.82	44.2	2.10	74.34	42.0	1.77	80.29	43.4	1.85
March	78.41	39.6	1.98	72.39	40.9	1.77	73.74	41.9	1.76	92.19	43.9	2.10	74.16	41.9	1.77	80.11	43.3	1.86
April	78.21	39.5	1.98	72.22	40.8	1.77	72.10	41.2	1.75	80.57	39.3	2.05	74.05	41.6	1.78	81.47	43.8	1.86
May	79.00	39.9	1.98	75.17	41.3	1.82	73.22	41.6	1.76	89.87	43.0	2.09	73.51	41.3	1.78	81.22	43.9	1.85
June	78.01	39.4	1.98	75.17	41.3	1.82	73.87	41.5	1.78	90.09	42.9	2.10	74.52	41.4	1.80	79.98	43.0	1.86
July	78.00	39.0	2.00	70.31	39.5	1.78	71.86	40.6	1.77	82.40	40.0	2.06	71.96	40.2	1.79	78.26	42.3	1.85
August	75.60	37.8	2.00	76.59	41.4	1.85	72.98	41.0	1.78	85.62	42.4	2.09	72.72	40.4	1.80	78.44	42.4	1.85
September	79.34	38.7	2.05	76.96	41.6	1.85	74.16	41.2	1.80	91.38	42.9	2.13	74.66	40.8	1.83	77.04	42.1	1.83
October	82.16	39.5	2.08	77.04	41.2	1.87	74.52	41.4	1.80	89.04	42.2	2.11	75.99	41.3	1.84	76.73	41.7	1.84
November	79.49	38.4	2.07	70.86	38.3	1.85	74.75	41.3	1.81	89.25	42.3	2.11	75.26	40.9	1.84	76.45	41.1	1.86
December	81.97	39.6	2.07	69.34	38.1	1.82	74.75	41.3	1.81	88.83	42.1	2.11	75.85	41.0	1.85	78.35	41.9	1.87
1954: January	81.64	39.2	2.08	68.78	38.0	1.81	72.22	39.9	1.81	80.50	38.7	2.08	72.83	39.8	1.83	75.11	40.6	1.85
February	81.72	39.1	2.09	71.86	39.7	1.81	73.53	40.4	1.82	81.97	39.6	2.07	74.89	40.7	1.84	76.31	41.7	1.83
	Instruments and related products—Continued									Miscellaneous manufacturing industries								
	Surgical, medical, and dental instruments			Ophthalmic goods			Photographic apparatus			Watches and clocks			Total: Miscellaneous manufacturing industries			Jewelry, silverware, and plated ware <sup>1</sup>		
1951: Average	\$60.86	41.4	\$1.47	\$55.49	40.8	\$1.36	\$73.08	42.0	\$1.74	\$59.57	40.8	\$1.46	\$57.67	40.9	\$1.41	\$61.30	41.7	\$1.47
1952: Average	64.68	41.2	1.57	56.63	39.6	1.43	76.73	41.7	1.84	60.55	40.1	1.51	61.50	41.0	1.50	65.99	42.3	1.60
1953: February	66.33	41.2	1.61	57.89	40.2	1.44	74.59	40.1	1.86	66.14	41.6	1.59	64.12	41.1	1.56	68.48	42.8	1.60
March	67.72	41.8	1.62	58.18	40.4	1.44	76.11	40.7	1.87	67.10	42.2	1.59	64.74	41.5	1.56	69.28	43.3	1.60
April	66.98	41.6	1.61	58.18	40.4	1.44	76.48	40.9	1.87	66.78	42.0	1.59	64.43	41.3	1.56	68.59	42.6	1.61
May	66.24	41.4	1.60	58.44	40.3	1.45	76.52	40.7	1.88	67.20	42.0	1.60	64.21	40.9	1.57	68.20	42.1	1.62
June	66.74	41.2	1.62	58.69	40.2	1.46	76.30	40.8	1.87	67.78	42.1	1.61	63.80	40.9	1.56	67.36	42.1	1.60
July	67.65	41.5	1.63	57.67	39.5	1.46	75.36	40.3	1.87	66.98	41.6	1.61	62.33	39.7	1.57	65.28	40.8	1.60
August	66.99	41.1	1.63	56.59	39.3	1.44	77.68	41.1	1.89	67.65	41.5	1.63	63.74	40.6	1.57	67.55	41.7	1.62
September	66.91	40.8	1.64	58.40	40.0	1.46	78.28	41.2	1.90	66.99	41.1	1.63	63.36	40.1	1.58	68.88	42.0	1.64
October	67.08	40.9	1.64	59.68	40.6	1.47	79.07	41.4	1.91	68.31	41.4	1.65	65.19	41.0	1.59	71.71	43.2	1.66
November	65.85	40.4	1.63	60.24	40.7	1.48	80.83	42.1	1.92	67.24	41.0	1.64	65.					

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees<sup>1</sup>—Continued

Year and month	Manufacturing—Continued																	
	Miscellaneous manufacturing industries—Continued																	
	Jewelry and findings			Silverware and plated ware			Musical instruments and parts			Toys and sporting goods <sup>2</sup>			Games, toys, dolls, and children's vehicles			Sporting and athletic goods		
	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
1951: Average	\$58.38	41.7	\$1.40	\$65.73	41.6	\$1.58	\$63.65	40.8	\$1.56	\$53.60	39.7	\$1.35	\$53.72	39.5	\$1.36	\$53.33	39.8	\$1.34
1952: Average	63.33	42.5	1.49	70.98	42.0	1.69	68.64	41.1	1.67	58.73	40.5	1.45	58.84	40.3	1.46	58.90	40.9	1.44
1953: February	65.91	42.8	1.54	73.44	42.7	1.72	72.21	41.5	1.74	61.00	40.4	1.51	60.04	39.5	1.52	61.98	41.6	1.49
March	66.10	43.2	1.53	75.69	43.5	1.74	72.73	41.8	1.74	62.06	41.1	1.51	61.81	40.4	1.53	62.58	42.0	1.49
April	64.41	42.1	1.53	76.13	43.5	1.75	72.28	41.3	1.75	61.05	40.7	1.50	61.66	40.5	1.52	60.83	41.1	1.48
May	63.91	41.5	1.54	76.03	43.2	1.76	70.88	40.5	1.75	60.90	40.6	1.50	61.41	40.4	1.52	60.53	40.9	1.48
June	63.38	41.7	1.52	74.73	42.7	1.75	70.35	40.2	1.75	60.60	40.4	1.50	60.70	40.2	1.51	60.24	40.7	1.48
July	60.70	40.2	1.51	73.50	42.0	1.75	68.78	39.3	1.75	58.20	38.8	1.50	57.45	38.3	1.50	59.00	39.6	1.49
August	62.73	41.0	1.53	75.50	42.9	1.76	70.58	40.1	1.76	59.75	40.1	1.49	60.30	40.2	1.50	59.05	39.9	1.48
September	63.71	41.1	1.55	77.43	43.5	1.78	70.84	39.8	1.78	60.34	39.7	1.52	61.51	40.2	1.53	58.55	38.7	1.50
October	68.37	43.0	1.59	78.04	43.6	1.79	72.80	40.9	1.78	62.12	40.6	1.53	63.55	41.0	1.55	60.00	40.0	1.50
November	68.05	42.8	1.59	80.00	44.2	1.81	73.51	41.3	1.78	62.93	40.6	1.55	64.84	41.3	1.57	59.65	39.5	1.51
December	68.53	43.1	1.59	77.83	43.0	1.81	73.51	41.3	1.78	61.69	39.8	1.55	61.70	39.3	1.57	61.41	40.4	1.52
1954: January	63.65	40.8	1.56	71.33	40.3	1.77	70.75	40.2	1.76	60.22	38.6	1.56	59.63	37.5	1.59	60.65	39.9	1.52
February	65.41	42.2	1.55	73.03	40.8	1.79	70.93	40.3	1.76	60.76	39.2	1.55	61.78	39.1	1.58	59.49	39.4	1.51
	Manufacturing—Continued																	
	Miscellaneous manufacturing industries—Continued												Transportation and public utilities					
	Pens, pencils, and other office supplies			Costume jewelry, buttons, notions			Fabricated plastic products			Other manufacturing industries			Class I railroads <sup>3</sup>			Local railways and buslines <sup>4</sup>		
	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
1951: Average	\$54.91	41.6	\$1.32	\$53.73	40.1	\$1.34	\$60.59	41.5	\$1.46	\$59.18	41.1	\$1.44	\$70.93	41.0	\$1.73	\$72.23	46.3	\$1.56
1952: Average	57.26	40.9	1.40	55.74	40.1	1.39	64.79	41.8	1.55	62.02	40.8	1.52	74.30	40.6	1.83	76.56	46.4	1.65
1953: February	57.57	39.7	1.45	60.01	41.1	1.46	69.21	42.2	1.64	63.90	40.7	1.57	76.95	40.5	1.90	75.82	45.4	1.67
March	58.29	40.2	1.46	61.01	41.5	1.47	69.28	42.5	1.63	64.37	41.0	1.57	75.30	40.7	1.85	75.99	45.5	1.67
April	59.02	40.7	1.45	61.01	41.5	1.47	68.79	42.2	1.63	64.62	40.9	1.58	76.82	41.3	1.86	76.78	45.7	1.68
May	59.13	40.5	1.46	60.38	40.8	1.48	68.88	42.0	1.64	64.24	40.4	1.59	74.43	39.8	1.87	78.08	46.2	1.69
June	59.86	41.0	1.46	59.83	40.7	1.47	67.16	41.2	1.63	64.71	40.7	1.59	77.75	41.8	1.86	78.37	46.1	1.70
July	57.38	39.3	1.46	55.39	38.2	1.45	66.91	41.3	1.62	64.24	39.9	1.61	73.31	42.1	1.86	77.92	45.3	1.72
August	58.58	40.4	1.45	58.11	39.8	1.46	67.07	41.4	1.62	65.21	40.5	1.61	75.36	40.3	1.87	77.40	45.0	1.72
September	58.80	40.0	1.47	58.61	39.6	1.48	66.91	40.8	1.64	63.92	39.7	1.61	76.33	40.6	1.88	78.13	44.9	1.74
October	60.56	41.2	1.47	58.07	39.5	1.47	68.06	41.5	1.64	66.34	40.7	1.63	77.30	40.9	1.89	77.53	44.3	1.75
November	60.79	40.8	1.49	57.57	38.9	1.48	67.73	41.3	1.64	65.53	40.2	1.63	76.04	39.4	1.93	77.18	44.1	1.75
December	61.12	41.3	1.48	58.36	39.7	1.47	68.31	41.4	1.65	66.50	40.3	1.65	76.78	40.2	1.91	77.43	44.5	1.74
1954: January	59.30	39.8	1.49	57.42	38.8	1.48	66.23	39.9	1.66	65.46	39.2	1.67	75.08	38.7	1.94	78.59	44.4	1.77
February	62.21	41.2	1.51	57.67	39.5	1.46	67.30	40.3	1.67	66.00	40.0	1.65				77.70	43.9	1.77
	Communication																	
	Telephone			Switchboard operating employees <sup>7</sup>			Line construction, installation, and maintenance employees <sup>8</sup>			Telegraph <sup>9</sup>			Total: Gas and electric utilities			Electric light and power utilities		
	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
1951: Average	\$58.26	39.1	\$1.49	\$49.39	37.7	\$1.31	\$81.32	42.8	\$1.90	\$68.24	44.6	\$1.53	\$71.65	41.9	\$1.71	\$72.91	41.9	\$1.74
1952: Average	61.22	38.5	1.59	51.43	37.0	1.39	86.51	42.2	2.05	72.48	43.4	1.67	75.12	41.5	1.81	76.18	41.4	1.84
1953: February	63.58	38.3	1.66	53.07	36.6	1.45	89.25	41.9	2.13	73.46	41.5	1.77	77.46	41.2	1.88	78.50	41.1	1.91
March	63.03	38.2	1.65	52.20	36.5	1.43	88.83	41.9	2.12	73.03	41.6	1.77	77.87	41.2	1.89	78.91	41.1	1.92
April	63.20	38.3	1.65	52.20	36.5	1.43	89.67	42.1	2.13	73.63	41.6	1.77	78.50	41.1	1.91	79.13	41.0	1.93
May	64.63	38.7	1.67	54.68	37.2	1.47	90.95	42.5	2.14	75.90	42.4	1.79	79.52	41.2	1.93	80.15	41.1	1.95
June	65.13	39.0	1.67	54.09	37.3	1.45	93.53	43.3	2.16	75.60	42.0	1.80	80.22	41.5	1.93	81.54	41.6	1.96
July	64.55	39.0	1.65	54.38	37.5	1.45	90.95	42.3	2.15	74.76	42.0	1.78	81.32	41.7	1.95	82.35	41.8	1.97
August	64.24	38.7	1.66	53.57	37.2	1.44	91.15	42.2	2.16	74.76	42.0	1.78	81.34	41.5	1.96	82.59	41.5	1.99
September	68.16	39.4	1.73	59.75	38.3	1.56	93.94	42.7	2.20	77.46	42.1	1.84	82.76	41.8	1.98	84.02	41.8	2.01
October	66.01	38.6	1.71	55.72	36.9	1.51	93.26	42.2	2.21	74.05	41.6	1.78	82.17	41.5	1.98	83.01	41.3	2.01
November	67.90	38.8	1.75	57.88	37.1	1.56	95.87	42.8	2.24	73.34	41.2	1.78	82.98	41.7	1.99	83.43	41.3	2.02
December	65.84	38.5	1.71	53.58	36.2	1.48	95.44	42.8	2.23	73.16	41.1	1.78	82.37	41.6	1.98	83.42	41.5	2.01
1954: January	65.70	38.2	1.72	54.30	36.2	1.50	91.94	41.6	2.21	72.80	40.9	1.78	81.77	41.3	1.98	(†)	(†)	(†)
February	65.74	38.0	1.73	54.36	36.0	1.51	92.99	41.7	2.23	73.69	41.4	1.78	80.97	41.1	1.97	(†)	(†)	(†)
	Transportation and public utilities—Continued																	
	Other public utilities—Continued						Wholesale and retail trade											
	Gas utilities			Electric light and gas utilities combined			Wholesale trade			Retail trade (except eating and drinking places)			Retail trade			Department stores and general mail-order houses		
	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
1951: Average	\$68.97	41.8	\$1.65	\$72.49	41.9	\$1.73	\$64.31	40.7	\$1.58	\$50.65	40.2	\$1.26	\$37.75	36.3	\$1.04	\$44.23	37.8	\$1.17
1952: Average	71.80	41.5	1.73	75.89	41.7	1.82	67.80	40.6	1.67	52.67	39.9	1.32	38.41	35.9	1.07	44.77	37.0	1.21
1953: February	74.21	41.0	1.81	78.85	41.5	1.90	69.66	40.5	1.72	53.70	39.2	1.37	38.17	34.7	1.10	43.77	35.3	1.24
March	74.21	41.0	1.81	79.49	41.4	1.92	69.89	40.4	1.73	53.70	39.2	1.37	37.82	34.7	1.09	43.67	35.5	1.23
April	75.44	41.0	1.84	80.32	41.4	1.94	70.12	40.3	1.74	53.96	39.1	1.38	37.93	34.8	1.09	43.79	35.6	1.23
May	75.26	40.9	1.84	80.93	41.5	1.95	70.93	40.3	1.76	54.21	39.0	1.39	38.52	34.7	1.11	44.38	35.5	1.25
June	74.85	40.9	1.83	82.15	41.7	1.97	71.10	40.4	1.76	55.16	39.4	1.40	39.65	34.4	1.12	45.59	35.9	1.27
July	76.63	41.2	1.86	82.76	41.8	1.98	72.09	40.5	1.78	56.26	39.9	1.41	40.54	36.2	1.12	45.86	36.4	1.26
August																		

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees<sup>1</sup>—Continued

Year and month	Wholesale and retail trade—Continued														
	Retail trade—Continued									Other retail trade					
	Food and liquor stores			Automotive and accessories dealers			Apparel and accessories stores			Furniture and appliance stores			Lumber and hardware supply stores		
	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
1951: Average	\$54.54	40.1	\$1.36	\$66.28	45.4	\$1.46	\$42.24	36.1	\$1.17	\$59.48	43.1	\$1.38	\$58.86	43.6	\$1.35
1952: Average	56.52	39.8	1.42	69.61	45.2	1.54	43.68	35.8	1.22	61.06	42.7	1.43	61.19	43.4	1.41
1953: February	57.48	39.1	1.47	71.55	46.0	1.59	43.65	35.2	1.24	60.06	42.0	1.43	61.92	42.7	1.45
March	57.57	38.9	1.48	72.90	45.0	1.62	43.30	35.2	1.23	60.48	42.0	1.44	62.49	42.8	1.46
April	57.81	38.8	1.49	74.09	44.9	1.65	43.75	35.0	1.25	60.90	42.0	1.45	62.78	43.0	1.46
May	57.66	38.7	1.49	74.70	45.0	1.66	44.58	35.1	1.27	61.03	41.8	1.46	64.37	43.2	1.49
June	58.95	39.3	1.50	74.98	44.9	1.67	45.09	35.5	1.27	61.89	42.1	1.47	64.67	43.4	1.49
July	60.25	39.9	1.51	74.98	44.9	1.67	45.61	36.2	1.26	62.31	42.1	1.48	65.10	43.4	1.50
August	60.25	39.9	1.51	74.48	44.6	1.67	45.25	36.2	1.25	62.16	42.0	1.48	65.97	43.4	1.52
September	60.37	39.2	1.54	73.10	44.3	1.65	44.80	35.0	1.28	62.31	42.1	1.48	65.79	43.0	1.53
October	58.98	38.3	1.54	74.48	44.6	1.67	45.41	35.2	1.29	63.15	42.1	1.50	66.99	43.5	1.54
November	59.37	38.3	1.55	74.32	44.5	1.67	45.63	35.1	1.30	62.97	41.7	1.51	66.22	43.0	1.54
December	59.44	38.6	1.54	72.37	44.4	1.63	46.90	35.8	1.31	66.07	42.9	1.54	65.79	43.0	1.53
1954: January	59.75	38.3	1.56	71.16	44.2	1.61	46.11	35.2	1.31	63.00	42.0	1.50	64.14	42.2	1.52
February	59.06	38.1	1.55	71.93	44.4	1.62	46.15	35.5	1.30	61.90	42.4	1.46	65.06	42.8	1.52
	Finance, insurance, and real estate <sup>10</sup>						Service and miscellaneous								
	Banks and trust companies		Security dealers and exchanges	Insurance carriers	Hotels, year-round <sup>11</sup>			Personal services						Motion-picture production and distribution <sup>10</sup>	
	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	Laundries		Cleaning and dyeing plants		Avg. wkly. earnings	
										Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1951: Average	\$50.32	\$83.68	\$61.31	\$35.42	43.2	\$0.82	\$37.81	41.1	\$0.92	\$43.99	41.5	\$1.06	\$43.99	41.5	\$1.06
1952: Average	52.50	81.07	63.38	37.06	42.6	.87	38.63	41.1	.94	45.10	41.0	1.10	45.10	41.0	1.10
1953: February	54.61	83.21	66.23	37.65	42.3	.89	38.88	40.5	.96	43.73	39.4	1.11	43.73	39.4	1.11
March	54.40	86.01	66.32	37.47	42.1	.89	39.88	40.6	.97	45.02	40.2	1.12	45.02	40.2	1.12
April	54.47	86.78	66.55	37.83	42.5	.89	39.58	40.8	.97	45.36	40.5	1.12	45.36	40.5	1.12
May	54.65	84.48	66.52	37.89	42.1	.90	40.67	41.5	.98	45.19	41.9	1.15	45.19	41.9	1.15
June	54.28	82.55	67.20	38.22	42.0	.91	40.08	40.1	.98	47.08	41.3	1.14	47.08	41.3	1.14
July	54.90	81.72	68.73	38.40	42.2	.91	39.30	40.1	.98	44.69	39.2	1.14	44.69	39.2	1.14
August	55.00	79.72	68.07	38.49	42.3	.91	39.10	39.9	.98	44.35	38.9	1.14	44.35	38.9	1.14
September	55.03	80.00	67.30	39.06	42.0	.93	39.80	40.2	.99	45.40	40.0	1.16	45.40	40.0	1.16
October	55.36	80.68	67.63	39.76	42.3	.94	39.70	40.1	.99	46.92	40.1	1.17	46.92	40.1	1.17
November	55.33	81.73	68.54	39.67	42.2	.94	40.00	40.0	1.00	45.98	39.3	1.17	45.98	39.3	1.17
December	55.68	84.19	68.43	39.81	41.9	.95	40.60	40.6	1.00	46.68	39.9	1.17	46.68	39.9	1.17
1954: January	56.51	86.83	68.74	39.71	41.8	.95	39.70	39.7	1.00	45.08	38.2	1.18	45.08	38.2	1.18
February	56.51	86.94	68.77	40.09	42.2	.95	40.00	40.0	1.00	45.16	38.6	1.17	45.16	38.6	1.17

<sup>1</sup> 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 three current months are subject to revision without notation; revised figures for earlier months will be identified by asterisks the first month they are published.

<sup>2</sup> Italicized titles which follow are components of this industry.

<sup>3</sup> See footnote 2, table A-2.

<sup>4</sup> See footnote 3, table A-2.

<sup>5</sup> 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).

<sup>6</sup> Beginning with January 1953, data include only privately operated establishments. Averages for earlier years include both privately operated and Government operated establishments. Data for 1953 shown in prior issues of the Monthly Labor Review were on the old basis, and are superseded by these data.

<sup>7</sup> Data relate to employees in such occupations in the telephone industry as switchboard operators, service assistants, operating-room instructors, and pay-station attendants. During 1952 such employees made up 47 percent of the total number of nonsupervisory employees in telephone establishments reporting hours and earnings data.

<sup>8</sup> 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 1952 such employees made up 23 percent of the total number of nonsupervisory employees in telephone establishments reporting hours and earnings data.

<sup>9</sup> Beginning with 1952, data relate to domestic employees, except messengers, and those compensated entirely on a commission basis and are not strictly comparable with figures shown for 1951.

<sup>10</sup> Data on average weekly hours and average hourly earnings are not available.

<sup>11</sup> Money payments only; additional value of board, room, uniforms, and tips, not included.

†Computation of these data has been discontinued.

See NOTE on p. 576.

TABLE C-2: Gross average weekly earnings of production workers in selected industries, in current and 1947-49 dollars<sup>1</sup>

Year and month	Manufacturing		Bituminous coal mining		Laundries		Year and month	Manufacturing		Bituminous coal mining		Laundries	
	Current dollars	1947-49 dollars	Current dollars	1947-49 dollars	Current dollars	1947-49 dollars		Current dollars	1947-49 dollars	Current dollars	1947-49 dollars	Current dollars	1947-49 dollars
1939: Average.....	\$23.86	\$40.17	\$23.88	\$40.20	\$17.64	\$29.70	1953: February.....	\$71.17	\$62.76	\$81.42	\$71.80	\$38.88	\$34.29
1941: Average.....	29.58	47.03	30.86	49.06	18.69	29.71	March.....	71.93	63.32	81.76	71.97	39.38	34.67
1946: Average.....	43.82	52.54	58.03	69.58	30.20	36.21	April.....	71.40	62.80	79.61	70.02	39.58	34.81
1948: Average.....	54.14	52.67	72.12	70.16	34.23	33.30	May.....	71.63	62.83	84.97	74.54	40.67	35.68
1949: Average.....	54.92	53.95	63.28	62.16	34.98	34.36	June.....	71.63	62.56	91.25	79.69	40.28	35.18
1950: Average.....	59.33	57.71	70.55	68.43	35.47	34.50	July.....	71.33	62.19	84.97	74.08	39.30	34.26
1951: Average.....	64.71	58.30	77.79	70.08	37.81	34.06	August.....	71.69	62.34	92.88	80.77	39.10	34.00
1952: Average.....	67.97	59.89	78.32	69.00	38.63	34.04	September.....	71.42	62.00	86.15	74.78	39.80	34.55
							October.....	71.73	62.16	89.78	77.80	39.70	34.40
							November.....	71.60	62.26	81.17	70.58	40.00	34.78
							December.....	71.96	62.63	82.25	71.58	40.60	35.34
							1954: January <sup>2</sup> .....	70.92	61.56	82.34	71.48	39.70	34.46
							February <sup>2</sup> .....	70.88	61.63	78.47	68.23	40.00	34.78

<sup>1</sup> These series indicate changes in the level of average weekly earnings prior to and after adjustment for changes in purchasing power as determined from the Bureau's Consumer Price Index, the years 1947-49 having been selected for the base period.

<sup>2</sup> Preliminary.

See NOTE on p. 576.

TABLE C-3: Gross and net spendable average weekly earnings of production workers in manufacturing industries, in current and 1947-49 dollars<sup>1</sup>

Period	Gross average weekly earnings		Net spendable average weekly earnings				Period	Gross average weekly earnings		Net spendable average weekly earnings			
	Amount	Index (1947-49 = 100)	Worker with no dependents		Worker with 3 dependents			Amount	Index (1947-49 = 100)	Worker with no dependents		Worker with 3 dependents	
			Current dollars	1947-49 dollars	Current dollars	1947-49 dollars				Current dollars	1947-49 dollars	Current dollars	1947-49 dollars
1941: January.....	\$26.64	50.3	\$25.41	\$42.14	\$26.37	\$43.73	1953: February.....	\$71.17	134.4	\$58.13	\$51.26	\$66.16	\$58.34
1945: January.....	47.50	89.7	39.40	51.77	45.17	59.36	March.....	71.93	135.8	58.72	51.69	66.77	58.78
1946: July.....	45.45	85.8	37.80	48.77	43.57	56.22	April.....	71.40	134.8	58.31	51.28	66.34	58.35
1946: June.....	43.31	81.8	37.30	46.74	42.78	53.61	May.....	71.63	135.3	58.49	51.31	66.53	58.36
1939: Average.....	23.86	45.1	23.58	39.70	23.62	39.76	June.....	71.63	135.3	58.49	51.08	66.53	58.10
1940: Average.....	25.20	47.6	24.69	41.22	24.95	41.65	July.....	71.33	134.7	58.26	50.79	66.29	57.79
1941: Average.....	29.58	55.9	28.05	44.59	29.28	46.55	August.....	71.69	135.4	58.54	50.90	66.58	57.90
1942: Average.....	36.65	69.2	31.77	45.58	36.28	52.05	September.....	71.42	134.9	58.33	50.63	66.36	57.60
1943: Average.....	43.14	81.5	36.01	48.66	41.39	55.93	October.....	71.73	135.5	58.57	50.75	66.61	57.72
1944: Average.....	46.08	87.0	38.29	50.92	44.06	58.59	November.....	71.60	135.2	58.47	50.84	66.50	57.83
1945: Average.....	44.39	83.8	36.97	48.08	42.74	55.58	December.....	71.96	135.9	58.75	51.13	66.79	58.13
1946: Average.....	43.82	82.8	37.72	45.23	43.20	51.80	1954: January <sup>2</sup> .....	70.92	133.9	58.80	51.04	66.00	57.29
1947: Average.....	49.97	94.4	42.76	44.77	48.24	50.51	February <sup>2</sup> .....	70.88	133.9	58.77	51.10	65.97	57.37
1948: Average.....	54.14	102.2	47.43	46.14	53.17	51.72							
1949: Average.....	54.92	103.7	48.09	47.24	53.83	52.88							
1950: Average.....	59.33	112.0	51.09	49.70	57.21	55.65							
1951: Average.....	64.71	122.2	54.04	48.68	61.28	55.21							
1952: Average.....	67.97	128.4	55.66	49.04	63.62	56.05							

<sup>1</sup> Net spendable average weekly earnings are obtained by deducting from gross average weekly earnings, social security and income taxes for which the specified type of 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 aver-

age 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.

<sup>2</sup> Preliminary.

See NOTE on p. 576.

TABLE C-4: Average hourly earnings, gross and excluding overtime, of production workers in manufacturing industries <sup>1</sup>

Period	Manufacturing			Durable goods		Nondurable goods		Period	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	1953: February....	\$1.74	\$1.68	130.4	\$1.85	\$1.77	\$1.58	\$1.54
1942: Average.....	.853	.805	62.5	.947	.881	.723	.698	March.....	1.75	1.68	130.4	1.85	1.77	1.59	1.54
1943: Average.....	.961	.894	69.4	1.059	.976	.803	.763	April.....	1.75	1.69	131.2	1.86	1.78	1.59	1.55
1944: Average.....	1.019	.947	73.5	1.117	1.029	.861	.814	May.....	1.76	1.69	131.2	1.86	1.79	1.60	1.55
1945: Average.....	1.023	1.963	174.8	1.111	1.042	.904	.858	June.....	1.76	1.70	132.0	1.87	1.80	1.60	1.55
1946: Average.....	1.086	1.051	81.6	1.156	1.122	1.015	.981	July.....	1.77	1.71	132.8	1.88	1.81	1.61	1.56
1947: Average.....	1.237	1.198	93.0	1.292	1.250	1.171	1.133	August.....	1.77	1.71	132.8	1.88	1.81	1.61	1.56
1948: Average.....	1.350	1.310	101.7	1.410	1.366	1.278	1.241	September....	1.79	1.73	134.3	1.89	1.83	1.62	1.58
1949: Average.....	1.401	1.367	106.1	1.469	1.434	1.325	1.292	October.....	1.78	1.73	134.3	1.89	1.83	1.63	1.59
1950: Average.....	1.465	1.415	109.9	1.537	1.480	1.378	1.337	November....	1.79	1.74	135.1	1.90	1.84	1.64	1.59
1951: Average.....	1.59	1.53	118.8	1.67	1.60	1.48	1.43	December....	1.79	1.74	135.1	1.90	1.84	1.64	1.59
1952: Average.....	1.67	1.61	125.0	1.76	1.69	1.54	1.49	1954: January <sup>2</sup> ....	1.80	1.75	135.9	1.91	1.85	1.65	1.61
								February <sup>3</sup> ....	1.79	1.74	135.1	1.90	1.84	1.64	1.60

<sup>1</sup> 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.

<sup>2</sup> 11-month average; August 1945 excluded because of V-J Holiday period.  
<sup>3</sup> Preliminary.

See NOTE on p. 576.

# D: Prices and Cost of Living

TABLE D-1: Consumer Price Index<sup>1</sup>—United States average, all items and commodity groups

[1947-49=100]

Year and month	All items	Total food <sup>2</sup>	Apparel	Housing <sup>3</sup>					Transportation	Medical care	Personal care	Reading and recreation	Other goods and services <sup>4</sup>	
				Total <sup>3</sup>	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	105.8	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
1950: January.....	100.6	97.0	96.7	104.4	107.5	102.5	109.9	97.4	99.4	110.2	105.0	99.4	104.3	103.9
February.....	100.4	96.5	96.7	104.6	107.7	102.8	109.6	97.6	99.4	110.0	105.0	99.2	104.6	103.9
March.....	100.7	97.3	96.8	104.6	107.8	102.8	108.9	97.7	99.5	109.8	105.1	99.1	104.4	103.9
April.....	100.8	97.7	96.7	104.7	108.1	102.9	109.7	97.7	99.4	109.6	105.1	99.1	104.0	103.8
May.....	101.3	98.9	96.5	104.7	108.5	102.8	106.8	97.6	99.6	109.9	105.4	99.2	105.5	103.7
June.....	101.8	100.5	96.5	104.9	108.7	102.7	107.6	97.4	99.9	111.2	105.6	99.5	101.7	104.1
July.....	102.9	103.1	96.4	105.3	109.1	102.8	108.1	99.7	101.2	112.4	106.0	100.8	101.9	106.3
August.....	103.7	103.9	97.1	106.1	109.3	102.7	109.8	102.4	102.3	112.7	107.0	101.3	102.7	106.8
September.....	104.4	104.0	99.2	107.1	109.5	102.8	111.6	102.4	103.6	112.6	107.1	103.3	103.0	107.1
October.....	105.0	104.3	100.9	108.1	109.6	102.7	113.4	104.7	103.6	112.6	107.1	103.3	103.0	107.1
November.....	105.5	104.4	101.6	108.8	110.0	102.7	114.3	106.0	104.4	112.9	107.4	106.1	103.6	107.4
December.....	106.9	107.1	102.2	109.4	110.4	102.7	114.8	107.1	105.6	114.1	108.0	107.4	104.1	107.9
1951: January.....	108.6	109.9	103.8	110.4	110.6	103.1	115.1	109.3	107.2	114.7	108.5	109.8	105.6	108.4
February.....	109.9	111.9	105.6	111.2	111.3	103.1	116.4	110.5	108.1	115.8	108.9	110.6	106.4	108.7
March.....	110.3	112.0	106.2	111.7	111.9	103.1	116.7	111.1	108.4	116.9	109.9	110.7	107.0	108.9
April.....	110.4	111.7	106.4	111.9	112.2	102.8	116.7	111.6	108.3	117.2	110.3	110.7	107.3	109.0
May.....	110.9	112.6	106.6	112.2	112.5	103.2	115.2	112.1	108.7	117.6	110.7	110.8	107.3	109.2
June.....	110.8	112.3	106.6	112.3	112.7	103.0	115.4	112.0	108.7	117.5	111.0	110.8	106.5	109.1
July.....	110.9	112.7	106.8	112.6	113.1	103.1	115.9	112.0	109.1	117.8	111.0	110.6	106.6	109.1
August.....	110.9	112.4	106.4	112.6	113.6	103.2	116.2	111.1	109.0	118.7	111.2	110.4	106.4	109.1
September.....	111.6	112.5	109.3	112.9	114.2	103.2	116.6	111.3	108.8	119.7	111.8	110.0	105.8	109.6
October.....	112.1	113.5	109.2	113.2	114.8	103.3	117.1	110.9	109.6	120.5	112.6	110.0	105.9	109.6
November.....	112.8	114.6	108.5	113.7	115.4	103.3	117.4	111.1	110.4	122.1	113.1	110.6	106.3	112.4
December.....	113.1	115.0	108.1	113.9	115.6	103.4	117.6	110.8	111.1	122.2	114.8	111.1	106.5	112.8
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	116.0
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	113.7	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	123.1	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	123.0	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	123.8	107.0	125.7	108.1	116.6	130.7	122.8	113.2	108.6	119.7
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

<sup>1</sup> A 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-3. The revised Consumer Price Index measures the average change in prices of goods and services purchased by urban wage-earner and salaried-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, in the February 1953 Monthly Labor Review; the pamphlet, The Consumer Price Index—A Short Description of the Index as Revised, 1953; 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 Committee 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. <sup>2</sup> Includes "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. <sup>3</sup> Includes "Other shelter." <sup>4</sup> Includes tobacco, alcoholic beverages, and "miscellaneous services" (such as legal services, banking fees, and burial services).

TABLE D-2: Consumer Price Index<sup>1</sup>—United States average, food and its subgroups

(1947-49=100)

Year and month	Total food <sup>2</sup>	Food at home						Year and month	Total food <sup>2</sup>	Food at home					
		Total food at home	Cereals and bakery products	Meats, poultry, and fish	Dairy products	Fruits and vegetables	Other foods <sup>3</sup>			Total food at home	Cereals and bakery products	Meats, poultry, and fish	Dairy products	Fruits and vegetables	Other foods <sup>3</sup>
1947: Avg.....	95.9	95.9	94.0	93.5	96.7	97.6	100.1	1951: Nov.....	114.6	114.6	115.1	117.7	109.2	109.5	118.5
1948: Avg.....	104.1	104.1	103.4	106.1	106.3	100.5	102.5	1951: Dec.....	115.0	115.0	115.2	116.3	110.7	115.8	114.5
1949: Avg.....	100.0	100.0	102.7	100.5	96.9	101.9	97.5	1952: Jan.....	115.0	115.0	115.3	117.1	112.0	109.1	109.1
1950: Avg.....	101.2	101.2	104.5	104.9	95.9	97.6	101.2	1952: Feb.....	112.6	112.6	115.5	116.7	112.7	109.5	105.8
1951: Avg.....	112.6	112.6	114.0	117.2	107.0	106.7	114.6	1952: Mar.....	112.7	112.7	115.7	115.2	112.0	113.7	104.4
1952: Avg.....	114.6	114.6	116.8	116.2	111.5	117.2	109.3	1952: Apr.....	113.9	113.9	115.6	114.8	110.4	121.1	105.0
1953: Avg.....	112.8	112.5	119.1	109.9	109.6	113.5	112.2	1952: May.....	114.3	114.3	117.2	114.5	109.3	124.3	104.4
1950: Jan.....	97.0	97.0	102.2	94.4	95.6	100.3	95.1	1952: June.....	114.6	114.6	116.9	116.5	108.9	122.4	105.2
1950: Feb.....	96.5	96.5	102.3	95.6	95.3	97.6	93.5	1952: July.....	116.3	116.3	117.6	116.4	116.2	124.0	111.5
1950: Mar.....	97.3	97.3	102.3	98.7	94.7	95.5	95.5	1952: Aug.....	116.6	116.6	117.5	119.4	111.0	118.7	113.1
1950: Apr.....	97.7	97.7	102.4	99.5	93.3	97.4	95.1	1952: Sept.....	115.4	115.4	117.4	119.2	112.5	111.5	113.7
1950: May.....	98.9	98.9	102.7	103.4	92.6	99.0	93.5	1952: Oct.....	115.0	115.0	117.5	116.9	113.2	111.3	115.1
1950: June.....	100.5	100.5	102.7	106.1	92.3	102.5	94.1	1952: Nov.....	115.0	115.0	117.5	114.3	113.3	115.9	114.3
1950: July.....	103.1	103.1	103.8	110.1	93.8	103.6	97.7	1952: Dec.....	113.8	113.8	117.7	113.0	112.7	115.8	110.6
1950: Aug.....	103.9	103.9	106.2	112.2	95.7	94.7	105.3	1953: Jan.....	113.1	112.9	117.7	110.9	111.6	116.7	109.7
1950: Sept.....	104.0	104.0	107.0	112.4	97.0	91.1	107.7	1953: Feb.....	111.5	111.1	117.6	107.7	110.7	115.9	107.3
1950: Oct.....	104.3	104.3	107.2	109.0	99.6	92.9	110.4	1953: Mar.....	111.7	111.3	117.7	107.4	110.3	115.5	109.1
1950: Nov.....	104.4	104.4	107.4	107.7	100.1	95.8	109.2	1953: Apr.....	111.5	111.1	118.0	106.8	109.0	115.0	110.4
1950: Dec.....	107.1	107.1	107.5	109.1	100.7	99.9	117.0	1953: May.....	112.1	111.7	118.4	109.2	107.8	115.2	110.3
1951: Jan.....	109.9	109.9	112.2	113.5	105.2	104.8	111.2	1953: June.....	113.7	113.7	118.9	111.3	107.5	121.7	110.9
1951: Feb.....	111.9	111.9	113.2	116.3	106.1	109.8	110.3	1953: July.....	113.8	113.8	119.1	112.0	108.3	118.2	112.3
1951: Mar.....	112.0	112.0	113.4	117.2	106.2	106.3	112.7	1953: Aug.....	114.1	114.1	119.5	114.1	109.1	112.7	114.4
1951: Apr.....	111.7	111.7	113.9	117.3	106.0	105.2	112.4	1953: Sept.....	113.8	113.5	120.3	113.5	109.6	106.6	116.7
1951: May.....	112.6	112.6	113.9	117.4	105.7	108.5	113.5	1953: Oct.....	113.6	113.3	120.4	111.1	110.1	107.7	117.4
1951: June.....	112.3	112.3	114.0	116.9	105.9	107.7	113.8	1953: Nov.....	112.0	111.4	120.6	107.0	110.5	107.4	114.8
1951: July.....	112.7	112.7	114.3	117.6	106.5	107.0	114.8	1953: Dec.....	112.3	111.7	120.9	107.8	110.3	109.2	113.5
1951: Aug.....	112.4	112.4	114.2	118.4	106.9	102.3	116.5	1954: Jan.....	113.1	112.6	121.2	110.2	109.7	110.8	113.5
1951: Sept.....	112.5	112.5	114.6	118.6	107.2	100.4	118.4	1954: Feb.....	112.6	112.0	121.3	109.7	109.0	108.0	114.0
1951: Oct.....	113.5	113.5	114.6	119.1	107.9	103.2	118.9	1954: Mar.....	112.1	111.4	121.2	109.5	108.0	107.8	112.3

<sup>1</sup> 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.

<sup>2</sup> See footnote 2 to table D-1.

<sup>3</sup> Includes eggs, fats and oils, sugar and sweets, beverages (nonalcoholic) and other miscellaneous foods.

TABLE D-3: Consumer Price Index<sup>1</sup>—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 <sup>2</sup>	All items		All items	Total food <sup>2</sup>	All items		All items	Total food <sup>2</sup>	All items
1913: Average.....	42.3	39.6	70.7	1944: Average.....	75.2	67.4	125.7	1951: October.....	112.1	113.5	187.4
1914: Average.....	42.9	40.5	71.8	1945: Average.....	76.9	68.9	128.6	1951: November.....	112.8	114.6	188.6
1915: Average.....	43.4	40.0	72.5	1946: Average.....	83.4	79.0	139.5	1951: December.....	113.1	115.0	189.1
1916: Average.....	46.6	45.0	77.9	1947: Average.....	95.5	95.9	159.6	1952: January.....	113.1	115.0	189.1
1917: Average.....	54.8	57.9	91.6	1948: Average.....	102.8	104.1	171.9	1952: February.....	112.4	112.6	187.9
1918: Average.....	64.3	66.5	107.5	1949: Average.....	101.8	100.0	170.2	1952: March.....	112.4	112.7	188.0
1919: Average.....	74.0	74.2	123.8	1950: Average.....	102.8	101.2	171.9	1952: April.....	112.9	113.9	188.7
1920: Average.....	85.7	83.6	143.3	1951: Average.....	111.0	112.6	185.6	1952: May.....	113.0	114.3	189.0
1921: Average.....	76.4	63.5	127.7	1952: Average.....	113.5	114.6	189.8	1952: June.....	113.4	114.6	189.6
1922: Average.....	71.6	59.4	119.7	1953: Average.....	114.4	112.8	191.3	1952: July.....	114.1	116.3	190.8
1923: Average.....	72.9	61.4	121.9	1950: January.....	100.6	97.0	168.2	1952: August.....	114.3	116.6	191.1
1924: Average.....	73.1	60.8	122.2	1950: February.....	100.4	96.5	167.9	1952: September.....	114.1	115.4	190.8
1925: Average.....	75.0	65.8	125.4	1950: March.....	100.7	97.3	168.4	1952: October.....	114.2	115.0	190.9
1926: Average.....	75.6	68.0	126.4	1950: April.....	100.8	97.7	168.5	1952: November.....	114.3	115.0	191.1
1927: Average.....	74.2	65.5	124.0	1950: May.....	101.3	98.9	169.3	1952: December.....	114.1	113.8	190.7
1928: Average.....	73.3	64.8	122.6	1950: June.....	101.8	100.5	170.2	1953: January.....	113.9	113.1	190.4
1929: Average.....	73.3	65.6	122.5	1950: July.....	102.9	103.1	172.0	1953: February.....	113.4	111.5	189.6
1930: Average.....	71.4	62.4	119.4	1950: August.....	103.7	103.9	173.4	1953: March.....	113.6	111.7	189.9
1931: Average.....	65.0	51.4	108.7	1950: September.....	104.4	104.0	174.6	1953: April.....	113.7	111.5	190.1
1932: Average.....	58.4	42.8	97.6	1950: October.....	105.0	104.3	175.6	1953: May.....	114.0	112.1	190.6
1933: Average.....	55.3	41.6	92.4	1950: November.....	105.5	104.4	176.4	1953: June.....	114.5	113.7	191.4
1934: Average.....	57.2	46.4	95.7	1950: December.....	106.9	107.1	178.8	1953: July.....	114.7	113.8	191.8
1935: Average.....	58.7	49.7	98.1	1951: January.....	108.6	109.9	181.5	1953: August.....	115.0	114.1	192.3
1936: Average.....	59.3	50.1	99.1	1951: February.....	109.9	111.9	183.8	1953: September.....	115.2	113.8	192.6
1937: Average.....	61.4	52.1	102.7	1951: March.....	110.3	112.0	184.5	1953: October.....	115.4	113.6	192.9
1938: Average.....	60.3	45.4	100.8	1951: April.....	110.4	111.7	184.6	1953: November.....	115.0	112.0	192.3
1939: Average.....	59.4	47.1	99.4	1951: May.....	110.9	112.6	185.4	1953: December.....	114.9	112.3	192.1
1940: Average.....	59.9	47.8	100.2	1951: June.....	110.8	112.3	185.2	1954: January.....	115.2	113.1	192.6
1941: Average.....	62.9	52.2	105.2	1951: July.....	110.9	112.7	185.5	1954: February.....	115.0	112.6	192.3
1942: Average.....	69.7	61.3	116.6	1951: August.....	110.9	112.4	185.5	1954: March.....	114.8	112.1	191.9
1943: Average.....	74.0	68.3	123.7	1951: September.....	111.6	112.5	186.6				

<sup>1</sup> See footnote 1 to table D-1.

<sup>2</sup> See footnote 2 to table D-1.



TABLE D-4: Consumer Price Index<sup>1</sup>—All items indexes for selected dates, by city

City	1947-49=100														1935-39=100	
	Mar. 1954	Feb. 1954	Jan. 1954	Dec. 1953	Nov. 1953	Oct. 1953	Sept. 1953	Aug. 1953	July 1953	June 1953	May 1953	Apr. 1953	Mar. 1953	June 1950	Revised series Mar. 1954	Old series June 4 1953
United States average <sup>2</sup> .....	114.8	115.0	115.2	114.9	115.0	115.4	115.2	115.0	114.7	114.5	114.0	113.7	113.6	101.8	191.9	190.9
Atlanta, Ga.....	117.0	(3)	(3)	117.1	(3)	(3)	117.6	(3)	(3)	117.1	(3)	(3)	116.7	(3)	198.4	197.7
Baltimore, Md.....	114.8	(3)	(3)	114.5	(3)	(3)	115.0	(3)	(3)	115.1	(3)	(3)	114.2	101.6	197.3	194.6
Boston, Mass.....	(3)	(3)	112.7	(3)	(3)	113.8	(3)	(3)	113.1	(3)	(3)	111.7	(3)	102.8	(3)	180.6
Chicago, Ill.....	116.7	116.7	116.7	116.4	116.4	117.1	116.6	116.3	115.7	115.3	114.6	114.2	113.8	102.8	198.7	195.7
Cincinnati, Ohio.....	114.2	(3)	(3)	114.6	(3)	(3)	115.3	(3)	(3)	114.5	(3)	(3)	112.6	101.2	192.3	195.0
Cleveland, Ohio.....	(3)	115.2	(3)	(3)	115.5	(3)	(3)	115.1	(3)	(3)	113.7	(3)	(3)	(3)	(3)	(3)
Detroit, Mich.....	116.5	116.4	117.0	116.4	117.2	116.9	116.9	116.9	116.9	116.6	115.8	115.2	115.2	102.8	196.7	200.4
Houston, Tex.....	(3)	116.9	(3)	(3)	117.3	(3)	(3)	116.8	(3)	(3)	116.8	(3)	(3)	103.8	(3)	193.4
Kansas City, Mo.....	(3)	(3)	115.0	(3)	(3)	115.7	(3)	(3)	115.3	(3)	(3)	114.3	(3)	(3)	(3)	(3)
Los Angeles, Calif.....	116.2	116.6	116.8	115.8	116.1	116.3	116.2	115.8	115.8	115.4	115.3	115.6	115.4	101.3	194.2	188.7
Minneapolis, Minn.....	(3)	(3)	116.6	(3)	(3)	116.6	(3)	(3)	115.6	(3)	(3)	115.1	(3)	102.1	(3)	(3)
New York, N. Y.....	112.4	112.8	113.0	113.0	112.9	113.3	113.2	112.7	112.1	112.0	111.4	111.1	111.2	100.9	186.0	185.4
Philadelphia, Pa.....	114.9	115.2	115.3	115.0	114.7	115.3	115.2	114.9	114.7	114.6	113.8	113.7	114.1	101.6	191.2	190.5
Pittsburgh, Pa.....	(3)	(3)	114.4	(3)	(3)	114.7	(3)	(3)	113.8	(3)	(3)	112.8	(3)	101.1	(3)	194.6
Portland, Ore.....	(3)	(3)	115.4	(3)	(3)	116.1	(3)	(3)	115.5	(3)	(3)	115.4	(3)	(3)	(3)	(3)
St. Louis, Mo.....	116.9	(3)	(3)	116.9	(3)	(3)	117.1	(3)	(3)	115.8	(3)	(3)	114.7	101.1	195.1	192.9
San Francisco, Calif.....	116.5	(3)	(3)	116.9	(3)	(3)	116.9	(3)	(3)	116.1	(3)	(3)	115.5	100.9	199.1	199.1
Scranton, Pa.....	(3)	113.2	(3)	(3)	113.4	(3)	(3)	113.2	(3)	(3)	112.0	(3)	(3)	(3)	(3)	(3)
Seattle, Wash.....	(3)	116.2	(3)	(3)	116.4	(3)	(3)	116.8	(3)	(3)	116.2	(3)	(3)	(3)	(3)	(3)
Washington, D. C.....	(3)	114.1	(3)	(3)	114.3	(3)	(3)	114.2	(3)	(3)	113.5	(3)	(3)	(3)	(3)	(3)

<sup>1</sup> 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.

<sup>2</sup> A average of 46 cities beginning January 1953. See footnote 1 to table D-1.  
<sup>3</sup> 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.

<sup>4</sup> All "old series" indexes discontinued as of June 1953. Last "old series" indexes (1935-39=100) for the 14 cities not included in the revised index and for cities not surveyed in June are as follows:

June 1953	
Birmingham, Ala.....	196.6
Jacksonville, Fla.....	198.2
Memphis, Tenn.....	190.8
Mobile, Ala.....	185.6
Portland, Maine.....	181.9

May 1953	
Cleveland, Ohio.....	192.8
Milwaukee, Wis.....	196.9
New Orleans, La.....	190.1
Norfolk, Va.....	191.3
Scranton, Pa.....	185.3
Seattle, Wash.....	195.4
Washington, D. C.....	185.5

April 1953	
Buffalo, N. Y.....	187.3
Denver, Colo.....	189.1
Indianapolis, Ind.....	192.5
Kansas City, Mo.....	181.8
Manchester, N. H.....	184.7
Minneapolis, Minn.....	188.0
Portland, Ore.....	198.9
Richmond, Va.....	181.5
Savannah, Ga.....	197.7

TABLE D-5: Consumer Price Index<sup>1</sup>—All items and commodity groups, except food,<sup>2</sup> by city

[1947-49=100]

City and cycle of pricing	All items		Apparel		Personal care		Medical care		Transportation		Reading and recreation		Other goods and services	
	Mar. 1954	Mar. 1953	Mar. 1954	Mar. 1953	Mar. 1954	Mar. 1953	Mar. 1954	Mar. 1953	Mar. 1954	Mar. 1953	Mar. 1954	Mar. 1953	Mar. 1954	Mar. 1953
United States average.....	114.8	113.6	104.3	104.7	114.1	112.4	124.4	119.5	129.0	129.3	108.2	107.7	120.1	117.5
Monthly:														
Chicago, Ill.....	116.7	113.8	108.2	106.3	114.7	114.5	122.8	116.8	132.7	134.0	107.9	109.2	118.9	111.2
Detroit, Mich.....	116.5	115.2	102.8	102.9	120.0	119.1	122.3	116.8	121.2	125.6	111.8	110.9	124.9	122.8
Los Angeles, Calif.....	116.2	115.4	104.3	104.0	117.9	118.0	121.3	118.3	127.7	127.4	102.0	104.5	115.2	113.6
New York, N. Y.....	112.4	111.2	104.5	105.5	108.6	105.9	123.2	120.7	134.6	127.4	105.8	106.9	121.1	118.0
Philadelphia, Pa.....	114.9	114.1	105.8	105.1	118.0	116.4	123.7	120.0	137.4	132.8	110.8	112.3	122.7	122.0
Mar., June, Sept., and Dec.:														
Atlanta, Ga.....	117.0	116.7	111.2	111.1	116.6	115.4	120.8	117.9	127.3	130.5	112.0	110.4	118.2	116.8
Baltimore, Md.....	114.8	114.2	102.4	102.8	108.6	105.7	133.3	132.1	138.2	138.0	113.7	119.0	123.3	118.2
Cincinnati, Ohio.....	114.2	112.6	103.1	104.7	110.2	108.8	124.6	121.2	128.2	130.7	99.8	99.4	118.1	113.6
St. Louis, Mo.....	116.9	114.7	104.5	104.4	114.6	110.0	134.6	132.4	136.2	137.2	99.4	100.7	115.7	115.4
San Francisco, Calif.....	116.5	115.5	103.5	105.3	113.0	113.0	123.2	120.0	143.4	143.1	105.7	104.3	116.3	114.6
Feb. 1954	Feb. 1953	Feb. 1954	Feb. 1953	Feb. 1954	Feb. 1953	Feb. 1954	Feb. 1953	Feb. 1954	Feb. 1953	Feb. 1954	Feb. 1953	Feb. 1954	Feb. 1953	Feb. 1953
Feb., May, Aug., and Nov.:														
Cleveland, Ohio.....	115.2	112.5	104.7	104.7	115.0	113.7	129.2	119.5	123.1	123.0	117.3	114.5	119.8	114.5
Houston, Tex.....	116.9	116.1	106.5	107.4	120.3	119.4	119.2	117.2	125.5	126.7	112.0	112.0	119.6	116.9
Scranton, Pa.....	113.2	112.2	106.4	106.4	113.0	112.1	119.6	114.1	128.4	129.9	117.7	118.2	116.3	114.2
Seattle, Wash.....	116.2	114.6	106.0	107.1	111.3	111.3	129.5	123.5	132.9	129.9	111.0	107.8	127.2	123.9
Washington, D. C.....	114.1	113.0	103.4	103.3	112.4	111.6	117.1	116.6	128.1	127.1	110.5	110.6	127.2	122.1
Jan. 1954	Jan. 1953	Jan. 1954	Jan. 1953	Jan. 1954	Jan. 1953	Jan. 1954	Jan. 1953	Jan. 1954	Jan. 1953	Jan. 1954	Jan. 1953	Jan. 1954	Jan. 1953	Jan. 1953
Jan., Apr., July, and Oct.:														
Boston, Mass.....	112.7	112.1	100.6	102.8	112.6	110.4	124.5	123.3	135.5	134.2	107.3	106.4	118.0	115.1
Kansas City, Mo.....	115.0	114.3	104.7	106.1	116.3	114.9	120.1	119.1	125.9	130.6	116.8	109.4	117.6	115.5
Minneapolis, Minn.....	116.6	114.4	106.1	105.3	116.7	117.3	138.8	125.1	121.9	120.7	115.7	113.7	125.3	121.2
Pittsburgh, Pa.....	114.4	112.6	104.4	103.4	113.3	105.5	121.2	116.8	139.4	139.4	99.7	98.4	120.5	117.0
Portland, Ore.....	115.4	114.6	105.4	104.3	111.7	111.8	121.0	117.5	125.8	126.3	117.1	116.1	119.4	114.4
Housing														
	Total housing		Rent		Gas and electricity		Solid fuels and fuel oil		House-furnishings		Household operation			
	Mar. 1954	Mar. 1953	Mar. 1954	Mar. 1953	Mar. 1954	Mar. 1953	Mar. 1954	Mar. 1953	Mar. 1954	Mar. 1953	Mar. 1954	Mar. 1953	Mar. 1954	Mar. 1953
United States average.....	119.0	116.8	128.0	121.7	107.6	106.5	125.8	124.4	107.2	108.0	117.5	114.0		
Monthly:														
Chicago, Ill.....	125.1	119.3	138.9	123.5	106.2	100.0	124.5	122.0	108.9	108.0	121.5	117.6		
Detroit, Mich.....	122.2	118.6	( <sup>3</sup> )	( <sup>3</sup> )	110.4	109.8	119.4	117.4	110.5	110.6	110.4	106.2		
Los Angeles, Calif.....	124.3	122.5	( <sup>3</sup> )	( <sup>3</sup> )	109.5	108.7	( <sup>3</sup> )	( <sup>3</sup> )	108.9	111.1	108.3	106.7		
New York, N. Y.....	115.3	113.0	( <sup>3</sup> )	( <sup>3</sup> )	108.7	108.0	130.5	130.2	107.4	109.1	119.4	118.6		
Philadelphia, Pa.....	113.6	113.0	( <sup>3</sup> )	( <sup>3</sup> )	102.3	101.8	124.0	125.4	109.3	111.3	113.9	111.1		
Mar., June, Sept., and Dec.:														
Atlanta, Ga.....	124.1	123.3	130.5	128.0	112.0	109.2	119.5	119.5	112.0	112.0	128.2	125.9		
Baltimore, Md.....	113.8	113.8	123.7	120.2	97.5	97.8	126.9	126.7	100.9	103.2	109.7	109.1		
Cincinnati, Ohio.....	116.7	112.9	( <sup>3</sup> )	( <sup>3</sup> )	115.4	112.5	127.2	122.6	102.9	103.9	121.5	111.8		
St. Louis, Mo.....	119.1	114.6	( <sup>3</sup> )	( <sup>3</sup> )	103.8	95.8	135.1	127.4	106.7	108.7	119.0	116.5		
San Francisco, Calif.....	118.0	116.1	( <sup>3</sup> )	( <sup>3</sup> )	130.1	130.1	( <sup>3</sup> )	( <sup>3</sup> )	106.9	109.2	109.6	108.3		
Feb. 1954	Feb. 1953	Feb. 1954	Feb. 1953	Feb. 1954	Feb. 1953	Feb. 1954	Feb. 1953	Feb. 1954	Feb. 1953	Feb. 1954	Feb. 1953	Feb. 1954	Feb. 1953	Feb. 1953
Feb., May, Aug., and Nov.:														
Cleveland, Ohio.....	119.1	115.8	138.8	124.6	106.8	102.7	124.3	120.0	104.0	104.7	111.4	107.6		
Houston, Tex.....	123.6	122.0	138.3	136.9	106.5	106.5	( <sup>3</sup> )	( <sup>3</sup> )	102.2	103.7	129.0	118.2		
Scranton, Pa.....	116.4	115.3	( <sup>3</sup> )	( <sup>3</sup> )	112.2	111.9	139.9	138.6	102.3	103.0	107.6	105.1		
Seattle, Wash.....	118.3	117.5	134.8	128.2	88.5	98.2	127.3	113.7	106.1	108.0	111.5	108.8		
Washington, D. C.....	117.7	116.3	( <sup>3</sup> )	( <sup>3</sup> )	118.1	114.9	133.3	132.2	108.2	109.1	114.7	113.1		
Jan. 1954	Jan. 1953	Jan. 1954	Jan. 1953	Jan. 1954	Jan. 1953	Jan. 1954	Jan. 1953	Jan. 1954	Jan. 1953	Jan. 1954	Jan. 1953	Jan. 1954	Jan. 1953	Jan. 1953
Jan., Apr., July, and Oct.:														
Boston, Mass.....	117.6	114.8	120.2	116.4	108.8	105.5	124.5	124.7	106.4	106.4	112.2	107.6		
Kansas City, Mo.....	119.0	116.4	( <sup>3</sup> )	( <sup>3</sup> )	103.0	102.6	113.2	113.2	107.7	106.2	120.9	118.2		
Minneapolis, Minn.....	119.7	115.9	136.5	120.5	110.0	106.3	114.8	113.7	106.7	105.7	115.4	112.0		
Pittsburgh, Pa.....	116.4	113.7	( <sup>3</sup> )	( <sup>3</sup> )	116.7	113.7	123.2	120.3	105.6	106.2	119.9	116.3		
Portland, Ore.....	118.8	118.1	128.5	126.8	105.2	118.6	127.3	111.6	107.5	109.2	113.1	110.8		

<sup>1</sup> See footnote 1 to table D-1.<sup>2</sup> See tables D-2, D-3, D-6, and D-7, for food.<sup>3</sup> Not available.

TABLE D-6: Consumer Price Index<sup>1</sup>—Food and its subgroups, by city

[1947-49=100]

City	Total food <sup>2</sup>			Food at home								
				Total food at home			Cereals and bakery products			Meats, poultry, and fish		
	Mar. 1954	Feb. 1954	Mar. 1953	Mar. 1954	Feb. 1954	Mar. 1953	Mar. 1954	Feb. 1954	Mar. 1953	Mar. 1954	Feb. 1954	Mar. 1953
United States average <sup>3</sup> .....	112.1	112.6	111.7	111.4	112.0	111.3	121.2	121.3	117.7	109.5	109.7	107.4
Atlanta, Ga.....	112.2	112.5	112.3	111.2	112.0	112.0	116.0	115.8	115.3	116.5	117.0	112.8
Baltimore, Md.....	113.6	113.6	111.7	112.7	113.0	111.2	121.6	121.1	116.5	112.2	112.4	108.3
Boston, Mass.....	109.3	109.5	109.6	107.9	108.1	109.1	119.1	119.1	116.9	105.5	104.9	103.4
Chicago, Ill.....	110.7	111.2	109.7	109.7	110.0	109.3	117.0	117.3	113.0	105.1	104.9	101.9
Cincinnati, Ohio.....	114.1	114.9	112.7	113.7	114.5	112.3	118.4	121.1	117.5	114.7	114.1	109.0
Cleveland, Ohio.....	110.3	110.5	108.8	109.4	109.7	108.4	118.6	118.4	114.3	105.6	106.6	103.9
Detroit, Mich.....	114.7	114.7	113.8	113.7	113.6	113.4	117.8	118.0	115.6	108.7	108.6	105.9
Houston, Tex.....	112.7	112.9	111.9	111.7	112.0	111.4	118.3	118.5	114.6	108.3	107.9	105.4
Kansas City, Mo.....	108.4	108.3	109.5	107.8	107.8	108.9	120.4	120.4	117.0	106.6	105.2	105.3
Los Angeles, Calif.....	113.4	114.3	113.2	112.1	113.1	112.8	122.6	122.7	117.3	110.4	111.0	110.4
Minneapolis, Minn.....	112.4	112.8	112.6	112.1	112.6	112.2	124.9	124.8	119.2	104.3	103.0	103.3
New York, N. Y.....	109.9	110.6	110.5	109.3	110.4	109.9	125.1	125.7	121.6	107.6	108.8	106.9
Philadelphia, Pa.....	113.7	114.5	113.5	112.6	113.7	113.1	120.6	121.5	118.0	110.5	112.0	108.9
Pittsburgh, Pa.....	113.2	113.4	112.3	112.8	113.0	112.0	121.7	121.6	119.5	105.5	105.2	103.5
Portland, Ore.....	112.7	113.5	112.5	112.6	113.6	112.4	116.2	116.9	113.7	113.5	115.3	113.5
St. Louis, Mo.....	114.9	115.2	112.4	113.3	114.2	112.0	116.5	117.0	113.0	110.4	111.2	107.9
San Francisco, Calif.....	113.2	113.4	112.6	112.3	112.9	112.1	127.4	127.4	122.8	109.4	109.2	108.8
Scranton, Pa.....	111.2	112.5	111.3	110.7	112.2	111.0	119.4	119.2	115.8	109.4	109.5	106.6
Seattle, Wash.....	112.2	112.1	111.7	112.0	111.9	111.4	122.2	122.0	118.6	110.2	110.1	106.1
Washington, D. C.....	110.3	110.9	110.0	109.5	110.3	109.5	118.4	118.1	112.1	104.4	105.2	104.3

City	Food at home—Continued								
	Dairy products			Fruits and vegetables			Other foods at home <sup>4</sup>		
	Mar. 1954	Feb. 1954	Mar. 1953	Mar. 1954	Feb. 1954	Mar. 1953	Mar. 1954	Feb. 1954	Mar. 1953
United States average <sup>3</sup> .....	108.0	109.0	110.3	107.8	108.0	115.5	112.3	114.0	109.1
Atlanta, Ga.....	109.5	109.8	114.9	105.5	105.8	117.5	105.7	107.8	103.1
Baltimore, Md.....	111.9	112.1	112.5	107.5	107.4	114.3	111.0	112.1	107.4
Boston, Mass.....	108.5	109.9	109.1	101.0	101.0	113.8	105.8	106.6	105.2
Chicago, Ill.....	107.1	108.1	109.1	105.8	105.9	114.4	119.0	119.3	115.5
Cincinnati, Ohio.....	111.4	111.5	110.0	104.7	107.3	114.2	118.1	119.1	114.4
Cleveland, Ohio.....	104.8	105.0	105.9	103.3	102.0	109.7	116.2	117.0	110.7
Detroit, Mich.....	108.1	108.6	111.2	116.3	114.3	124.1	114.8	115.6	110.5
Houston, Tex.....	110.0	110.7	113.4	110.7	110.9	118.6	112.7	113.5	109.6
Kansas City, Mo.....	101.2	104.4	106.9	102.9	101.2	111.7	108.6	109.3	106.6
Los Angeles, Calif.....	105.3	105.4	112.9	112.8	112.8	113.0	111.1	114.5	111.1
Minneapolis, Minn.....	104.7	106.6	109.2	117.3	118.4	121.9	118.2	120.0	116.1
New York, N. Y.....	106.4	107.8	105.1	100.8	101.2	112.2	112.1	113.4	109.3
Philadelphia, Pa.....	110.8	111.1	114.1	108.7	109.9	117.5	112.3	113.0	108.9
Pittsburgh, Pa.....	112.1	112.4	113.0	107.2	107.2	114.8	122.3	123.6	116.2
Portland, Ore.....	109.1	109.1	110.4	110.0	111.4	114.1	113.6	114.4	110.7
St. Louis, Mo.....	101.6	103.5	107.2	115.3	115.5	118.5	121.9	123.1	115.3
San Francisco, Calif.....	106.8	107.1	111.9	116.0	116.3	115.8	108.4	110.6	107.1
Scranton, Pa.....	109.4	112.7	111.1	102.5	105.6	113.4	111.3	112.8	109.0
Seattle, Wash.....	105.7	105.9	109.8	113.0	113.9	120.5	110.9	110.1	107.1
Washington, D. C.....	113.8	114.1	113.7	104.1	104.4	112.5	109.9	111.6	107.3

<sup>1</sup> 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-7 for U. S. average prices for 46 cities combined.

<sup>2</sup> See footnote 2 to table D-1.

<sup>3</sup> Average of 46 cities beginning January 1953. See footnote 1 to table D-1.

<sup>4</sup> See footnote 3 to table D-2.

TABLE D-7: Average retail prices of selected foods

Commodity	Mar. 1954	Feb. 1954	Mar. 1953	Commodity	Mar. 1954	Feb. 1954	Mar. 1953
<b>Cereals and bakery products:</b>	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	<b>All fruits and vegetables—Continued</b>			
Flour, wheat..... 5 pounds.....	53.6	53.5	52.2	<b>Fresh fruits and vegetables—Continued</b>	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>
Biscuit mix..... 20 ounces.....	27.7	27.6	28.2	Peaches*..... pound.....			
Cornmeal <sup>1</sup> ..... pound.....	12.5	12.5	12.6	Strawberries*..... pint.....			
Rice..... do.....	19.7	19.8	19.4	Grapes, seedless*..... pound.....			
Rollled oats..... 20 ounces.....	18.5	18.5	18.3	Watermelons*..... do.....			
Cornflakes <sup>2</sup> ..... 12 ounces.....	21.8	21.9	21.7	Potatoes..... 15 pounds.....	64.5	68.1	89.3
Bread..... pound.....	17.0	17.0	16.2	Sweetpotatoes..... pound.....	13.1	12.9	18.3
Soda crackers..... do.....	27.1	27.2	25.8	Onions..... do.....	5.9	6.2	13.0
Vanilla cookies <sup>3</sup> ..... 7 ounces.....	23.3	23.3	23.3	Carrots..... do.....	11.8	12.1	10.7
<b>Meats, poultry, and fish:</b>				Lettuce..... head.....	14.1	13.3	15.1
<b>Beef and veal:</b>				Celery..... pound.....	13.6	14.1	12.5
Round steak..... pound.....	88.4	88.9	88.6	Cabbage..... do.....	7.4	6.8	7.1
Chuck roast..... do.....	51.0	52.3	52.3	Tomatoes..... do.....	30.6	29.5	30.7
Rib roast..... do.....	69.6	70.1	69.1	Beans, green..... do.....	26.6	25.5	23.6
Hamburger..... do.....	40.9	41.0	47.4	<b>Canned fruits and vegetables:</b>			
Veal cutlets..... do.....	112.1	113.9	116.5	Orange juice..... 46-ounce can.....	33.4	34.4	32.9
<b>Pork:</b>				Peaches..... No. 2½ can.....	32.9	33.1	34.0
Pork chops, center cut..... do.....	85.7	84.8	78.2	Pineapple..... do.....	38.7	38.8	38.4
Bacon, sliced..... do.....	88.0	88.2	69.9	Fruit cocktail..... do.....	41.1	41.1	40.1
Ham, whole..... do.....	72.2	72.3	67.3	Corn, cream style..... No. 303 can.....	18.6	18.8	19.1
Lamb, leg..... do.....	70.7	70.5	70.2	Peas, green..... do.....	21.3	21.3	21.3
<b>Other meats:</b>				Tomatoes <sup>8</sup> ..... No. 2 can.....	17.3	17.3	18.0
Frankfurters..... do.....	56.1	56.1	58.5	Baby foods..... 4¼-5 ounces.....	9.8	9.8	9.8
Luncheon meat, canned..... 12 ounces.....	51.4	50.6	48.7	<b>Dried fruits and vegetables:</b>			
<b>Poultry:</b>				Prunes..... pound.....	29.8	29.7	28.8
<b>Frying chickens:</b>				Navy beans..... do.....	17.3	17.2	16.5
Dressed <sup>4</sup> ..... pound.....	43.9	44.3	48.0	<b>Other foods at home:</b>			
Ready-to-cook <sup>4</sup> ..... do.....	54.5	54.2	60.2	<b>Partially prepared foods:</b>			
<b>Fish:</b>				Vegetable soup..... 11-ounce can.....	14.3	14.3	14.3
Ocean perch fillet, frozen <sup>5</sup> ..... do.....	43.6	43.5	44.5	Beans with pork..... 16-ounce can.....	14.3	14.4	14.3
Haddock fillet, frozen <sup>6</sup> ..... do.....	50.0	49.9	49.5	<b>Condiments and sauces:</b>			
Salmon, pink..... 16-ounce can.....	51.3	51.6	53.0	Gherkins, sweet..... 7½ ounces.....	30.1	29.9	29.9
Tuna fish..... 7-ounce can.....	39.2	38.9	37.7	Catsup, tomato..... 14 ounces.....	22.2	22.3	22.4
<b>Dairy products:</b>				<b>Beverages, nonalcoholic:</b>			
Milk, fresh (grocery)..... quart.....	21.9	22.3	22.4	Coffee..... pound.....	105.2	99.4	86.7
Milk, fresh (delivered) <sup>7</sup> ..... do.....	23.3	23.3	23.5	Tea..... ¼ pound.....	33.2	33.2	32.2
Ice cream..... pint.....	29.7	29.8	30.2	Cola drink..... carton of 6, 6-ounce.....	30.9	30.9	29.6
Butter..... pound.....	78.4	79.1	79.3	<b>Fats and oils:</b>			
Cheese, American process..... do.....	58.9	59.5	60.4	Shortening, hydrogenated..... pound.....	34.5	34.6	33.8
Milk, evaporated..... 14½-ounce can.....	14.3	14.3	15.0	Margarine, colored <sup>9</sup> ..... do.....	29.7	29.9	29.2
<b>All fruits and vegetables:</b>				Lard..... do.....	25.6	25.4	16.2
<b>Frozen fruits and vegetables:</b>				Salad dressing..... pint.....	35.8	35.8	34.2
Strawberries..... 12 ounces.....	36.9	37.2	37.6	Peanut butter..... pound.....	49.2	49.2	48.9
Orange juice concentrate..... 6 ounces.....	17.0	18.5	18.3	<b>Sugar and sweets:</b>			
Peas, green <sup>10</sup> ..... 10 ounces.....	19.4	19.2	22.8	Sugar..... 5 pounds.....	52.6	52.6	52.4
Beans, green..... 10 ounces.....	24.5	24.4	24.3	Corn syrup..... 24 ounces.....	23.6	23.6	23.5
<b>Fresh fruits and vegetables:</b>				Grape jelly..... 12 ounces.....	25.0	25.1	24.1
Apples..... pound.....	15.1	14.7	15.4	Chocolate bar..... 1 ounce.....	4.5	4.5	4.5
Bananas..... do.....	16.7	16.7	16.8	Eggs, fresh..... dozen.....	57.9	65.6	64.8
Oranges, size 200..... dozen.....	46.1	46.5	46.4	<b>Miscellaneous foods:</b>			
Lemons..... pound.....	18.3	18.7	---	Gelatin, flavored..... 3-4 ounces.....	8.6	8.6	8.6
Grapefruit*..... each.....	9.9	9.6	9.9				

1 41 cities.

4 42 cities.

2 38 cities.

5 36 cities.

3 12 cities.

6 45 cities.

4 34 cities.

7 40 cities.

5 44 cities beginning July 1953, 43 cities December 1952 through June 1953.

6 10. Specification changed from 12 ounces to 10 ounces, effective February 1954.

7 \*Priced only in season.

NOTE.—The United States average retail food prices appearing in table D-7 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.

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TABLE D-8: Indexes of wholesale prices, by group and subgroup of commodities <sup>1</sup>

[1947-49=100]

Commodity group	Mar. 1954 <sup>2</sup>	Feb. 1954	Jan. 1954	Dec. 1953	Nov. 1953	Oct. 1953	Sept. 1953	Aug. 1953	July 1953	June 1953	May 1953	Apr. 1953	Mar. 1953	June 1950
All commodities	110.6	110.5	110.9	110.1	109.8	110.2	111.0	110.6	110.9	109.5	109.8	109.4	110.0	100.
Farm products	98.5	*97.7	97.8	94.4	93.7	95.3	98.1	96.4	97.9	95.4	97.8	97.3	99.8	94.5
Fresh and dried produce	89.6	89.7	91.2	89.8	94.2	94.2	96.0	98.0	94.7	109.9	105.4	106.9	105.8	89.8
Grains	93.0	91.6	91.3	90.6	89.3	87.9	88.3	86.5	85.4	84.2	93.4	93.8	94.7	89.6
Livestock and poultry	92.4	91.3	91.8	83.9	78.4	82.0	90.6	88.1	95.9	86.8	91.7	87.5	91.7	99.8
Plant and animal fibers	105.9	106.5	104.2	103.2	103.5	103.2	103.6	103.9	105.0	104.0	104.3	103.4	104.6	107.3
Fluid milk	94.4	*95.0	97.5	99.5	101.9	100.7	99.0	97.6	96.4	93.1	93.6	96.7	100.5	81.6
Eggs	80.1	89.6	92.7	97.2	111.6	126.3	122.5	113.8	106.2	106.5	98.7	102.5	100.6	70.6
Hay and seeds	93.4	91.6	90.5	89.7	88.0	84.3	81.1	85.1	85.5	89.8	93.7	95.3	97.5	87.6
Other farm products	181.2	168.0	161.0	148.1	145.9	146.2	149.3	144.3	140.7	136.7	135.4	137.1	142.5	122.4
Processed foods	105.3	104.8	106.2	104.3	103.8	104.7	106.6	104.8	105.5	103.3	104.3	103.2	104.1	96.8
Cereal and bakery products	112.6	112.7	112.4	112.2	112.6	112.0	110.8	108.4	108.5	107.9	109.0	109.2	108.9	96.5
Meats, poultry, fish	92.8	92.9	96.4	89.7	86.2	88.9	97.4	93.6	97.0	91.6	93.8	89.2	91.2	102.4
Dairy products and ice cream	106.2	107.4	109.4	111.3	113.9	112.7	111.3	110.7	110.0	107.7	107.9	108.5	109.7	90.0
Canned, frozen, fruits and vegetables	103.0	*103.0	103.8	103.9	104.9	104.9	104.7	104.7	105.0	103.7	104.0	104.4	105.1	98.0
Sugar and confectionery	112.6	110.2	110.1	108.9	108.7	110.2	110.1	110.5	109.8	109.8	109.6	109.6	109.7	94.7
Packaged beverage materials	209.1	191.4	182.1	171.6	171.0	169.8	169.8	169.8	169.8	164.6	164.6	168.1	168.9	136.9
Animal fats and oils	95.1	94.7	93.5	92.7	85.6	94.0	106.8	82.2	72.4	60.9	64.2	60.4	60.2	63.9
Crude vegetable oils	67.9	65.2	64.0	65.3	71.2	70.1	65.7	62.9	63.1	68.4	70.5	75.4	75.6	67.9
Refined vegetable oils	73.1	69.8	72.7	74.2	75.5	73.3	68.8	70.9	78.0	79.8	79.8	79.8	79.8	67.4
Vegetable-oil and products	83.0	81.4	83.8	84.4	84.2	80.3	80.5	83.4	84.0	84.6	86.5	85.0	84.3	79.2
Other processed foods	106.5	108.9	111.5	113.9	110.2	117.1	116.8	116.7	117.3	120.2	121.5	120.5	120.9	106.6
All commodities other than farm and foods	114.3	114.4	114.6	114.6	114.5	114.6	114.7	114.9	114.8	113.9	113.6	113.2	113.4	102.2
Textile products and apparel	95.1	*95.3	96.1	95.8	96.2	96.5	96.9	97.5	97.5	97.4	97.6	97.4	97.5	93.3
Cotton products	88.5	*88.8	90.4	90.9	91.6	92.4	93.7	94.1	94.1	93.4	93.3	92.9	93.1	90.0
Wool products	109.3	109.0	111.0	112.1	111.5	111.6	111.2	111.8	111.7	111.6	112.0	111.3	111.9	105.3
Synthetic textiles	84.9	85.4	85.4	85.5	85.2	85.9	86.7	86.7	87.5	87.5	87.4	88.0	87.9	91.3
Silk products	135.1	*135.8	142.1	139.3	136.5	135.8	134.7	134.7	134.7	134.7	133.0	131.6	141.4	88.8
Apparel	98.7	*98.8	98.1	97.9	98.7	98.7	98.5	99.3	99.3	99.4	99.9	99.9	99.6	92.7
Other textile products	80.6	*83.1	82.7	82.4	83.5	82.7	82.9	86.5	85.3	85.5	83.8	82.5	82.8	96.3
Hides, skins, and leather products	94.6	*94.9	95.3	95.6	97.1	97.1	99.7	99.9	100.0	101.0	100.4	97.9	98.1	99.1
Hides and skins	55.5	55.4	56.8	57.7	64.3	64.4	74.2	74.6	73.4	76.3	74.8	66.4	64.8	94.3
Leather	86.3	87.4	88.1	88.7	90.4	90.4	94.5	95.0	96.1	98.0	97.3	92.7	93.5	98.2
Footwear	111.9	111.9	111.9	111.8	111.8	111.7	111.8	111.7	111.7	111.7	111.5	111.5	112.1	102.7
Other leather products	98.0	*98.0	98.1	98.2	98.8	99.1	99.1	99.5	99.7	100.3	100.0	99.3	99.0	95.2
Fuel, power, and lighting materials	109.0	*110.5	110.8	111.1	111.2	111.2	110.9	111.0	111.1	108.3	107.1	107.4	108.4	102.4
Coal	107.9	*110.9	111.9	112.5	112.5	112.5	112.3	111.7	111.8	111.2	110.8	111.2	114.4	104.8
Coke	132.5	132.5	132.5	132.5	132.5	132.5	131.8	131.8	131.8	131.8	131.8	131.8	131.8	115.6
Gas	113.5	*113.5	111.8	109.6	106.3	106.6	106.0	105.7	106.1	108.2	108.2	109.5	109.5	94.8
Electricity	101.3	*101.3	100.7	100.7	99.6	98.5	98.0	99.1	98.5	98.5	97.4	98.0	100.7	101.3
Petroleum and products	111.5	113.5	114.2	114.9	116.3	116.6	116.5	116.8	111.1	109.4	109.3	109.3	109.0	103.1
Chemicals and allied products	107.4	*107.5	107.2	107.1	107.2	106.7	106.7	106.3	106.2	105.6	105.5	105.5	104.2	92.1
Industrial chemicals	117.9	*118.4	118.4	118.6	119.2	119.5	120.0	120.2	120.2	119.2	118.0	117.0	113.9	96.3
Prepared paint	112.8	112.8	112.8	112.7	112.7	112.1	111.0	110.7	110.7	110.8	110.8	110.5	110.5	98.0
Paint materials	95.2	95.2	96.5	96.6	97.7	98.0	98.5	96.0	95.3	95.0	95.1	95.4	95.4	86.8
Drugs, pharmaceuticals, cosmetics	93.9	*93.9	93.9	93.8	93.5	93.5	93.5	93.5	93.6	93.1	93.1	93.0	91.6	91.3
Fats and oils, inedible	60.5	63.5	61.2	58.6	58.0	53.3	51.1	46.9	46.7	46.6	49.9	55.9	59.0	48.8
Mixed fertilizer	110.0	110.0	111.1	111.4	111.5	111.7	112.0	111.2	110.6	110.7	110.7	110.7	110.7	101.2
Fertilizer materials	114.0	114.0	114.0	113.9	112.9	112.9	113.0	113.8	113.8	110.6	112.9	113.2	112.8	98.5
Other chemicals and products	108.1	*106.8	105.3	105.2	105.0	103.4	103.3	102.9	102.8	102.6	103.0	103.1	102.9	91.1
Rubber and products	124.9	124.6	124.8	124.8	124.3	124.2	124.0	123.5	124.6	125.0	124.8	124.8	125.7	109.5
Crude rubber	113.8	112.9	113.4	114.5	112.0	111.3	120.1	120.0	121.1	122.7	124.2	122.3	126.6	129.0
Tire casings and tubes	130.3	130.3	130.3	130.1	130.1	130.1	126.4	125.1	126.4	126.3	126.3	126.3	126.3	106.1
Other rubber products	123.5	123.3	123.7	123.2	123.2	123.2	123.0	123.2	124.1	124.5	124.7	124.2	124.3	103.6
Lumber and wood products	116.6	*116.8	117.0	117.4	117.3	118.1	119.2	120.4	121.1	121.5	121.8	122.2	121.7	112.4
Lumber	115.6	115.5	115.9	116.4	116.3	117.2	118.3	119.3	120.2	120.7	121.0	121.5	120.9	113.5
Millwork	131.1	131.1	131.1	131.3	131.2	131.2	131.4	131.7	131.6	132.0	132.0	132.0	131.9	110.9
Plywood	102.9	105.0	103.5	103.9	103.1	104.7	106.8	112.4	112.7	112.4	112.4	112.0	112.0	101.7
Pulp, paper, and allied products	116.6	117.1	117.0	117.1	117.3	117.5	116.9	116.2	115.8	115.8	115.4	115.3	115.1	95.9
Woodpulp	109.7	109.7	109.7	109.7	109.7	109.7	108.8	108.8	108.8	108.8	108.8	108.8	108.8	90.6
Wastepaper	84.1	85.7	79.1	79.1	90.8	112.9	109.6	98.5	85.0	85.0	88.3	83.8	79.0	
Paper	126.8	126.8	126.8	126.8	126.8	126.6	126.5	125.9	125.1	124.7	124.9	124.9	124.9	103.3
Paperboard	124.6	125.1	125.5	125.9	126.0	126.2	126.0	123.6	123.7	123.2	123.1	123.1	123.4	97.2
Converted paper and paperboard	112.3	113.2	113.2	113.4	113.4	113.2	112.3	112.1	112.1	112.4	111.4	111.4	111.1	93.2
Building paper and board	127.9	127.9	127.9	123.0	123.0	123.0	123.0	123.0	123.0	123.0	123.0	118.2	118.2	106.3
Metals and metal products	126.3	126.2	127.2	127.5	127.9	127.9	128.5	129.4	129.3	126.9	125.7	125.0	125.5	108.8
Iron and steel	130.6	131.0	132.0	132.8	133.6	133.4	134.6	136.2	135.7	130.9	128.9	127.7	127.7	113.1
Nonferrous metals	121.3	119.8	121.5	122.1	122.3	122.1	122.8	124.5	126.4	127.6	126.6	128.2	131.5	101.8
Metal containers	130.0	130.0	130.0	128.7	128.7	128.7	128.6	128.6	128.6	128.6	126.6	126.5	125.3	109.0
Hardware	138.0	*137.9	137.5	137.2	137.2	137.2	136.9	135.6	134.7	134.5	133.2	127.9	126.2	111.1
Plumbing equipment	118.2	118.2	118.2	118.2	118.2	118.2	118.7	118.7	116.4	113.5	113.8	113.8	113.8	103.2
Heating equipment	114.4	*114.8	115.3	115.5	115.8	115.8								

TABLE D-8: Indexes of wholesale prices, by group and subgroup of commodities <sup>1</sup>—Continued

[1947-49=100]

Commodity group	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	June
	1954 <sup>2</sup>	1954	1954	1953	1953	1953	1953	1953	1953	1953	1953	1953	1953	1950
Machinery and motive products.....	124.6	*124.5	124.4	124.3	124.2	124.1	124.0	123.7	123.4	122.9	122.4	122.0	121.8	106.3
Agricultural machinery and equipment.....	123.0	*123.0	122.7	122.5	122.5	122.4	122.3	122.3	122.7	122.6	122.4	122.3	122.2	108.3
Construction machinery and equipment.....	131.5	*131.5	131.2	131.1	131.1	131.0	130.9	130.5	130.8	129.4	129.1	128.6	127.1	108.1
Metalworking machinery and equipment.....	133.0	133.0	132.8	132.8	132.8	132.7	132.8	131.9	131.8	131.3	130.1	129.8	129.1	108.8
General purpose machinery and equipment.....	128.4	128.2	128.2	128.6	128.5	128.2	127.9	126.9	125.8	124.9	123.8	123.6	122.1	107.0
Miscellaneous machinery.....	125.0	*124.9	124.7	124.5	124.4	124.1	124.2	123.9	123.3	122.4	122.0	120.6	120.3	105.0
Electrical machinery and equipment.....	126.8	126.8	126.8	126.8	126.6	126.5	126.2	125.6	124.8	124.2	122.6	121.3	119.9	102.1
Motor vehicles.....	118.9	118.9	118.9	118.5	118.5	118.5	118.6	118.6	118.6	118.6	118.6	118.9	120.0	106.7
Furniture and other household durables.....	115.1	115.1	115.2	115.0	114.9	114.8	114.9	114.8	114.7	114.3	114.1	113.9	113.1	103.1
Household furniture.....	113.9	*113.9	114.2	114.1	114.1	114.2	114.2	113.8	113.8	114.1	114.0	113.8	113.6	101.8
Commercial furniture.....	126.2	126.2	126.2	126.2	126.2	125.8	125.8	125.8	125.8	125.7	124.3	123.2	123.2	106.2
Floor covering.....	122.6	*122.3	122.5	124.8	125.0	125.2	125.2	125.3	125.2	124.8	125.0	124.2	124.1	109.1
Household appliances.....	109.6	109.7	109.6	109.1	109.0	109.0	109.1	108.9	108.8	108.1	108.1	108.0	107.9	100.1
Radios.....	95.7	96.1	96.1	94.3	94.3	94.8	94.8	95.0	95.0	95.4	94.9	94.9	95.0	(*)
Television sets.....	73.8	*73.8	73.5	74.0	74.2	74.2	74.0	74.0	74.3	75.0	74.9	74.9	74.9	(*)
Other household durable goods.....	128.2	128.1	128.1	127.7	127.6	126.8	126.9	126.9	126.7	125.5	125.4	125.4	121.8	106.8
Nonmetallic minerals—structural.....	121.0	121.0	120.9	120.8	120.8	120.7	120.7	119.6	119.4	118.1	117.2	116.9	115.1	105.4
Flat glass.....	124.7	124.7	124.7	124.7	124.7	124.7	124.7	124.7	124.7	122.9	116.4	116.4	116.4	105.6
Concrete ingredients.....	119.8	*119.8	119.9	119.6	119.4	119.4	118.6	118.6	118.4	118.2	117.9	117.6	113.8	105.7
Concrete products.....	117.4	117.6	117.2	117.2	117.4	117.4	116.1	115.6	115.5	115.5	114.2	112.8	112.8	104.5
Structural clay products.....	132.0	131.9	131.9	132.1	132.1	132.0	132.0	131.4	131.1	125.1	124.7	124.6	124.3	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	118.3	102.3
Prepared asphalt roofing.....	109.9	109.9	109.9	109.9	109.9	109.9	109.8	105.8	105.8	106.2	106.0	106.0	106.0	98.9
Other nonmetallic minerals.....	119.8	119.8	119.8	118.9	118.9	118.0	117.8	117.8	117.3	116.4	115.3	115.3	115.3	105.7
Tobacco manufactures and bottled beverages <sup>4</sup> .....	118.0	118.0	118.2	118.1	118.1	118.1	116.2	115.6	115.6	114.9	114.8	114.8	114.8	101.4
Cigarettes <sup>4</sup> .....	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 <sup>4</sup> .....	103.5	103.5	103.5	103.5	103.5	103.5	103.5	103.5	103.5	102.9	102.9	102.9	102.9	100.6
Other tobacco products <sup>4</sup> .....	120.7	120.7	120.7	120.7	120.7	120.7	120.7	120.7	120.7	120.7	121.5	121.5	122.4	103.3
Alcoholic beverages <sup>4</sup> .....	114.6	114.6	115.0	114.9	114.9	114.9	111.2	110.0	110.0	110.0	110.0	110.0	110.0	100.9
Nonalcoholic beverages.....	125.1	125.1	125.1	125.1	125.1	125.1	125.1	125.1	125.1	120.6	119.9	119.8	119.8	100.8
Miscellaneous.....	104.9	102.8	101.1	100.1	93.2	94.4	94.7	96.4	95.3	95.8	99.7	98.5	101.7	96.9
Toys, sporting goods, small arms.....	113.0	*113.0	113.1	113.2	114.0	114.1	114.0	114.0	114.1	114.0	114.3	113.7	112.9	104.8
Manufactured animal feeds.....	101.1	97.2	94.0	92.2	78.7	81.0	81.6	85.0	82.7	83.7	91.1	88.7	95.0	93.7
Notions and accessories.....	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.2	93.2	93.2	93.2	94.3	88.7
Jewelry, watches, photo equipment.....	102.0	*102.0	102.1	101.9	101.9	101.9	102.0	101.8	101.8	101.8	101.9	101.8	101.8	96.6
Other miscellaneous.....	121.2	120.4	119.8	119.7	119.5	119.5	119.3	119.6	119.8	119.9	120.3	121.1	121.0	105.4

<sup>1</sup> 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.

<sup>2</sup> Preliminary.

<sup>3</sup> Not available.

<sup>4</sup> Figures shown in this series are the official indexes. Beginning with January 1953 the method of calculating excise taxes and discounts was changed and official indexes for earlier dates are not strictly comparable with these. For analytical purposes indexes prior to 1953 have been recalculated for comparability and are available on request.

\* Revised.

TABLE D-9: Special wholesale price indexes <sup>1</sup>

[1947-49=100]

Commodity group	1954				1953								1950	
	Mar. <sup>2</sup>	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	June
All foods.....	103.0	103.1	104.5	103.1	103.6	105.1	106.8	104.8	104.9	103.8	104.1	103.4	104.0	95.0
All fish.....	107.4	107.2	114.0	109.4	106.1	111.3	104.9	107.8	102.5	100.9	106.5	98.9	102.8	92.4
Special metals and metal products.....	124.6	124.6	125.3	125.4	125.7	125.7	126.2	126.8	126.8	125.0	124.1	123.6	124.2	108.3
Metalworking machinery.....	140.1	140.1	139.7	139.7	139.7	139.6	139.7	139.1	138.8	138.7	138.2	137.6	136.6	109.8
Machinery and equipment.....	127.7	*127.6	127.4	127.4	127.4	127.2	127.1	126.5	126.0	125.3	124.4	123.7	122.8	106.1
Total tractors.....	124.9	*124.9	124.5	124.1	124.1	124.1	124.1	123.7	124.3	124.3	123.8	123.6	122.8	107.5
Steel mill products.....	141.9	*142.0	142.4	142.4	142.4	142.5	142.6	142.7	142.7	137.1	134.4	131.1	131.1	114.9
Building materials.....	119.3	119.2	119.6	119.6	119.5	120.0	120.4	120.8	121.3	120.5	120.2	119.9	119.2	107.5
Soaps.....	97.0	*94.8	91.1	90.5	90.0	86.5	86.2	85.8	85.8	85.5	87.2	87.2	86.7	80.9
Synthetic detergents.....	93.4	91.0	91.0	91.0	91.0	91.0	91.0	91.0	90.8	90.8	90.8	90.8	91.8	82.9
Refined petroleum products.....	109.7	112.2	112.9	113.8	115.5	115.8	115.6	115.6	116.1	109.1	109.1	108.9	108.6	102.1
East coast petroleum.....	108.7	109.9	109.4	112.0	114.1	113.5	113.8	113.8	113.8	107.3	107.8	109.3	108.5	98.1
Mid-continent petroleum.....	106.3	107.7	109.9	109.6	110.2	110.1	109.6	109.6	109.7	100.0	99.6	99.6	99.6	101.8
Gulf coast petroleum.....	110.0	116.0	116.2	117.8	121.3	122.8	122.8	122.8	124.1	116.8	116.8	115.2	114.6	109.7
Pacific coast petroleum.....	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	94.1
Pulp, paper and products, excl. bldg. paper.....	116.3	116.9	116.8	116.9	117.1	117.4	116.7	116.1	115.6	115.6	115.2	115.2	115.0	95.6

<sup>1</sup> See footnote 1, table D-8.

<sup>2</sup> Preliminary.

\* Revised.

## E: Work Stoppages

TABLE E-1: Work stoppages resulting from labor-management disputes <sup>1</sup>

Month and year	Number of stoppages		Workers involved in stoppages		Man-days idle during month or year	
	Beginning in month or year	In effect during month	Beginning in month or year	In effect during month	Number	Percent of estimated working time
1935-39 (average).....	2,862	-----	1,130,000	-----	16,900,000	0.27
1947-49 (average).....	3,573	-----	2,380,000	-----	39,700,000	.46
1945.....	4,750	-----	3,470,000	-----	38,000,000	.47
1946.....	4,985	-----	4,600,000	-----	116,000,000	1.43
1947.....	3,693	-----	2,170,000	-----	34,600,000	.41
1948.....	3,419	-----	1,960,000	-----	34,100,000	.37
1949.....	3,606	-----	3,030,000	-----	50,500,000	.59
1950.....	4,843	-----	2,410,000	-----	38,800,000	.44
1951.....	4,737	-----	2,220,000	-----	22,900,000	.23
1952.....	5,117	-----	3,540,000	-----	59,100,000	.57
1953.....	5,091	-----	2,400,000	-----	28,300,000	.26
1953: March.....	457	639	196,000	237,000	1,260,000	.14
April.....	560	798	312,000	413,000	2,690,000	.29
May.....	596	869	313,000	406,000	3,770,000	.42
June.....	567	875	258,000	448,000	4,530,000	.48
July.....	534	841	293,000	491,000	3,880,000	.39
August.....	484	763	238,000	393,000	2,880,000	.32
September.....	420	721	119,000	211,000	1,700,000	.19
October.....	379	658	175,000	240,000	1,650,000	.17
November.....	281	502	100,000	175,000	1,570,000	.18
December.....	145	354	76,300	173,000	1,880,000	.20
1954: January <sup>2</sup> .....	250	400	80,000	150,000	1,000,000	.12
February <sup>2</sup> .....	200	350	50,000	100,000	750,000	.09
March <sup>2</sup> .....	225	375	100,000	150,000	1,300,000	.14

<sup>1</sup> All known work stoppages, arising out of labor-management disputes, involving six or more workers and continuing as long as a full day or shift are included in reports of the Bureau of Labor Statistics. Figures on "workers involved" and "man-days idle" cover all workers made idle for one or more shifts 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.

<sup>2</sup> Preliminary.

## F: Building and Construction

TABLE F-1: Expenditures for new construction <sup>1</sup>

[Value of work put in place]

Type of construction	Expenditures (in millions)														
	1954				1953								1953	1952	
	Apr. <sup>2</sup>	Mar. <sup>3</sup>	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Total <sup>2</sup>	Total
Total new construction <sup>4</sup> .....	\$2,795	\$2,555	\$2,317	\$2,428	\$2,661	\$2,988	\$3,211	\$3,295	\$3,317	\$3,282	\$3,209	\$2,947	\$2,758	\$34,843	\$32,638
Private construction.....	1,897	1,780	1,638	1,717	1,908	2,052	2,129	2,177	2,202	2,194	2,160	1,991	1,872	23,615	21,812
Residential building (nonfarm).....	956	870	766	830	952	1,024	1,066	1,088	1,113	1,126	1,123	1,012	964	11,905	11,100
New dwelling units.....	840	775	680	740	850	905	940	960	980	990	990	885	850	10,530	9,870
Additions and alterations.....	92	73	64	67	78	94	101	103	110	112	110	105	94	1,108	1,045
Nonhousekeeping <sup>5</sup> .....	24	22	22	23	24	25	25	23	24	23	22	22	20	267	185
Nonresidential building (nonfarm) <sup>6</sup> .....	465	469	476	486	505	523	511	507	493	490	477	449	427	5,676	5,014
Industrial.....	169	173	177	179	176	177	177	177	174	176	184	190	192	2,226	2,320
Commercial.....	152	154	158	164	182	192	179	176	169	166	152	128	114	1,791	1,137
Warehouses, office, and loft buildings.....	69	70	73	75	79	79	75	71	66	60	56	52	50	737	515
Stores, restaurants, and garages.....	83	84	85	89	103	113	104	105	103	106	96	76	64	1,054	622
Other nonresidential building.....	144	142	141	143	147	154	155	154	150	148	141	131	121	1,659	1,557
Religious.....	40	40	41	43	45	46	46	45	43	41	38	35	33	474	399
Educational.....	39	38	38	39	39	41	41	40	38	36	34	32	31	425	351
Social and recreational.....	16	16	16	16	17	17	16	15	15	14	14	13	11	163	125
Hospital and institutional <sup>7</sup> .....	27	27	26	26	26	26	26	27	27	27	26	26	26	316	394
Miscellaneous.....	22	21	20	19	20	24	26	27	27	30	29	25	20	281	288
Farm construction.....	106	96	89	87	88	100	119	144	158	155	148	138	120	1,475	1,610
Public utilities.....	362	338	300	307	354	396	423	428	427	410	399	380	352	4,439	4,003
Railroad.....	40	33	27	30	44	45	49	44	44	43	41	40	40	480	438
Telephone and telegraph.....	50	50	45	46	47	50	55	54	54	53	52	52	48	600	570
Other public utilities.....	272	255	228	231	263	301	319	330	329	314	306	288	264	3,359	2,995
All other private <sup>8</sup> .....	8	7	7	7	9	9	10	10	11	13	13	12	9	120	85
Public construction.....	898	775	679	711	753	936	1,082	1,118	1,115	1,088	1,049	956	886	11,228	10,826
Residential building <sup>9</sup> .....	32	34	34	35	39	42	46	46	44	46	50	50	49	554	654
Nonresidential building (other than military or naval facilities).....	383	371	339	341	336	355	372	376	371	373	380	371	370	4,317	4,119
Industrial.....	145	143	126	130	123	131	142	148	152	155	165	159	159	1,758	1,667
Educational.....	166	161	156	155	155	158	160	155	160	147	142	140	139	1,742	1,619
Hospital and institutional.....	29	26	23	21	21	24	24	25	26	28	32	33	34	347	473
Other nonresidential.....	43	41	34	35	37	42	46	48	43	43	41	39	38	470	360
Military facilities <sup>10</sup> .....	71	64	62	76	92	101	105	116	119	119	120	115	113	1,323	1,388
Highways.....	250	160	115	125	145	280	390	400	405	375	330	260	200	3,150	2,860
Sewer and water.....	71	67	62	61	63	67	69	73	71	67	63	61	60	761	692
Miscellaneous public service enterprises <sup>11</sup> .....	15	14	12	13	13	18	21	23	19	19	17	15	14	196	193
Conservation and development.....	62	53	45	51	56	63	68	72	75	79	80	75	72	822	854
All other public <sup>12</sup> .....	14	12	10	9	9	10	11	12	11	10	9	9	8	105	66

<sup>1</sup> 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 authorized (tables F-3 and F-4) and the data on value of contract awards reported in table F-2.

<sup>2</sup> Preliminary.

<sup>3</sup> Revised.

<sup>4</sup> Includes major additions and alterations.

<sup>5</sup> Includes hotels, dormitories, and tourist courts and cabins.

<sup>6</sup> Expenditures by privately owned public utilities for nonresidential building are included under "Public utilities."

<sup>7</sup> Includes Federal contributions toward construction of private nonprofit hospital facilities under the National Hospital Program.

<sup>8</sup> Covers privately owned sewer and water facilities, roads and bridges, and miscellaneous nonbuilding items such as parks and playgrounds.

<sup>9</sup> Includes nonhousekeeping public residential construction as well as housekeeping units.

<sup>10</sup> Covers all construction, building as well as nonbuilding (except for production facilities, which are included in public industrial building).

<sup>11</sup> Covers primarily publicly owned airports, electric light and power systems, and local transit facilities.

<sup>12</sup> Covers public construction not elsewhere classified such as parks, playgrounds, and memorials.



TABLE F-2: Value of contracts awarded and force-account work started on federally financed new construction, by type of construction <sup>1</sup>

Type of construction	Value (in thousands)														
	1954		1953 <sup>2</sup>											1953 <sup>3</sup>	1952 <sup>3</sup>
	Feb. <sup>4</sup>	Jan. <sup>4</sup>	Dec. <sup>4</sup>	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Total	Total
Total new construction <sup>4</sup>	\$104,999	\$150,654	\$157,112	\$151,912	\$318,397	\$166,946	\$212,413	\$176,726	\$352,393	\$261,092	\$355,132	\$235,796	\$198,606	\$2,823,869	\$4,730,311
Airfields <sup>5</sup>	19,118	11,497	2,670	3,309	634	8,554	11,305	12,651	10,274	4,773	21,246	16,637	4,401	106,331	140,991
Building	18,153	75,427	29,001	46,693	168,223	48,337	65,399	48,007	132,074	112,102	217,155	76,083	129,168	1,225,226	2,596,961
Residential	377	104	79	68	( <sup>6</sup> )	394	30	( <sup>6</sup> )	3,412	620	3,025	580	4,807	15,239	23,296
Nonresidential	17,776	75,323	28,922	46,625	168,223	47,943	65,369	48,007	128,662	111,482	214,130	75,503	124,361	1,209,987	2,573,665
Educational <sup>7</sup>	2,084	8,796	5,651	10,130	7,712	11,051	19,778	16,319	18,429	20,150	18,794	18,238	14,340	172,243	130,949
Hospital and institutional	5,589	1,273	2,402	7,427	9,721	9,691	6,856	10,280	18,490	23,790	6,097	10,119	7,949	131,578	211,877
Administrative and general <sup>8</sup>	1,766	2,019	1,873	1,085	14,432	2,512	2,135	1,719	4,506	4,462	4,220	1,978	1,785	45,638	43,195
Other nonresidential building	8,337	63,235	18,996	27,983	136,358	24,689	36,600	19,689	87,237	63,080	185,019	45,168	100,287	860,528	2,187,644
Airfield buildings <sup>9</sup>	1,382	12,382	1,076	1,774	199	4,027	2,630	1,008	17,659	10,584	12,032	2,360	8,301	70,047	80,671
Industrial <sup>10</sup>	3,093	40,889	14,995	19,631	128,400	11,196	22,011	12,940	36,004	33,849	147,136	16,673	85,091	602,583	1,305,481
Troop housing	1,394	2,334	372	1,002	1,176	823	3,077	2,284	9,483	4,567	6,739	15,049	1,612	60,046	285,602
Warehouses	511	2,538	518	992	2,758	3,437	160	880	8,382	5,262	4,962	2,977	1,110	40,105	276,455
Miscellaneous <sup>11</sup>	1,957	5,092	2,035	4,584	3,825	5,206	8,722	2,577	15,709	8,818	14,150	8,109	4,173	87,747	239,435
Conservation and development	3,048	3,976	10,220	7,737	26,772	9,770	14,663	11,564	31,396	14,179	10,665	40,302	4,379	203,091	287,498
Reclamation	810	1,339	7,701	3,673	1,716	1,844	11,086	4,060	4,540	9,419	3,083	5,577	444	63,604	92,916
River, harbor, and flood control	2,238	2,637	2,519	4,064	25,056	7,926	3,577	7,504	26,856	4,760	7,582	34,725	3,935	139,487	194,582
Highways	47,552	50,401	92,047	88,176	66,407	97,543	105,629	94,792	122,202	110,664	92,771	90,692	47,092	1,050,116	1,005,808
Electrification	13,413	3,585	20,130	1,226	47,237	557	10,695	5,293	40,069	11,815	2,981	4,743	8,709	156,759	515,962
All other <sup>12</sup>	3,715	5,768	3,044	4,771	9,124	2,185	4,722	4,419	16,378	7,559	10,314	7,339	4,857	82,346	183,091

<sup>1</sup> Excludes classified military projects, but includes projects for the Atomic Energy Commission. Data for Federal-aid programs cover amounts contributed by both owner and the Federal Government. Force-account work is done not through a contractor, but directly by a Government agency, using a separate work force to perform nonmaintenance construction on the agency's own properties.

<sup>2</sup> Beginning with data for January 1953, awards of less than \$25,000 in value are excluded; during 1951-52 the total value of such awards represented less than 1 percent of the total.

<sup>3</sup> Preliminary.

<sup>4</sup> Includes major additions and alterations.

<sup>5</sup> Excludes hangars and other buildings, which are included under "Other nonresidential" building construction.

<sup>6</sup> Less than \$25,000.

<sup>7</sup> Includes projects under the Federal School Construction Program, which provides aid for areas affected by Federal Government activities.

<sup>8</sup> Includes armories, offices, and customhouses.

<sup>9</sup> Includes all buildings on civilian airports and military airfields and air bases with the exception of barracks and other troop housing, which are included under "Troop housing."

<sup>10</sup> Covers all industrial plants under Federal Government ownership, including those which are privately operated.

<sup>11</sup> Includes types of buildings not elsewhere classified.

<sup>12</sup> Includes sewer and water projects, railroad construction, and other type of projects not elsewhere classified.

TABLE F-3: Urban building authorized, by principal class of construction and by type of building<sup>1</sup>

Period	Valuation (in thousands)										Number of new dwelling units—House-keeping only				
	Total all classes <sup>2</sup>	New residential building					Non-house-keeping <sup>3</sup>	New non-residential building	Additions, alterations, and repairs	Privately financed				Publicly financed	
		Housekeeping				Publicly financed dwelling units				Total	1-family	2-family <sup>4</sup>	Multi-family <sup>4</sup>		
		Privately financed dwelling units													
Total	1-family	2-family <sup>4</sup>	Multi-family <sup>4</sup>	Publicly financed dwelling units	Total	1-family	2-family <sup>4</sup>	Multi-family <sup>4</sup>	Total	1-family	2-family <sup>4</sup>	Multi-family <sup>4</sup>			
1942	\$2,707,573	\$598,570	\$478,658	\$42,629	\$77,283	\$296,933	\$22,910	\$1,510,688	\$278,472	184,892	138,908	15,747	30,237	95,946	
1946	4,743,414	2,114,833	1,830,260	103,042	181,531	355,587	43,369	1,458,602	771,023	430,195	358,151	24,326	47,718	98,310	
1947	5,563,348	2,885,374	2,361,752	151,036	372,586	42,249	29,831	1,713,489	892,040	502,312	393,606	33,423	75,283	5,833	
1948	6,972,784	3,422,927	2,745,219	181,493	496,215	139,334	38,034	2,367,940	1,004,549	516,179	392,532	36,306	87,341	15,114	
1949	7,398,144	3,724,924	2,845,399	132,365	747,160	285,627	89,785	2,410,315	937,493	575,286	413,543	26,431	135,312	32,194	
1950	10,480,350	5,819,360	4,850,763	178,985	798,612	327,583	84,504	3,156,475	1,092,458	708,499	624,377	33,310	140,812	38,953	
1951	8,018,168	4,380,137	3,817,697	171,343	391,997	587,476	37,875	2,815,669	1,097,011	534,605	435,219	29,895	69,491	66,640	
1952	8,926,672	4,647,014	4,050,435	213,790	382,789	490,375	51,713	2,637,037	1,130,534	563,211	467,389	37,454	68,368	53,626	
1953 <sup>5</sup>	9,603,891	4,645,521	3,993,421	201,133	450,967	284,592	93,111	3,330,469	1,250,197	536,998	425,686	32,548	78,764	32,737	
1952: January	627,773	267,068	230,354	16,287	20,426	28,684	1,432	159,148	71,441	34,426	27,902	2,892	3,632	3,419	
February	611,085	345,392	300,957	17,276	27,160	26,089	1,632	160,558	77,417	43,237	35,003	3,019	5,215	3,047	
March	783,787	408,661	353,504	18,807	36,841	80,967	4,570	197,739	91,869	50,026	40,204	3,471	6,351	10,094	
April	858,403	465,793	409,964	20,425	35,404	75,698	3,257	219,581	94,074	56,325	45,964	3,566	6,795	9,235	
May	829,940	443,619	388,013	20,737	34,769	62,057	6,729	211,040	106,595	63,352	43,672	3,550	6,130	6,736	
June	887,561	411,226	368,060	17,489	25,675	63,596	3,605	291,571	117,562	48,909	41,107	3,080	4,722	7,008	
July	807,019	430,336	369,062	17,301	33,983	22,584	2,395	252,128	109,607	50,636	41,842	2,938	5,856	2,484	
August	751,678	401,450	347,555	19,001	34,894	12,116	5,781	232,974	99,354	48,768	39,110	3,289	6,369	1,663	
September	800,125	438,618	384,202	20,719	33,997	15,947	7,247	233,568	104,746	52,528	42,767	3,588	6,173	1,701	
October	822,292	450,175	388,207	17,479	44,489	15,680	4,243	246,654	105,539	52,785	42,655	3,055	7,075	1,624	
November	644,786	319,189	276,724	14,498	27,967	21,822	7,451	217,087	79,237	38,314	30,854	2,621	4,939	2,475	
December	602,222	275,596	233,845	13,770	27,981	35,172	3,370	214,900	73,094	33,905	26,309	2,485	5,111	4,141	
1953: January	590,397	278,931	233,070	13,369	32,492	32,280	5,153	195,643	78,390	34,914	26,833	2,347	5,734	3,973	
February	665,229	331,971	281,720	16,345	33,906	33,111	3,101	213,028	84,088	39,953	31,047	2,815	6,091	3,869	
March	941,607	482,342	417,691	19,861	44,790	80,979	6,603	288,016	103,478	56,068	44,647	3,342	8,079	9,268	
April	1,015,568	501,327	438,390	20,964	42,003	26,005	7,077	362,123	119,037	57,225	46,074	3,524	7,627	3,918	
May	910,269	454,976	395,168	20,095	39,713	23,150	6,235	311,049	114,859	52,739	42,477	3,294	6,968	2,457	
June	886,089	447,820	385,891	16,970	44,959	19,976	4,677	288,053	125,563	51,721	41,351	2,635	7,735	2,282	
July	884,063	410,770	352,921	17,967	39,882	5,210	11,135	332,523	124,425	46,697	37,015	2,906	6,776	571	
August	802,374	392,541	338,663	14,682	39,196	9,730	13,109	278,386	108,609	44,528	35,686	2,246	6,596	1,046	
September	801,062	378,975	323,110	14,790	41,075	28,001	15,425	260,908	117,753	42,899	33,625	2,399	6,875	3,249	
October	785,093	386,155	332,596	18,644	34,915	2,066	5,986	282,237	108,650	43,148	34,534	2,674	5,940	238	
November	672,564	302,858	253,782	13,518	25,558	12,705	7,697	262,917	86,387	34,363	27,839	2,128	4,396	1,557	
December	608,318	271,361	227,110	12,192	32,059	5,146	6,823	248,324	76,664	32,074	24,165	2,028	5,881	734	
1954: January <sup>7</sup>	600,116	263,564	210,176	9,274	44,114	16,817	8,117	238,295	73,324	31,855	23,185	1,489	7,181	1,830	
February <sup>6</sup>	632,130	321,628	276,854	10,992	33,782	9,876	5,223	218,825	67,578	37,784	29,705	1,882	6,197	1,132	

<sup>1</sup> Building for which building permits were issued and Federal contracts awarded in all urban places, including an estimate of building undertaken in some smaller urban places that do not issue permits.

The data cover federally and nonfederally financed building construction combined. Estimates of non-Federal (private and State and local government) urban building construction are based primarily on building-permit reports received from places containing about 85 percent of the urban population of the country; estimates of federally financed projects are compiled from notifications of construction contracts awarded, which are obtained from other Federal agencies. Data from building permits are not adjusted to allow for lapsed permits or for lag between permit issuance and the start of construction. Thus, the estimates do not represent construction actually started during the month.

Urban is defined according to the 1940 Census, and includes all incorporated places of 2,500 inhabitants or more in 1940 and a small number of places, usually minor civil divisions, classified as urban under special rule.

Sums of components do not always equal totals exactly because of rounding.

<sup>2</sup> Covers additions, alterations, and repairs, as well as new residential and nonresidential building.

<sup>3</sup> Includes units in 1-family and 2-family structures with stores.

<sup>4</sup> Includes units in multifamily structures with stores.

<sup>5</sup> Covers hotels, dormitories, tourist cabins, and other nonhousekeeping residential buildings.

<sup>6</sup> Preliminary.

<sup>7</sup> Revised.

TABLE F-4: New nonresidential building authorized in all urban places,<sup>1</sup> by general type and by geographic division<sup>2</sup>

Geographic division and type of new nonresidential building	Valuation (in thousands)														1953 <sup>3</sup>	1952
	1954				1953											
	Feb. <sup>4</sup>	Jan. <sup>4</sup>	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Total		
All types	\$218,825	\$238,295	\$248,324	\$262,917	\$282,237	\$260,908	\$278,386	\$332,523	\$288,053	\$311,049	\$362,123	\$268,016	\$213,028	\$3,303,469	\$2,637,037	
New England	5,974	8,237	17,350	20,166	18,912	15,378	11,952	16,233	17,486	21,323	22,552	14,538	4,958	192,857	165,928	
Middle Atlantic	36,921	45,993	62,445	36,391	45,840	40,252	44,733	40,125	46,485	47,769	50,012	40,731	29,334	508,043	440,529	
East North Central	49,008	55,354	41,019	58,297	67,670	56,482	74,963	102,275	68,768	76,925	92,818	49,537	57,025	786,544	597,588	
West North Central	15,712	15,751	21,058	16,520	23,865	26,308	23,548	30,470	18,584	32,934	25,074	19,846	18,280	271,263	215,776	
South Atlantic	34,024	28,374	25,172	41,241	36,375	37,366	40,810	44,496	35,810	36,831	52,476	22,661	36,083	441,683	276,783	
East South Central	8,703	8,181	7,737	6,212	10,954	10,870	10,086	8,558	10,164	6,675	11,631	10,891	9,150	113,191	120,165	
West South Central	25,326	31,003	24,746	37,410	24,642	28,570	22,425	28,101	41,131	28,552	50,546	28,222	22,049	368,642	274,142	
Mountain	6,810	5,288	11,124	8,838	8,510	15,421	9,961	17,762	10,749	11,082	17,562	12,836	8,978	141,752	101,699	
Pacific	36,348	40,114	37,674	37,842	45,470	40,261	39,908	44,503	38,877	49,058	39,452	69,154	28,170	506,494	444,429	
Industrial buildings <sup>5</sup>	20,318	37,362	36,890	39,378	34,217	21,027	41,198	39,523	37,982	46,826	48,178	32,097	23,252	429,709	351,520	
New England	603	511	683	6,858	1,066	1,704	1,291	1,982	2,553	2,237	1,904	2,559	1,284	25,231	28,097	
Middle Atlantic	2,112	14,089	11,893	8,321	9,962	5,556	4,729	6,213	7,335	7,133	9,010	6,983	3,725	84,380	60,949	
East North Central	4,036	9,037	8,227	14,083	9,718	6,307	21,156	18,399	12,380	20,762	10,228	7,787	5,051	138,556	111,839	
West North Central	2,244	2,486	6,257	1,875	3,536	3,090	2,147	3,055	1,225	1,246	1,316	2,369	1,629	30,467	24,305	
South Atlantic	4,362	1,436	1,435	1,339	2,255	1,357	2,341	2,199	3,774	3,689	12,340	1,752	1,877	41,631	25,237	
East South Central	218	897	2,431	1,232	2,408	441	1,359	662	707	447	3,771	924	577	16,511	16,084	
West South Central	1,407	1,013	762	1,208	610	2,033	2,258	801	1,026	1,713	1,987	856	361	14,410	17,192	
Mountain	531	683	277	933	484	271	356	625	209	927	1,668	709	4,475	9,989	5,983	
Pacific	4,805	7,311	4,926	3,528	4,177	5,269	5,562	5,587	8,774	9,107	5,954	8,178	4,572	68,645	61,834	
Commercial buildings <sup>6</sup>	75,804	66,141	74,210	87,594	98,279	94,446	91,247	112,910	96,137	101,017	124,887	84,822	62,400	1,093,687	686,346	
New England	2,895	2,206	3,454	4,154	3,122	4,935	3,649	3,487	2,832	4,420	7,481	5,180	1,374	49,192	28,766	
Middle Atlantic	10,136	10,959	17,202	11,784	17,510	17,476	13,096	16,260	16,237	21,798	17,639	14,338	9,739	181,303	121,120	
East North Central	13,216	10,606	16,642	14,955	17,434	22,023	20,176	26,805	16,182	17,796	35,344	14,945	12,915	226,201	144,107	
West North Central	3,944	3,504	4,028	4,953	11,056	7,928	8,056	6,699	6,808	10,296	12,813	5,278	4,193	84,282	56,056	
South Atlantic	19,955	9,629	11,734	18,096	14,889	8,977	21,162	22,294	12,903	14,316	11,493	9,166	11,234	166,734	87,085	
East South Central	4,790	1,836	2,106	1,452	1,807	3,514	3,083	3,666	3,405	2,782	2,961	2,885	2,017	33,055	26,015	
West South Central	10,011	14,449	7,444	14,272	9,520	9,386	5,715	12,671	20,558	10,736	13,493	13,347	9,291	138,262	91,774	
Mountain	3,096	1,718	2,908	3,431	2,574	8,080	3,149	5,095	3,307	4,204	10,471	3,186	3,031	54,133	30,392	
Pacific	7,761	11,234	8,692	14,497	20,366	12,126	13,162	15,934	13,906	14,759	13,201	16,499	8,606	160,525	101,032	
Community buildings <sup>7</sup>	72,996	102,500	101,501	93,908	106,237	100,331	100,476	136,250	102,894	119,215	123,702	114,991	89,144	1,268,043	1,101,141	
New England	2,020	4,703	11,389	6,705	10,644	7,172	4,541	8,911	6,649	8,881	9,282	4,397	1,661	80,420	78,221	
Middle Atlantic	13,646	18,341	26,212	11,686	15,432	13,247	23,349	9,949	12,890	14,607	19,593	16,169	14,509	188,091	193,155	
East North Central	15,398	28,902	12,372	17,824	23,664	17,844	20,252	46,284	26,956	25,579	27,351	19,144	14,396	272,363	227,139	
West North Central	7,234	3,867	9,195	3,891	5,164	11,921	9,697	18,026	7,136	17,728	6,626	10,319	9,515	115,333	103,712	
South Atlantic	7,122	12,929	7,711	12,403	16,576	13,758	8,913	15,814	13,360	15,572	24,538	7,181	15,302	167,647	115,572	
East South Central	1,177	2,487	2,961	2,742	3,860	5,621	4,406	1,469	4,500	2,258	3,575	4,977	5,886	46,632	57,008	
West South Central	9,815	12,214	10,368	19,927	11,010	10,331	11,011	8,758	15,499	12,920	14,414	10,292	9,063	150,304	117,264	
Mountain	1,454	1,886	6,318	3,613	4,028	3,371	4,877	9,246	5,385	3,800	4,718	7,515	6,221	56,164	34,827	
Pacific	15,130	17,171	14,975	15,116	15,859	17,067	13,432	17,792	10,518	17,871	13,605	34,997	9,290	191,090	174,243	
Public buildings <sup>8</sup>	29,228	7,059	9,715	3,952	8,334	4,824	7,087	4,384	13,700	13,824	13,476	6,003	2,739	119,502	152,537	
New England	0	55	798	231	1,510	0	711	20	420	1,294	916	149	67	6,723	13,951	
Middle Atlantic	8,198	5	1,213	127	110	125	285	381	6,145	1,585	609	51	256	10,993	19,434	
East North Central	11,737	313	462	1,050	4,155	448	731	666	1,269	5,467	5,743	1,133	17,488	39,286	15,656	
West North Central	773	1,032	790	509	739	1,050	285	467	606	332	1,502	51	452	7,033	4,246	
South Atlantic	1,902	1,348	417	1,168	482	354	1,227	611	4,114	1,197	227	189	1,812	13,102	16,547	
East South Central	1,995	1,662	72	27	0	44	55	0	175	419	639	480	105	2,329	10,841	
West South Central	1,599	335	3,373	136	454	642	212	14	176	360	2,608	648	339	9,412	7,348	
Mountain	975	0	801	82	83	906	96	506	6	320	419	0	307	3,845	14,480	
Pacific	4,050	1,762	1,788	622	801	1,254	3,484	1,718	790	2,850	753	3,302	1,612	26,750	50,035	
Public works and utility buildings <sup>9</sup>	7,561	10,559	15,051	23,180	15,284	13,666	11,668	14,140	12,113	7,787	31,547	11,482	12,758	193,608	135,525	
New England	136	155	453	1,089	1,600	143	567	536	3,632	2,860	1,597	1,716	379	19,227	6,296	
Middle Atlantic	1,298	345	4,015	3,043	474	1,553	1,301	5,335	1,112	709	1,065	1,586	845	21,292	23,540	
East North Central	2,860	463	1,522	6,491	5,675	4,184	1,509	3,904	605	7,383	1,700	4,611	4,611	42,462	33,612	
West North Central	1,443	4,213	21	3,878	1,265	418	1,363	614	1,174	573	351	376	1,840	15,936	7,618	
South Atlantic	1,117	2,097	2,048	5,868	551	1,156	1,602	2,078	181	673	2,541	1,767	3,858	29,286	12,736	
East South Central	0	0	0	76	2,394	650	123	889	28	287	24	848	180	5,878	3,720	
West South Central	649	1,489	1,262	533	1,250	3,724	890	1,760	654	777	15,505	662	812	29,299	19,091	
Mountain	49	305	361	190	1,364	1,576	462	951	74	44	128	120	20	4,282	3,365	
Pacific	811	480	5,370	2,012	1,706	1,850	1,176	468	1,354	1,258	2,954	2,708	713	25,945	24,648	
All other buildings <sup>10</sup>	12,818	14,674	10,957	14,905	19,886	21,614	26,707	25,316	25,226	22,380	20,334	18,620	11,736	225,921	209,968	
New England	320	607	592	1,129	964	1,425	1,193	1,297	1,401	1,631	1,372	537	292	12,064	10,509	
Middle Atlantic	1,531	1,707	1,909	1,429	2,352	2,295	1,975	1,987	2,766	1,937	2,097	1,625	790	21,984	22,331	
East North Central	1,762	6,034	1,793	3,894	7,024	7,296	8,464	8,612	8,077	6,806	6,770	4,829	2,564	67,677	65,234	
West North Central	873	649	767	1,413	2,104	1,901	1,999	1,619	1,635	2,758	1,465	1,453	651	18,202	19,839	
South Atlantic	1,277	933	1,828	2,367	1,620	1,763										

TABLE F-5: Number and construction cost of new permanent nonfarm dwelling units started, by urban or rural location, and by source of funds<sup>1</sup>

Period	Number of new dwelling units started									Estimated construction cost (in thousands) <sup>2</sup>		
	All units			Privately financed			Publicly financed			Total	Privately financed	Publicly financed
	Total non-farm	Urban	Rural non-farm	Total non-farm	Urban	Rural non-farm	Total non-farm	Urban	Rural non-farm			
1925	937,000	752,000	185,000	937,000	752,000	185,000	0	0	0	\$4,475,000	\$4,475,000	0
1933	93,000	45,000	48,000	93,000	45,000	48,000	0	0	0	285,446	285,446	0
1941	706,100	434,300	271,800	619,500	369,500	250,000	86,600	64,800	21,800	2,826,192	2,830,765	\$295,427
1944	141,800	96,200	45,600	138,700	93,200	45,500	3,100	3,000	100	496,054	483,231	12,823
1946	670,500	403,700	266,800	662,500	395,700	266,800	8,000	8,000	0	3,769,767	3,713,776	55,991
1946	849,000	479,800	369,200	845,600	476,400	369,200	3,400	3,400	0	5,643,436	5,617,425	26,011
1947	931,600	524,900	406,700	913,500	510,000	403,500	18,100	14,900	3,200	7,203,119	7,028,980	174,139
1948	1,025,100	588,800	436,300	988,800	556,600	432,200	36,300	32,200	4,100	7,702,971	7,374,269	328,702
1949	1,396,000	827,800	568,200	1,352,200	785,600	566,600	43,800	42,200	1,600	11,788,595	11,413,371	370,224
1950	1,091,300	595,300	496,000	1,020,100	531,300	488,800	71,200	64,000	7,200	9,800,892	9,186,123	614,769
1951	1,127,000	609,600	517,400	1,068,500	554,600	513,900	58,500	55,000	3,500	10,208,983	9,706,276	502,707
1952	1,106,000	(8)	(8)	1,070,400	(8)	(8)	35,600	(8)	(8)	10,514,147	10,207,735	306,412
1953	1,106,000	(8)	(8)	1,070,400	(8)	(8)	35,600	(8)	(8)	10,514,147	10,207,735	306,412
1951: First quarter	260,300	147,800	112,500	248,900	137,200	111,700	11,400	10,600	800	2,293,974	2,191,489	102,485
January	85,900	49,600	36,300	82,200	46,400	35,800	3,700	3,200	500	755,600	721,014	34,586
February	80,600	47,000	33,600	76,600	43,200	33,300	4,100	3,800	300	716,629	681,607	35,022
March	93,800	51,200	42,600	90,200	47,600	42,600	3,600	3,600	(8)	821,745	788,868	32,877
Second quarter	329,700	192,000	137,700	280,200	148,500	131,700	49,500	43,500	6,000	2,649,238	2,549,238	415,572
April	96,200	51,900	44,300	92,300	48,300	44,000	3,900	3,600	300	896,652	828,339	38,313
May	101,000	55,400	45,600	97,600	52,300	45,300	3,400	3,100	300	922,661	895,309	27,352
June	132,500	84,700	47,800	90,300	47,900	42,400	42,200	36,800	5,400	1,175,497	1,175,497	349,907
Third quarter	276,000	141,200	134,800	270,400	135,700	134,700	5,600	5,500	100	2,527,033	2,472,196	54,837
July	90,500	45,900	44,600	86,800	42,300	44,500	3,700	3,600	100	827,173	791,783	35,390
August	89,100	45,900	43,200	88,300	45,100	43,200	800	800	0	804,317	795,624	8,693
September	96,400	49,400	47,000	95,300	48,300	47,000	1,100	1,100	(8)	895,543	884,789	10,754
Fourth quarter	225,300	114,300	111,000	220,600	109,900	110,700	4,700	4,400	300	2,015,075	1,973,200	41,875
October	90,000	44,400	45,600	88,900	43,400	45,500	1,100	1,000	100	806,965	796,682	10,273
November	74,500	38,500	36,000	72,200	36,200	36,000	2,300	2,300	(8)	672,078	650,660	21,418
December	60,800	31,400	29,400	59,500	30,300	29,200	1,300	1,100	200	536,042	525,858	10,184
1952: First quarter	246,500	137,400	109,100	226,800	119,100	107,700	19,700	18,300	1,400	2,167,659	2,006,918	160,741
January	36,100	20,800	16,400	32,800	17,000	15,600	3,500	3,300	200	566,665	537,697	28,968
February	77,700	42,800	34,900	74,300	39,700	34,600	3,400	3,100	300	682,895	654,631	28,264
March	103,900	58,500	45,400	91,100	46,600	44,500	12,800	11,900	900	918,099	814,590	103,509
Second quarter	319,300	175,800	143,500	294,900	152,700	142,200	24,400	23,100	1,300	2,920,186	2,705,653	214,533
April	106,200	59,000	47,200	97,000	50,400	46,600	9,200	8,900	600	949,001	874,524	74,477
May	109,600	60,700	48,900	101,000	52,400	48,600	8,600	8,300	300	1,006,552	926,803	79,749
June	103,500	56,100	47,400	96,900	49,900	47,000	6,600	6,200	400	964,633	904,326	60,307
Third quarter	302,500	156,000	146,500	297,700	151,600	146,100	4,800	4,400	400	2,761,316	2,718,369	42,947
July	102,600	52,400	50,200	101,100	50,900	50,200	1,500	1,500	(8)	945,587	931,214	14,373
August	99,100	50,800	48,300	97,400	49,400	48,000	1,700	1,400	300	895,675	882,446	13,229
September	100,800	52,800	48,000	99,200	51,300	47,900	1,600	1,500	100	920,054	904,709	15,345
Fourth quarter	258,700	140,400	118,300	249,100	131,200	117,900	9,600	9,200	400	2,359,822	2,275,336	84,486
October	101,100	53,800	47,300	99,200	52,100	47,100	1,900	1,700	200	928,677	910,701	17,976
November	86,100	46,000	40,100	82,300	42,300	40,900	3,800	3,700	100	785,969	751,664	34,305
December	71,500	40,600	30,900	67,600	36,800	30,800	3,900	3,800	100	645,176	612,971	32,205
1953: First quarter	257,100	140,600	116,500	238,100	123,800	114,300	19,000	16,800	2,200	2,346,213	2,183,710	162,503
January	72,100	38,400	33,700	68,200	35,400	32,800	3,900	3,000	900	641,703	610,344	31,359
February	79,200	43,100	36,100	73,800	38,600	35,200	5,400	4,500	900	720,234	674,399	45,835
March	105,800	59,100	46,700	96,100	49,800	46,300	9,700	9,300	400	984,276	898,967	85,309
Second quarter	324,300	165,900	158,400	315,000	158,000	157,000	9,300	7,900	1,400	3,083,256	3,000,120	83,136
April	111,400	57,400	54,000	107,400	54,100	53,100	4,000	3,300	700	1,057,899	1,022,836	35,063
May	108,300	55,200	53,100	105,600	52,500	53,100	2,700	2,700	(8)	1,027,221	1,001,693	25,528
June	104,600	53,300	51,300	102,000	51,400	50,600	2,600	1,900	700	998,136	975,591	22,545
Third quarter	285,000	141,600	143,400	280,700	137,300	143,400	4,300	4,300	(8)	2,777,607	2,739,268	38,339
July	96,700	48,100	48,600	96,400	47,800	48,600	1,000	1,000	(8)	941,943	938,871	3,072
August	93,200	46,400	46,800	92,200	45,400	46,800	3,000	3,000	(8)	911,681	902,501	9,180
September	95,100	47,100	48,000	92,100	44,100	48,000	3,000	3,000	(8)	923,983	897,896	26,087
Fourth quarter	239,600	(8)	(8)	236,600	(8)	(8)	3,000	(8)	(8)	2,307,071	2,284,637	22,434
October	90,100	43,100	47,000	90,000	43,000	47,000	100	100	(8)	883,455	882,838	617
November	81,500	38,800	42,700	79,900	37,200	42,700	1,600	1,600	(8)	777,072	764,774	12,298
December	68,000	(8)	(8)	66,700	(8)	(8)	1,300	(8)	(8)	646,544	637,025	9,519
1954: First quarter	236,000	(8)	(8)	232,300	(8)	(8)	3,700	(8)	(8)	(8)	(8)	(8)
January	66,000	(8)	(8)	64,700	(8)	(8)	1,300	(8)	(8)	613,425	601,162	12,263
February	73,000	(8)	(8)	71,800	(8)	(8)	1,200	(8)	(8)	691,202	680,405	10,797
March	97,000	(8)	(8)	95,800	(8)	(8)	1,200	(8)	(8)	(8)	(8)	(8)

<sup>1</sup> The estimates shown here do not include temporary units, conversions, dormitory accommodations, trailers, or military barracks. They do include prefabricated housing units.

These estimates are based on building-permit records, which, beginning with 1945, have been adjusted for lapsed permits and for lag between permit issuance and start of construction. They are based also on reports of Federal construction contract awards and beginning in 1946 on field surveys in non-permit-issuing places. The data in this table refer to nonfarm dwelling units started, and not to urban dwelling units authorized, as shown in table F-3.

All of these estimates contain some error. For example, if the estimate of nonfarm starts is 50,000, the chances are about 19 out of 20 that an actual enumeration would produce a figure between 48,000 and 52,000.

<sup>2</sup> 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.

<sup>3</sup> Depression, low year.

<sup>4</sup> Recovery peak year prior to wartime limitations.

<sup>5</sup> Last full year under wartime control.

<sup>6</sup> Housing peak year.

<sup>7</sup> Preliminary.

<sup>8</sup> Not available.

<sup>9</sup> Less than 50 units.