# EMPLOYMENT and Payrolls 

## MARCH 1952



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Listed below and continued on the (inside) back cover are the major reports available to the public. Distribution is free unless otherwise noted. Requests for these publications specifying exact titles, should be addressed to the Bureau of Labor Statistics, U. S. Department of Labor, Washington 25, D. C.

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LABOR TURNOVER -Data on hiring, quits, layoff, and discharges shown for 121 intividual manufacturing and selected non -manufacturing industries. On a national basis only, data on women for selected industries available guarter ty. Press release, giving analysis of current trends in broad industry groups based on preliminary data, available approximately two weeks earier. Both reports published monthly.

These publications prepared by
DIVISION OF MANPOWER AND EMPLOYMENT STATISTICS
Seymour L. Wolfbein, Chief

In this issue.....
Indexes of productionworker employment and weekly payrolls (table 5), previously based on the 1939 average, have been revised to a 1947-1949 base period. These new series supersede data shown in monthly reports dated prior to March 1952 and in issues of the "Monthly Labor Review" dated prior to April 1952.

Coming next month.....
A supplement showing annual averages for the five-year period 1947-1951 for all tables in the current issue. The tables on State and Area data, however, will carry annual averages for 1951 only.

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## Employment Trends

## Manufacturing Employment Down by 160,000 Over the Year

Manufacturing employment declined by 160,000 between February 1951 and February 1952, to 15.8 million, but expansion in other sectors of the economy outweighed this reduction, so that the total number of employees in nonfarm industries was 440,000 higher than a year ago, and unemployment-as measured by the Bureau of the Censuswas at a postwar low for the month.

Between Jaruary and February 1952, nonfarm employment declined slightly, to 45.8 million, mainly because of seasonal reductions in retail trade and construction. However, pre-Faster employment gains were reported by the apparel and shoe industries, and most of the metalworking industries made small additions to their workforce as a result of expanding defense production and some easing of metals supplies.

Over the year, employment reductions of 5 percent or more were reported in the apparel, leather, furniture, lumber, and textile industry groups, reflecting decreased demand for consumer goods and restrictions on nondefense construction. In the leather and textile industries, February 1952 employment levels were even lower than in February 1939, in contrast to a gain of over 60 percent in total factory employment over this period.

However, industries producing military goods and industrial equipment required by the national defense program recorded significant employment gains over the year. The ordnance, instruments, machinery, and transportation equipment industry groups increased their workforce by 5 percent or more between February 1951 and February 1952. In transportation equipment, a net addition of 190,000 workers in aircraft plants and of 30,000 in shipyards more than offset reduced employment in the automobile industry.

## Nonmanufacturing Activities Add Workers

Total Government employment increased by 370,000 over the year. Most of the rise occurred in Federal arsenals, navy yards, military bases, and other defense activities. State and local government accounted for about 110,000 of the increase. The number of workers employed by nondefense agencies of the Federal Government was virtually unchanged.

Contract construction employment, at 2.3 million this February, continued at an all-time peak for the season, and was about 50,000 higher than in February of last year. Total expenditures for new construction were virtually unchanged over the year as increased military and industrial building activity offset cutbacks in residential and commercial construction.

Employment in retail and wholesale trade in February 1952 was about 100,000, or 1 percent, higher than a year earlier, despite a reduced volume of retail sales.

Finance is another sector of the economy where employment gains were recorded over the year. The number of persons employed in banks, insurance companies, and other financial institutions increased by about 80,000 , to 1.9 million in February 1952.

## Factory Hiring Lower Than Year Age

The number of workers hired by manufacturing plants increased seasonally between December and Jamary, but remained lower than a year earlier. Over the month, the hiring rate rose from 30 to 45 per 1,000 employees as a result of pre-Easter expansion in many consumer goods plants as well as the greater number of working days in Jamuary.

Hiring this January was about 15 percent below the January 1951 rate. Over-the-year decreases in hiring were reported in most industry groups, reflecting reduced output of consumer gaods and building materials and a slower rate of expansion in defense-related industries.

Factory workers were laid off at a rate of 14 per $1,000 \mathrm{em}-$ ployees this January-about the same as in December, but 40 percent greater than in January 1951. Over the year, layoffs more than doubled in the apparel, chemicals, textiles, lumber, paper, and stone, clay, and glass industry groups. Except for chemicals, these are industries where reduced consumer buying or restrictions on nondefense construction have resulted in significant employment declines over the year, as well as marked decreases in the average workweek.

However, defense-related industries continued to report relatively low layoff rates. In the ordnance, electrical machinery, instruments, transportation equipment, and primary and fabricated metals industry groups, layoffs this Jamary were at or below the low rates of a year earlier.

The rate at which workers were quitting their jobs rose seasonally between December and January, from 14 to 19 per 1,000 employees. However, the quit rate was 10 percent lower than in Jamuary 1951, when expanding employment opportunities permitted more workers to change their jobs.

## Factory Workweek at Year-Ago Level

The average workweek of factory production workers in midJamuary 1952-at 40.9 hours-was about the same as a year earlier, as reduced hours in plants producing consumer goods and building materials offset gains in defensemrelated industries.

Between December 1951 and Jamary 1952, the average workweek declined seasonally because of brief shutdowns for inventorytaking in a wide range of industries and seasonal slackening in lumber, tobacco, furniture, and stone, clay, and glass.

Over the year, decreases in the workweek of a half hour or more were reported in the apparel, textile, paper, lumber, and stone, clay, and glass industry groups, which also experienced decreases in production worker employment-ranging fram 5 to 10 per-cent--because of slackened consumer demand or curtailed nondefense building activity.

In contrast, average weekly hours in defense-connected industries this January were at or above the high levels of a year earlier. The ordnance, machinery, electrical machinery, instruments, and primary and fabricated metals industries reported average workweeks of over 42 hours in mid-January, indicating extensive scheduling of overtime for many of their workers.

In the rubber products industry group, the average workweek in January 1952 was over a half hour longer than a year earlier, reflecting the recent relaxation of government controls on the use of rubber for tire manufacturing. In the previous six months, this industry had been reporting over-the-year reductions in hours of work.

## Workers' Pay Up 5 Percent

Because of the shorter workweek, average weekly earnings of production workers in manufacturing plants declined by 32 cents between December and Jamary. However, earnings, at $\$ 67.08$ in January, were $\$ 3.32$-or 5 percent--higher than a year earlier. This increase resulted both from the larger proportion of workers in the higherpaid defense-related industries and from cost-of-living and other wage adjustments allowed since the wage stabilization order of Jamuary 1951.

Average gross hourly earnings-including overtime and other premium pay--rose by a half cent between December and Jamaary, reflecting widespread cost-of-living and other wage rate advances.

Over the year, average hourly earnings were up by $5-1 / 2$ per-cent-or $8-1 / 2$ cents-to $\$ 1.64$ in Jamuary 1952. The sharpest relative gain-almost 11 percent-was reported by the rubber products industry. With the exception of the apparel industry group-where hourly earnings were virtually unchanged--all industry groups recorded increases of at least 2 percent between January 1951 and January 1952.

Table A: Employees in Nonagricultural Establishments, by Industry Division and Selected Groups
(In thousands)

| Industry division and group | 1952 |  | 1951 |  | Het change |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Feb. } \\ & \text { I/ } \end{aligned}$ | Jan. | Dec. | Feb. | $\begin{gathered} \text { Jan. } \\ 1952 \\ \text { to } \\ \text { Feb. } \\ 1952 \end{gathered}$ | $\begin{gathered} \text { Feb. } \\ 1951 \\ \text { to } \\ \text { Feb. } \\ 1952 \end{gathered}$ |
| TOTAL...... | 45,834 | 45,903 | 47,592 | 45,390 | -69 | +444 |
| MANUFACTURING. | 15,819 | 15,776 | 15,912 | 15,978 | +43 | -159 |
| MINING. | 905 | 909 | 915 | 930 | -4 | - 25 |
| Metal mining..................... | 107 | 107 | 106 | 106 | 0 | + 1 |
| Bituminous-coal................... | 365 | 368 | 369 | 402 | - 3 | -37 |
| Nonmetallic mining and quarrying.......................... | 100 | 100 | 105 | 97 | 0 | + 3 |
| CONTRACT COMSTRUCTION.............. | 2,276 | 2,316 | 2,524 | 2,228 | $-40$ | $+48$ |
| transportation and public UTILITIES. | 4,105 | 4,109 | 4,151 | 4,082 | -4 | + 23 |
| Transportation...................... | 2,852 | 2,858 | 2,897 | 2,866 | -6 | -14 +34 |
| Communication.................... Other public utilities......... | 705 548 | 701 550 | 702 552 | 671 545 | +4 +2 | +34 $+\quad 3$ |
| TRADE............................... | 9,653 | 9,706 | 10,646 | 9,554 | -53 | +99 |
| Wholesale trade.................. | 2,636 | 2,627 | 2,658 | 2,593 | +9 | + 43 |
| Retall trade...................... | 7,017 | 7,079 | 7,988 | 6,961 | -62 | + 56 |
| General merchandise stores..... | 1,442 | 1,474 | 2,089 | 1,431 | -32 |  |
| Food and liquor stores.......... <br> Automotive and accessories | 1,268 | 1,266 | 1,312 | 1,257 | +2 | + 11 |
| Automotive and accessories dealers.......................... | 747 | 751 | 768 | 735 | -4 | $+12$ |
| Apparel and accessories <br> stores............................. | 511 | 533 | 652 | 515 | -22 |  |
| Other retail trade.............. | 3,049 | 3,055 | 3,167 | 3,023 | -6 | $+26$ |
| FINANCE.............................. | 1,919 | 1,906 | 1,911 | 1,839 | +13 | + 80 |
| SERVICE............................... | 4,667 | 4,672 | 4,702 | 4,657 | - 5 | + 10 |
| GOVERNMENT. . . . . . . . . . . . . . . . . . . . | 6,490 | 6,509 | 6,831 | 6,122 | -19 | +368 |
| Federal........................... State and Local............... | 2,344 4,146 | 2,331 4,178 | 2,677 4,154 | 2,085 4,037 | +13 -32 | $\begin{aligned} & +259 \\ & +109 \end{aligned}$ |
| stave and Local................... |  |  |  |  |  |  |

1/ Preliminary.

Table B: Employees in Manufacturing Industry Groups
(In thousands)

| Industry division and group | 1952 |  | 1951 |  | Net change |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Feb. $1 /$ | Jan. | Dec. | Feb. | $\begin{gathered} \text { Jan. } \\ 1952 \\ \text { to } \\ \text { Feb. } \\ 1952 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Feb. } \\ 1951 \\ \text { to } \\ \text { Feb. } \\ 1952 \end{gathered}$ |
| MANUFACTURING. . . . | 15,819 | 15,776 | 15,912 | 15,978 | +43 | -159 |
| DURABLE GOODS | 8,971 | 8,946 | 8,999 | 8,877 | +25 | $+94$ |
| Ordnance and accessories. | 71.2 | 68.5 | 65.7 | 33.3 | $+2.7$ | $+37.9$ |
| Lumber and wood products (except furniture)..... | 716 | 722 | 762 | 800 | - 6 | - 84 |
| Furniture and fixtures............. | 341 | 341 | 342 | 373 | 0 | - 32 |
| Stone, clay, and glass products. | 530 | 533 | 545 | 547 | - 3 | - 17 |
| Primary metal industries........... | 1,351 | 1,352 | 1,355 | 1,331 | -1 | + 20 |
| Fabricated metal products (except ordnance, machinery, and transportation equipment).......... | 993 | 988 | 989 | 1,022 | $+5$ | - 29 |
| Machinery (except electrical)...... | 1,654 | 1,645 | 1,640 | 1,557 | +9 | + 97 |
| Electrical machinery.. | 966 | 961 | 963 | 931 | $+5$ | + 35 |
| Transportation equipment.......... | 1,568 | 1,564 | 1,559 | 1,493 | $+4$ | + 75 |
| Instruments and related products... | 317 | 316 | , 315 | 286 | $+1$ | $+31$ |
| Miscellaneous manufacturing industries. $\qquad$ | 4614 | 455 | 463 | 504 | +9 | - 40 |
| NONDURABLE GOODS | 6,848 | 6,830 | 6,913 | 7,101 | +18 | $-253$ |
| Food and kindred products | 1,449 | 1,452 | 1,508 | 1,478 | - 3 | - 29 |
| Tobacco manufactures................ | 88 | 89 | 91 | 87 | $-1$ | + 1 |
| Textile-mill products............... | 1,217 | 1,229 | I,239 | 1,365 | -12 | -. -18 |
| Apparel and other finished textile products.................... | 1,168 | 1,144 | 1,152 | 1,237 | +24 | -69 -17 |
| Paper and allied products........... Printing, publishing, and allied | 479 | 480 | 484 | 496 | - 1 | - 17 |
| industries........... | 767 | 768 | 773 | 758 | -1 | + 9 |
| Chemicals and allied products...... | 761 | 757 | 759 | 738 | $+4$ | + 23 |
| Products of petroleum and coal..... | 266 | 266 | 269 | 256 | 0 | + 10 |
| Rubber products. | 272 | 275 | 275 | 273 | - 3 | - 1 |
| Leather and leather products | 381 | 370 | 363 | 413 | $+11$ | - 32 |

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# INDUSTRIAL ORGANIC CHEMICALS 

Frployment in the industrial corganic chmicals industry was 229,200 in Jamuary 1952. This represents a rise of 16 percont since the beginning of hostilities in Korea, and is 24.1 peroent higher than in January 1946. The upward employment trend is expeoted to oontinue in this fast growing industry.

Fever than 40 jears ago the industrial organic chmicals industry consisted of only seven manufacturer: with annual sales of $\$ 3.5$ million. The industry now employs about 230,000 workers in 570 plants, and its products are valued at nearly $\$ 4$ billion. To a great extent, this industry owes its rapid development to the discovery of new products through soientific research.

## Most Products Are Made From Coal and Petroleum

Industrial organic chemicals are compounds produced from cosl, petroleum, and agricultural products. Scme of these organic compounds are well known; for example, synthetic fibers, such as nylon or rayon; synthetic rubber; and plastics materials. There are many other important products less well known, such as industrial explosives, the wide variety of dyes and other color pigments, industrial alcohol, formaldehyde, benzene, and glycerin. Sone of the principal users of organic chemicals are the textile industry, plastics products manufacturers, and the mining industry. Much of the output is used within the industry in manufacturing other organic chemical products.

Coal is the principal raw material used in manufacturing organic chemicals, but petroleum and natural gas are becoming increasingly important. Wood and cotton are basic raw materials in rayon manafacture and in making cellulosics plastics materials.

The raw materials are changed into finished products for use in industry by a number of different manufacturing processes. There are, how ever, four major steps in the sequence of manufacture. In the first step, tars are extracted from coal, oil-gas, or water gas. Coal tar is produced ohiefly by the steel industry as a byproduct of coke. Water-gas and oilgas tars are byproducts of the petroleum and natural gas industry. The second step consists of production of "crudes"_mpincipally benzene, toluene, xylene, and napthalene from ters, and from petroleum and natural gas.

Small amounts of these crudes are sold as end-products but the greater portion is used in manufacturing "intermediates", the third stop in processing. "Intermediates" originally were used as an intermediate step only in the manufacture of dyes, but they are now used for other products such as explosives, perfumes, medicinals, flavors, and plastics. Some of the principal intermediates are alcohnl, phenol, nitro-benzene, aniline oil, refined napthalene, clorobenzene, and styrene. In the fourth step, these compounds are used mainly in making more complex synthetic organic chemicals and finished products. However, some are sold as finished products without further processing. For example, refined napthalene may be packaged and sold as a moth repellent or as a deodorant.

Some of the principal industrial organic chemicals shipped as finished products are: dyes, which are soluble colors and used mainly in textile manufacturing; lakes and toners, which are color pigments not saluble in water or oil and are used in the manufacture of paints and inks; plastics and resin materials in the form of sheets, rods, tubes, and powder, which are furnished to manufacturers of finished plastics products; synthetic fibers, such as rayon, nylon, and orlon, which are used in textile, apparel, and tire cord manufacture; synthetic rubber, such as GR-S, neoprene, and butyl, which are used by the tire and tube industry.

Synthetic Fibers and Phestics Account for Large Share of the Emplopment

Synthetic fibers, one of the major branches of the industry, are used in greater volume than wool and rank second only to cotton among the textile fibers. Production has increased almost continuously since just arter World War I when quantity production of rayon began. Currentily, production workers in synthetio fibers mmber about 50,000 , and output of rayon, nylon, orlon and other synthetic fibers is at an all-time peak. These fibers have made major inroads in 211 the major textile fields and accounted for 73 parcent of the increase in fiber consumption between 1937 and 1949. The principel use of synthetic fibers is for clothing. (See chart 1). Industrial uses such as for tire cord and belting have increased in importance and now consume almost one-third of production.

Raw material for rayon is wood pulp or cotton lintars, the short fibers left on the seeds after they have been separated from cotton. Cool is the raw material used for the newer fibers such as nylon, orlon, and dynel.
$\begin{array}{cc}\text { chart } 2 & \text { PRODUCTION OF } \\ & \text { PLASTICS MATERIALS }\end{array}$


Chart 3
PRODUCTION OF SYNTHETIC RUBBER


The phenomenal growth of plastics during the past decade has been matched by thet of fow products. Flastics, once considared merely substitute materials with limited application, have assumed a place of major importance in our industrial economy. This branch of the organic chemicals industry employed 21,800 production workers in Januery 1952. About 125 compenies produced approximately 1.8 billion pounds of plastics materials in 1951, roughly twice the volume produced in 1946.

Leading plastics materials in order of volume produced are vinyl resins, phenolics, alkyd resins, and polystyrenes. The largest outlet for vinyl is film and sheeting for such items as drapes, shower curtains, upholstery, raincoats, phonograph records, and garden hose. Phenolics materials are used for radio and tele vision cabinets, table tops, cameras, and telephone parts. The alkyd resins are used in malding paints, varnishes, and enamels, especially finishes for automo bile bodies and refrigerators. Polystyrene, made from styrene (also one of the main ingredients of synthetic rubber) has shown the greatest gain in recent years. Its principal advantages are its low cost and its ability to take colors well. Among its uses are moldod products such as dishware, toys, refrigerator dishes, and novelties.

Synthetic rubber is produced mainly in Government-owned, bat privately operated plants which were built during World War II. This branch of the organic chemicals industry employed 7,600 production workers in January 1952. CR-S synthetic rubber, which accounts for 85 percent of production, is a general purpose type which is made from butadiene and styrene. Butadiene comes from a combination of petroleum or natural gas and ethyl alcohol. Styrene is made from benzol, a derivative of petraleum or coal tar.

Currently, over 80 percent of the rubber used in passenger tires is GR-S. Over 90 percent of tire tubes are made of the butyl (GR-I), a special purpose synthetic rubber. Neoprene,

Charl 4
PRODUCTION OF
INDUSTRIAL ALCOHOL

another synthetic rubber, is used extensively in life-saving equipment, wire and cable coverings, solid airplane tires, hose, and aircraft equipment.

Industrial alcohol, one of the major products of the organic chemicals industry, is an essential commodity for both peace and wartime uses. In peacetime it is used primarily as a solvent and as a raw material for the produotion of other chemicals. In wartime or in periods of defense preperation it has additional important uses in the manufacture of such products as synthetic rubber and military explosives.

Industrial alcohol is again in short supply as a result of the reopening of synthetic rubber plants. It is expected that the additional quantity needed for the synthetic rubber program will be supplied by imports from France. Otherwise it would probably be necessary to obtain the alcohol from beverage distributors.

Many Research Workers Emploved
Firms producing industrial chemicals employ an unusually large number of professional and research personnel. More than 10 percent of the Nation's professional personnel engaged in research are employed by industrial chemical firms. Chemists and chemical engineers constitute the major proportion of these professional workers. Chemists in this industry perform analytical and research work on carbon compounds. They develop process control methods, supervise routine testing of material during processing, and prepare technical reports. Chemical engineers apply chemistry and engineering science to the designing, constructing, and improving of equipment. Many specialize in consulting, testing, technical sales and service, or technical writing. Also important are mechanical engineers who specialize in designing tools, engines, machines, or other industrial equipment, or planning and operating the central distribution for heat, gas, water, or steam; and electrical engineers who specialize in planning and supervising the construction, installation, and operation of electric-power generating plants and transmission lines Some large plants employ industrial, civil, construction, metallurgical, and safety engineers.

In addition to the large number of professional personnel this industry employs many subprofessional workers, including draftsmen who prepare working plans and detailed drawings from the rough sketches or notes of the chemists or engineers; and laboratory assistants who perform standard laboram tory tests for specific gravity, viscosity, or routine tests on volume or color to determine various properties. They work in the research laboratories or in the various processing departments.

## Operating and Yaintenance Workers Predominate

Most of the processing equipment operators are shilled. Chemical operators, the largest group, determine proper proportions of material according to formalas or specifications, make necessary standard calculations, set and regulate controls for temperature, pressure, or flow of material. They also observe controls and make necessary adjustments, and use measuring and testing instruments to check quality of operations. Stillmen operate distillation equipment that separates volatile mixtures into component parts. Filterers operate one or more units of filtering equipment used in separating suspended solids from liquids. Autoclave operators charge, operate, and unload autoclaves (high-pressure vessels) used in chemical manufacturing processes in which the reaction involves cheancal changes within highly critical pressure and temperature linits. Compressors operate equipment that compresses commercial gases into liquid form. They maintain the proper flow of gases through compressing equipment by manually setting and adjusting controls. Driers operate one or more units of equipment used in separating water or other undesirable volatile liquid components from solids. Volatile components are removed by heating the solids with circulating hot acid or steam and by maintaining a vacuum over the solids. Electrio-cell men operate electric cells that break dow liquids into component parts by electricity. They maintain the flow of material to and from the cells, by use of valves; check the various electric gauges, examine the sides and poles of the cell for corrosion; adjust and make minor repairs to the equipment. Millers tend one or more units of equipment used to crush, grind, or pulverize materials to specification. Mixers operate one or more machines in which component parts (liquids or solids) are blended or mixed in controlled amounts. Pumpmen tend and maintain power-driven pumps used to move liquids from one process to another or to storage tanks.

The highly skilled carpenters, pipefitters, electricians, machinists, and other maintenance workers keep the plant and equipment in repair and make installations. Because chemical manufacture requires a relatively high ratio of equipment to workers, this industry employs a high proportion of maintenance workers. In general, their work is smilar to that of most other manufacturing industries.

The processing equipment operators helpers constitute a small proportion of the work force. In chemical industries most of the higher skilled jobs are filled by promotion within the plant. Helpers usually move from semiskilled work to the more skilled jobs of operators.

Materials handling occupations, such as truck drivers, hend and power truckers, and loaders and unloaders, comprise a relatively small occupam tional group. Materials handlers are almost entirely unskilled or semiskilled workers.

Guards, janitors, watchmen, and other custodial workers have jobs similar to those in other industries. Less than 5 percent of the industry's workers are employed in these occupations.

Another small group, apprentices, learners, and trainees, work under the supervision of experienced men as a part of their training program. About one-fourth of the plant workers consist of general laborers, handymen, a few stock clerks, roustabouts, general helpers and utility men.

According to the 1947 Census of Manufactures, over 86 percent of total production workers and about three-fowths of administrative and office personnel in industrial organic chemicals were men. Women were emm ployed mainly in office jobs. In the plant, they usually work in laboratory and packaging departments. However, in some branches of the industry, women play a more important role. In the manufacturing of synthetic fibers, which employed over 60 percent of all women working in industrial organic chemicals, more than 25 percent of the production workers were women. They constituted more than 15 percent of the plant workers in the manufacture of industrial explosives.


## Sharpest Employment Gains in South Central States

Employment has ncreased in every region since 1939, but there has been a significant shift to the East South Central and the West South Central States. These regions, which between them accoumted for only 13 percent of 1939 employment, currently have 28 percent of the total. The greatest numerical employment increases from 1939 to 1951 were in the East South Central, Middle Atlantic, and in West South Centrol regions, in that order (see table 1).

The Middle Atlantic States employ the greatest number of workers, accounting for 30 percent of total employment. Following closely are the South Atlantic States with 26 percent of the total. The East South Central States, with 18 percent, is the only other region with more than 10 percent of total employment.

Table 1.- Estimated Average Employment in Industrial Organic Chemicals, by Region 1939 and 1951

| Region | 1939 |  | 1951 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { All } \\ \text { employees } \end{gathered}$ | Percent of total | $\begin{gathered} \text { All } \\ \text { employees } \end{gathered}$ | ```Percent of total``` |
| All regions - . . . . . - - | 110,500 | 100.0 | 227,100 | 100.0 |
| New England - - - - - - | 4,400 | 4.0 | 9,300 | 4.1 |
| Middle Atlantic - . . . . - | 40,800 | 36.9 | 68,300 | 30.1 |
| East North Central - - - - - | 9,000 | 8.1 | 19,100 | 8.4 |
| West North Central - - - - | 1,400 | 1.3 | 5,200 | 2.3 |
| South Atlantic - - - - - | 38,300 | 34.6 | 58,100 | 25.6 |
| East South Central - . . - | 13,700 | 12.4 | 40,300 | 17.7 |
| West South Central - - - - | 1,000 | . 9 | 22,300 | 9.8 |
| Mountain - - - - - - - | 400 | . 4 | 900 | . 4 |
| Pacific - - - - - - - | 1,500 | 1.4 | 3,600 | 1.6 |

Plants manufacturing synthetic fibers are concentrated in the eastern part of the United States, the South Atlantic States accounting for threefourths of total employment. The main centers of employment in the manufacture of synthetic rubber are Texas, Louisiana, and Los Angeles and there are a few plants in the Louisville and Akron areas. Employment in plastics materials is concentrated in two regions, the Middle and South Atlantic States, which account for almost 70 percent of the total.

More than 60 percent of the 563 plants in the organic chemicals industry in 1947 employed fewer than 100 workers. Among this various industry branches there were significant differences in plant size. In plastics materials manufacture, 75 of the 125 plants had fewer than 100 workers, and accounted for less than 8 percent of total employment, whereas the 16 establishments having over 500 workers employed over three-fourths of total workers. Of the 38 plants primarily engaged in the manufacture of synthetic fibers, 70 percent of the work force was concentrated in the 13 establishments having over 2,500 employees. Of the 20 plants producing synthetic rubber, the 10 with between 250 and 500 workers each, employed over half the work force. Most of the remainder were in 4 large plants. In industrial explosive production, almost two-thirds of the 76 plants employed fewer than 100 workers, but accounted for only 15 percent of total employment. Most of the 46 cyclic crudes manufacturing plants employed fewer than 100 workers; no plant employed over 250. Of the 258 plants producing miscellaneous organic chemicals, 9 with a total of over 2,500 employees had almost half of total employment.

## Injury and Turn-Over Rates Low

The nature of the products made working conditions relativaly hazardous in the early stages of the industry's development. In recent years, however, most of the hazards of industrial chemical manufacturing have been eliminated and injury rates are now generally lower than the avarage for allmanufacturing industries. (See table 2).

Table 2.- Worker Injury Rates, Industrial Organic
Chemicals and All Manufacturing
1945-50

| Year | Al1 <br> manufacturing |  | Plastics materials |  | Synthetic rubber |  | Synthetic fibers |  | Explosives |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Fre- } \\ \text { quency } \end{gathered}$ | Sevar= ity | $\begin{array}{r} \text { Fre- } \\ \text { quency } \end{array}$ | Severity | $\begin{gathered} \text { Fre- } \\ \text { quency } \end{gathered}$ | Severity | $\begin{gathered} \text { Fre- } \\ \text { quency } \end{gathered}$ | $\begin{gathered} \text { Sever- } \\ \text { ity } \end{gathered}$ | $\begin{gathered} \text { Fre- } \\ \text { quency } \end{gathered}$ | $\begin{gathered} \text { Sever- } \\ \text { ity } \\ \hline \end{gathered}$ |
|  | 1 | 2 |  |  |  |  |  |  |  |  |
| 1945- - - | 18.6 | 1.6 | 9.5 | 6.5 | 6.6 | . 2 | 8.9 | 1.3 | 3.6 | 2.1 |
| 1946 - - - | 19.9 | 1.6 | 9.9 | 9.9 | 1.9 | . 01 | 6.8 | 1.0 | 5.7 | 3.0 |
| 1947 - - - | 18.8 | 1.4 | 7.2 | 1.7 | 1.9 | . 8 | 5.8 | . 8 | 5.3 | 3.5 |
| 1948 - | 17.2 | 1.5 | 6.4 | 2.6 | 1.7 | . 1 | 5.4 | 1.2 | 4.3 | 3.7 |
| 1949 - - - | 14.5 | 1.4 | 4.8 | . 9 | 2.3 | . 4 | 3.0 | $\bigcirc$ | 1.8 | -9 |
| 19,50-- - | 14.7 | 1.2 | 7.0 | 1.9 | 3.4 | 3 | 2.1 | 3 | 3.8 | $3 /$ |

1 The injury-frequency rate is the average number of disabling work injuries for each million employee-hours worked.
2/ The severity rate is the average number of days lost because of disabling work inJuries, per 1,000 employee-hours worked.
3 Information not available.
Source: Branch of Industrial Hazards, Bureau of Labor Statistics.

Fmployment is relatively steady in this industry. The turn-over rates, both separations and accessions, have been consistently lower than the rates in all-manufacturing. (See table 3).

Table 3.- Labor Turn-Over Rates, Industrial Organic Chemicals and All Manufacturing 1/ 1950-52

| Year | Industrial organic chemicals |  | All manufacturing |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Separation rate | Accession rate | Separation rate | Accession rate |
| 1950: Jan. - - - | 1.2 | 1.7 | 3.1 | 3.6 |
| Apr. - - - | 1.0 | 1.8 | 2.8 | 3.5 |
| July - - - | 1.0 | 2.3 | 2.9 | 4.7 |
| Oot. - - - | 1.9 | 2.5 | 4.3 | 5.2 |
| 1951: Jan. - - - | 1.7 | 2.7 | 4.1 | 5.2 |
| Apr. - - - | 1.7 | 2.3 | 4.6 | 4.5 |
| July - - - - | 1.6 | 2.2 | 4.4 | 4.2 |
| Oct. - - - - | 2.7 | 1.6 | 4.7 | 404 |
| 1952: Jan. 2/ - - | 2.7 | 1.7 | 4.0 | 4.5 |

1 Rates per 100 employees
2/ Preliminary

## Earnings Above Average

Average earnings, both hourly and weekly, are higher in organic chemicals than the general average for manufacturing industries. (See table 4). However, in synthetic fiber manufacturing, wages are slightly lower than the all-manufacturing average. There is considerable variation among the industries classified as making industrial organic chemicals. Hourly earnings in synthetic fibers manufacture were less than the average in industrial organic chemicals, whereas earnings in the manufacture of synthetic rubber were higher.

The workweek in this industry is about the same as in all-manufacturing, avaraging 41.0 hours during 1951 as compared with 40.8 in allmanufacturing.

Table 40- Average Hours and Gross Earnings of Production Workers in Industrial Organic Chemicals and All-Manufacturing Industries, 1947-52

| Year | Industrial organic chemicals |  |  |  | All-manufacturing |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Average weekly } \\ \text { hours } \end{gathered}$ |  | Average earnings |  | $\begin{gathered} \text { Average weekly } \\ \text { hours } \end{gathered}$ | Average earnings |  |
|  |  |  | Hourly | Weekly |  | Hourly | WeekIy |
| 1947-- |  | 40.3 | \$1.310 | \$52.79 | 40.4 | \$1.237 | \$49.97 |
| 1948 - - |  | 40.4 | 1.428 | 57.69 | 40.1 | 1.350 | 54.14 |
| 1949-- |  | 39.5 | 1.540 | 60.83 | 39.2 | 1.401 | 54.92 |
| 1950-- |  | 40.6 | 1.618 | 65.69 | 40.5 | 1.465 | 59.33 |
| 1951 1/ |  | 41.0 | 1.752 | 71.83 | 40.8 | 1.594 | 64.92 |
| 1952: Jan. | $1 /$ | 40.2 | 1.783 | 71.68 | 40.9 | 1.640 | 67.08 |

## 1/ Preliminary

## Industry Outiook Bright

Before 1914, the dye manufacturers, which constituted almost the entire organic chemical manufacturing industry, made less than 10 percent of the dyes and intermediates needed for Amarican industry. Germany supplied most of the remainder. When these imports ceased at the outbreak of World War I, there was a frantic scramble to build an organic cheaical industry from the meager facilities available. By the end of the war, over 90 percent of our requirements were being produced in this coumtry. In the interest of national defense, Congress erected tariff barriers to protect the organic chemicals industry from foreign competition. As a result of this protection and the growing demand for organic chemicals, the industry grew steadily. Synthetic fibers made particularly large gains in production. Output of rayon increased greatly, and in the 1930's nylon was introduced and found a wide market. Plastics made serious inroads into fields previously thought to be the exclusive preserve of such materials as wood and metol. Production of many other organic chemicals rose several fold, and a host of new products were developed.

World War II brought about a tremendous expansion of the organic chemicals industry. Production and employment rose sharply in response to military needs, especially in explosives. Synthetic rubber production rose from a few thousand pounds annually to 820 thousand tons in 1945, to make up for the loss of natural rubber imports from the Far East which had been overrum by the Japanese. By the end of the war, the synthetic rubber industry was producing more rubber amually than the Nation consumed in the years before 1941. The need for clothing and equipment, particularly parachutes made of nylon, gave stimulus to the expansion of the synthetic fibers industry. As metals became scarce there was a heavy demand for plastics materials. Employment in the industry rose 160 percent between 1939 and 1943 to an all-time peak of 290,000 workers, and remained at about that level for the next 2 years. (See chart 6.)


In the postwar period, demand declined for such products as military explosives, synthetic rubber, and other items which are used primarily for war purposes, and employment dropped to about 200,000 . However, production of other chemicals, including synthetic fibers and plastics materials, continued to expand and partially offset the decline due to reductions in military requirements. There was also a pent-up demand for nylon, increased acceptance of new plastics products, renewed construction activity with its demands for industrial explosives and paints, demand for textile dyes, and many other products of this industry. Employment climbed slowiy in 1947 and 1948, declined in early 1949, and then rose steadily until Beptember 1951, when amployment reached a postwar high of 234,500 . The number of workers in January 1952 was 229,200, 22 percent higher than in January 1950, the year hostilities started in Korea. Employment is still well below the World War II peak when production of chemicals needed for military purposes was at extremaly high levels.

Employment and production probably will continue at high levels in 1952. Defense needs have been added to the growing civilian demand for the industry's products. Military preparedness calls for increased production of many organic chemicals, including explosives, industrial alcohol, synthetic rubber, plastics materials, and synthetic fibers. These materials are needed to produce military items, including camofflage material, raincoats, helmets, parachutes, tire cording, and clothing for the Armed Forces.

The industry is expected to continue its long-term growth, even if defense requirements decline. All branches of the chemical industry have invested about $\$ 6$ billion in plant and equipment since the end of World War II and plan to invest $\$ 1.2$ billion more in the next 2 years.


## Other Industries In Brief

## MOTION PICTURES

Motion picture producers and exhibitors employed 241,000 workers in January 1952, four-fifths of whom worked in the theaters. Employment has remained fairly steady in the past 2 years after falling 20,000 between 1947 and 1950. During that period, there was a 40 perm cent drop in theater attendance owing in part to the rapid growth of the television audience. However, attendance at theaters remained constant in 1950 and 1951 while the number of television sets increased by nearly 12 million.

This year, employment in the industry will probably continue at about the same level as in 1951. Few new television stations will be erected this year, and in areas which now have television stations a high proportion of the families already own sets.

## METAL STAMPINGS

Emplosment in the production of stamped metal goods for civilian use has been declining steadily since spring of 1951, because the defense program has required a constantly increasing amount of available metal supplies. The metal stampings industry employed 106,900 production workers in January 1952, 11 percent below January 1951.

This industry's decline in employment reflects the limitations on the amount of metal available for the production of kitchen and household utensils and many other stamped metal parts used in the manufacture of consumer durable goods during the latter part of 1951.

## CUTTING TOOLS, JIGS AND FIXTURES

Substantial employment gains have been recorded by producers of cutting tools, jigs, and fixtures, during the past 2 years. In

January 1952, 95,800 production workers were employed in this industry, 17 percent above the level of January 1951 and 52 percent above June 1950 when Korean hostilities began.

Although production of these machine tool accessories has been cut back for the automobile and other consumer durable goods industries, heavy purchasing by defense-connected industries has kept tool and die shops operating at near-capacity levels. Extensive overtime work has been scheduled in order to keep pace with the rise in new orders and to prevent bottlenecks in production schedules. This industry's January 1952 workweek of 47.4 hours was 1.6 hours longer than that of January 1951 and was one of the highest recorded in January among all-manufacturing industries.

Further moderate increases in employment in cutting tools, jigs, and fixture plants are expected during the first half of 1952 as defense industrjes continue to move ahead in tooling-up for larger scale output.


Industry Data
Table I: Employees in Nonagricultural Establishments
By Industry Division
(In thousands)

| Year and month | Total | Mining | Contract construction | Manufacturing | ```Transporta- tion and pubilc utilities``` | Trade | Finance | Service | Government |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Annual average: |  |  |  |  |  |  |  |  |  |
| 1939. | 30,287 | 845 | 1. 150 | 10.078 | 2,912 | 0, 012 | 1,382 | 3.321 | 3,987 |
| 1940.. | 32,031 | 918 | 1,294 | 10.780 | 3.013 | 0,940 | 1.418 | 3.477 | 4,192 |
| 1941.. | 36,164 | 947 | 1,790 | 12,974 | 3,248 | 7.416 | 1,462 | 3,705 | 4,622 |
| 1942. . | 39,697 | 983 | 2,170 | 15, 051 | 3,433 | 7.333 | 1,440 | 3,857 | 5.431 |
| 1943.. | 42,042 | 917 | 1,587 | 17,381 | 3,618 | 7.189 | 1,401 | 3,919 | 0.049 |
| 1944.. | 41,480 | 883 | 1.094 | 17.111 | 3,798 | 7,280 | 1,374 | 3.934 | 6,026 |
| 1945.. | 40,069 | 826 | 1. 132 | 15.302 | 3.872 | 7.522 | 1,394 | 4.055 | 5,887 |
| 1946.. | 41,412 | 852 | 1,661 | 14,461 | 4.023 | 8. 602 | 1,586 | 4,621 | 5,607 |
| 1947.. | 43,371 | 843 | 1.982 | 15.247 | 4.122 | 9,196 | 1.841 | 4.786 | 5.454 |
| 1948. . | 44,201 | 982 | 2,185 | 15,286 | 4.151 | 9,491 | 1.716 | 4,799 | 5,613 |
| 1949.. | 43,006 | 932 | 2,156 | 14,146 | 3,977 | 9,438 | 1,783 | 4,782 | 5,811 |
| 1950.. | 44,124 | 804 | 2,318 | 14,884 | 4,010 | 9,524 | 1,812 | 4,781 | 5,810 |
| $\frac{1950}{\text { Nov. }}$ | 45,873 | 938 | 2,571 | 15.765 | 4.123 | 9.896 | 1,820 | 4.723 | 6,037 |
| Dec... | 46.595 | 937 | 2.403 | 15.789 | 4,125 | 10,443 | 1,828 | 4,694 | 6,376 |
| $\underline{1921}$ |  |  |  |  |  |  |  |  |  |
| Jan.. | 45,246 | 932 | 2,281 | 25.784 | 4.072 | 9.592 | 1,831 | 4,666 | 6,088 |
| Feb.. | 45,390 | 930 | 2,228 | 15,978 | 4,082 | 9.554 | 1,839 | 4,657 | 6,122 |
| Mar.. | 45.850 | 924 | 2,326 | 16,022 | 4.112 | 9.713 | 1,854 | 4,682 | 6,217 |
| Apr.. | 45,998 | 911 | 2,471 | 15.955 | 4,132 | 9.627 | 1,865 | 4,745 | 6,292 |
| May.. | 46,226 | 915 | 2,598 | 15.853 | 4.137 | 9.683 | 1,874 | 4.789 | 6,377 |
| June. | 46,567 | 927 | 2,686 | 15,956 | 4.161 | 9.732 | 1,893 | 4,835 | 6,377 |
| July. | 46,432 | 906 | 2,754 | 15,813 | 4.176 | 9,667 | 1,908 | 4,852 | 6,356 |
| Aug.. | 46,724 | 922 | 2,809 | 16,008 | 4,190 | 9,641 | 1,914 | 4,839 | 6,401 |
| Sept. | 46,956 | 917 | 2,768 | 16,039 | 4,178 | 9.781 | 1,898 | 4,831 | 6,544 |
| oct.. | 46,902 | 917 | 2,761 | 15,965 | 4,166 | 9,893 | 1,898 | 4.770 | 6,532 |
| Nov.. | 46,852 | 917 | 2,633 | 15,890 | 4,165 | 10,109 | 1.907 | 4.734 | 6,497 |
| Dec.. | 47.592 | 915 | 2.524 | 15,912 | 4,151 | 10,646 | 1,911 | 4.702 | 6,831 |
| $\frac{1952}{\operatorname{Jan} .}$ | 45.903 | 909 | 2.316 | 15,776 | 4,109 | 9.706 | 1.906 | 4,672 | 6,509 |

See Explanatory Notes and Glossary for definitions.

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Table 2: Employees in Nonagricultural Establishments

## By Industry Division and Group

(In thousands)

| Industry division and group | 1952 | 1951 |  |  | 1950 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jan. | Dec. | Hov. | Jan. | Dec. |
| TOTAL... | 45,903 | 47,592 | 46,852 | 45,246 | 46,595 |
| mining. | 909 | 915 | 917 | 932 | 937 |
| Metal mininǵ | 106.5 | 106.2 | 105.4 | 105.2 | 104.4 |
| Anthracite. | 67.0 | 67.1 | 67.1 | 72.7 | 73.0 |
| Bituminous-coal. | 367.7 | 368.6 | 367.9 | 402.8 | 404.8 |
| Crude petroleum and natural gas production. | 267.6 | 268.5 | 269.2 | 253.3 | 256.7 |
| Nonmetallic mining and quarrying............ | 99.8 | 104.8 | 107.3 | 98.0 | 98.3 |
| COntract construction. | 2,316 | 2,524 | 2,633 | 2,281 | 2,403 |
| nonbuilding construction. | 393 | 454 | 495 | 383 | 428 |
| Highway and street.. | 141.5 | 180.1 | 207.3 | 141.1 | 164.0 |
| Other nonbuilding construction. | 251.3 | 273.6 | 288.1 | 242.1 | 263.8 |
| building construction. | 1,923 | 2,070 | 2,138 | 1,898 | 1,975 |
| gemeral contractors. | 770 | 848 | 887 | 798 | 839 |
| special-trade contractors. | 1,153 | 1,222 | 1,251 | 1,100 | 1,136 |
| Plumbing and heating. | 294.8 | 307.3 | 313.6 | 287.4 | 290.4 |
| Painting and decorating. | 146.6 | 167.9 | 175.5 | 123.0 | 132.8 |
| Electrical work. | 158.0 | 159.8 | 156.9 | 138.7 | 140.0 |
| Other special-trade contractors | 553.2 | 587.2 | 604.8 | 550.4 | 572.4 |
| manufacturing. | 15,776 | 15,912 | 15,890 | 15,784 | 15,789 |
| durable goods. | 8,946 | 8,999 | 8,976 | 8,742 | 8,717 |
| mondurable goods. | 6,830 | 6,913 | 6,914 | 7,042 | 7,072 |
| transportation and public utilities. | 4,109 | 4,151 | 4,165 | 4,072 | 4,125 |
| Transportation. | 2,858 | 2,897 | 2,912 | 2,858 | 2,908 |
| Interstate railroads | 1,397 | 1,416 | 1,428 | 1,428 | 1,460 |
| Class I railroads. | 1,222 | 1,243 | 1,258 | 1,253 | 1,277 |
| Local rallways and bus lines | 141 | 141 | 141 | 145 | 145 |
| Trucking and warehousing.... | 639 | 650 | 649 | 616 | 622 |
| Other transportation and services.......... | 681 | 690 | 694 | 669 | 681 |
| Air transportation (common carrier)....... | 86.1 | 85.6 | 84.7 | 75.1 | 74.6 |
| Communication. | 701 | 702 | 701 | 668 | 670 |
| Telephone. | 653.0 | 654.2 | 652.8 | 618.4 | 620.3 |
|  | 47.2 | 47.3 | 46.8 | 48.3 | 48.6 |

See Explanatory Notes and Glossary for definitions.

Table 2: Employees in Nonagricultural Establishments By Industry Division and Group - Continued
(In thousands)

| Industry division and group | 1952 | 1951 |  |  | 1950 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jan. | Dec. | Nov. | Jan. | Dec. |
| transportation and public utilities (Continued) |  |  |  |  |  |
| Other public utilities. | 550 | 552 | 552 | 546 | 547 |
| Gas and electric utilities. | 525.4 | 527.2 | 527.6 | 521.0 | 522.2 |
| Electric ilight and power utilities........ | 233.9 | 234.3 | 234.9 | 232.0 | 232.5 |
| Gas utilities.................................. | 117.6 | 118.6 | 118.6 | 116.4 | 117.2 |
| Electric light and gas utilities combined. | 173.9 | 174.3 | 174.1 | 172.6 | 172.5 |
| Local utilities, not elsewhere <br> classified.......................................... | 24.6 | 24.6 | 24.5 | 24.8 | 24.6 |
| TRADE. | 9,706 | 10,646 | 10,109 | 9,592 | 10,443 |
| Wholesale trade. | 2,627 | 2,658 | 2,657 | 2,587 | 2,616 |
| Retail trade. | 7,079 | 7,988 | 7,452 | 7,005 | 7,827 |
| General merchandise stores | 1,474 | 2,089 | 1,701 | 1,459 | $2,052$ |
| Food and liquor stores.... | 1,266 | 1,312 | 1,295 | 1,244 | 1, 264 |
| Automotive and accessories dealers | 751 | 768 | 759 | 743 | 753 |
| Apparel and accessories stores..... | 533 | 652 | 580 | 523 | 642 |
| Other retail trade............... | 3,055 | 3,167 | 3,117 | 3,036 | 3,116 |
| FINANCE. . | 1,906 | 1,911 | 1,907 | 1,831 | 1,828 |
| Banks and trust companies.................... |  |  |  |  |  |
| Security dealers and exchanges............... | $63.8$ | $64.1$ | $64.1$ | $62.0$ | $61.3$ |
| Insurance carriers and agents.................. | 681 | 689 | 689 | 653 | 655 |
| Other finance agencies and real estate...... | 689 | 686 | 684 | 675 | 673 |
| SERVICE. | 4,672 | 4,702 | 4,734 | 4,666 | 4,694 |
| Hotels and lodging places................... | 424 | 426 | 430 | 429 | 430 |
| Laundries. | 356.4 | 355.8 | 356.6 | 353.6 | 353.3 |
| Cleaning and dyeing plants................... | 154.5 | 154.8 | 157.4 | 145.8 | 146.8 |
| Motion pictures. | 241 | 241 | 242 | 242 | 242 |
| GOVERMMENT. | 6,509 | 6,831 | 6,497 | 6,088 | 6,376 |
| Federal 1/....................................... | 2,331 | 2,677 | 2,325 | 2,027 | 2,333 |
| State and local................................ | 4,178 | 4,154 | 4,172 | 4,061 | 4,043 |

1/ Fourth class postmasters are excluded her but are included in Table 7.

Table 3: All Employees and Production Workers in Mining and Manufacturing Industries
(In thousands)

| Industry group and industry | All employees |  |  |  | Production workers |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Jan. } \\ & 1952 \end{aligned}$ | $\begin{aligned} & \text { Dec. } \\ & 1951 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Mov. } \\ & 1951 \\ & \hline \end{aligned}$ | Jan. $1951$ | $\begin{aligned} & \text { Jan. } \\ & 1952 \end{aligned}$ | $\begin{aligned} & \text { Dec. } \\ & 1951 \end{aligned}$ | $\begin{aligned} & \text { Hov. } \\ & 1951 \end{aligned}$ | $\begin{aligned} & \text { Jan. } \\ & 1951 \end{aligned}$ |
| MINING. | 909 | 915 | 917 | 932 | -- | -- | -- | -- |
| metal mining. | 106.5 | 106.2 | 105.4 | 105.2 | 93.9 | 93.5 | 92.9 | 93.2 |
| Iron mining. | 37.1 | 37.6 | 37.7 | 36.2 | 33.2 | 33.7 | 33.8 | 32.6 |
| Copper mining. | 28.8 | 28.7 | 28.4 | 29.3 | 25.0 | 25.0 | 24.8 | 25.7 |
| Lead and zinc mining | 22.0 | 21.8 | 21.4 | 21.4 | 19.3 | 19.0 | 18.7 | 18.7 |
| anthracite. | 67.0 | 67.1 | 67.1 | 72.7 | 63.0 | 63.1 | 63.1 | 68.4 |
| BITUMINOUS-COAL | 367.7 | 368.6 | 367.9 | 402.8 | 343.6 | 344.7 | 344.7 | 377.4 |
| crude petroleum and natural gas PRODUCTION. | 267.6 | 268.5 | 269.2 | 253.3 | -- | -- | -- | -- |
| Petroleum and natural gas production (except contract services)......... | -- | -- | -- | -- | 126.4 | 127.2 | 127.8 | 122.7 |
| nommetallic mining and quarrying. | 99.8 | 104.8 | 107.3 | 98.0 | 86.5 | 91.6 | 93.9 | 85.2 |
| MANUFACTURING. | 15,776 | 15,912 | 15,890 | 15,784 | 12,775 | 12,911 | 12,904 | 13,018 |
| durable goods. | 8,946 | 8,999 | 8,976 | 8,742 | 7,269 | 7,325 | 7,314 | 7,256 |
| nondurable goods | 6,830 | 6,913 | 6,914 | 7,042 | 5,506 | 5,586 | 5,590 | 5,762 |
| ORDNANCE AND ACCESSORIES. | 68.5 | 65.7 | 63.4 | 30.8 | 53.5 | 51.7 | 50.1 | 25.0 |
| FOOD AND KINDRED PRODUCTS. | 1,452 | 1,508 | 1,547 | 1,499 | 1,068 | 1,123 | 1,160 | 1,120 |
| Meat products. | 310.2 | 314.7 | 309.8 | 312.8 | 245.7 | 251.4 | 246.3 | 250.8 |
| Dairy products. | 132.9 | 136.3 | 139.3 | 134.4 | 93.0 | 96.1 | 98.5 | 94.6 |
| Canning and preserving | 133.2 | 147.7 | 170.6 | 157.0 | 108.1 | 122.7 | 145.2 | 131.6 |
| Grain-mill products | 130.7 | 130.6 | 130.1 | 127.5 | 96.9 | 97.2 | 97.2 | 95.4 |
| Bakery products.................... | 284.7 | 287.4 | 288.6 | 286.3 | 187.3 | 190.6 | 192.2 | 187.8 |
| Sugar................................ . | 28.2 | 41.3 | 51.7 | 31.8 | 23.6 | 36.2 | 45.6 | 27.0 |
| Confectionery and related products. | 98.7 | 101.7 | 104.5 | 100.6 | 83.8 | 84.6 | 87.5 | 83.8 |
| Beverages.......................... | 204.2 | 215.3 | 216.2 | 212.2 | 136.2 | 146.4 | 146.8 | 146.8 |
| Miscellaneous food products. | 128.7 | 132.9 | 136.1 | 136.1 | 93.8 | 97.8 | 101.1 | 101.7 |
| tobacco manufactures. | 89 | 91 | 93 | 88 | 82 | 84 | 85 | 80 |
| Cigarettes. | 26.6 | 26.9 | 26.9 | 25.9 | 24.1 | 24.3 | 24.4 | 23.3 |
| Cigars.... | 40.9 | 41.7 | 42.3 | 41.2 | 38.7 | 39.6 | 40.1 | 39.0 |
| Tobacco and snuff. | 12.0 | 11.8 | 11.9 | 12.0 | 10.3 | 10.2 | 10.3 | 10.6 |
| Tobacoo stemming and redrying | 9.3 | 10.8 | 11.5 | 8.5 | 8.4 | 9.9 | 10.5 | 7.4 |
| textile-mill products. | 1,229 | 1,239 | 1,227 | 1,352 | 1,133 | 1,142 | 1,132 | 1,257 |
| Yarn and thread mills. | 161.5 | 161.3 | 160.3 | 172.0 | 150.2 | 150.3 | 149.4 | 161.5 |
| Broad-woven fabric mills | 570.5 | 579.7 | 575.2 | 633.0 | 540.3 | 547.3 | 544.2 | 602.0 |
| Knitting mills...... | 229.8 | 231.6 | 229.0 | 252.0 | 209.1 | 211.4 | 209.1 | 232.1 |
| Dyeing and finishing textiles....... | 87.9 | 87.9 | 86.4 | 93.5 | 78.1 | 78.2 | 76.5 | 83.3 |
| Carpets, rugs, other floor coverings. | 51.0 | 50.4 | 49.4 | 62.2 | 43.2 | 42.6 | 41.6 | 54.5 |
| Other textile-mill products......... | 128.5 | 128.5 | 127.0 | 138.9 | 112.3 | 112.3 | 111.3 | 123.7 |

See Explanatory Notes and Glossary for definitions.

Table 3: All Employees and Production Workers in Mining and Manufacturing Industries - Continued
(In thousands)

| Industry group and industry | All employees |  |  |  | Production workers |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{r} \text { Jan. } \\ 1952 \\ \hline \end{array}$ | Dec. $1951$ | Hov. $1951$ | Jan. $1951$ | Jan. $1952$ | $\begin{gathered} \text { Dec. } \\ 1951 \\ \hline \end{gathered}$ | Nov. $1951$ | Jan. <br> 1951 |
| apparel and other finished textile PRODUCTS. | 1,144 | 1,152 | 1,128 | 1,190 | 1,026 | 1,033 | 1,008 | 1,070 |
| Men's and boys' suits and coats..... | 138.2 | 134.8 | 131.0 | 152.7 | 124.6 | 120.9 | 117.1 | 138.4 |
| Men's and boys' furnishings and work clothing. | 249.6 | 255.3 | 251.6 | 269.6 | 230.4 | 237.0 | 232.7 | 251.0 |
| Women's outerwear................. | 332.9 | 329.2 | 314.1 | 338.1 | 298.6 | 294.3 | 278.6 | 303.3 |
| Women's, children's under garments.. | 98.3 | 100.4 | 100.3 | 103.6 | 88.2 | 90.3 | 90.3 | 93.1 |
| Millinery........................... | 23.0 | 20.8 | 19.1 | 24.3 | 20.6 | 18.4 | 16.7 | 21.7 |
| Children's outerwear. | 64.7 | 63.7 | 64.7 | 67.3 | 59.4 | 58.1 | 59.2 | 61.8 |
| Fur goods and miscellaneous apparel.. | 90.7 | 99.7 | 101.5 | 88.7 | 79.9 | 88.5 | 90.3 | 76.9 |
| Other fabricated textile products... | 146.1 | 147.9 | 145.6 | 146.0 | 123.8 | 125.8 | 123.3 | 124.0 |
| Lumber and wood products (EXCEPT FURNITURE) | 722 | 762 | 783 | 804 | 657 | 695 | 719 | 739 |
| Logking camps and contractors. | 57.3 | 70.3 | 74.9 | 69.5 | 53.4 | 65.7 | 70.7 | 64.9 |
| Sawnills and planing mills... | 421.8 | 444.5 | 460.7 | 460.8 | 388.5 | 410.7 | 428.0 | 429.4 |
| Millwork, plywood, and prefabricated structural wood products............. | 106.4 | 108.8 | 110.8 | 126.2 | 90.8 | 93.1 | 95.3 | 110.3 |
| Wooden containers.. | 76.4 | 77.9 | 76.7 | 82.8 | 70.9 | 72.2 | 70.9 | 76.9 |
| Miscellaneous wood product | 59.8 | 60.0 | 60.2 | 64.2 | 53.5 | 53.7 | 54.0 | 57.9 |
| FURNITURE AND FIXTURES. | 341 | 342 | 342 | 370 | 293 | 294 | 294 | 323. |
| Household furniture | 235.3 | 235.1 | 235.1 | 262.9 | 206.8 | 206.2 | 206.4 | 233.7 |
| Other furniture and fixtur | 106.0 | 107.0 | 106.8 | 106.8 | 86.3 | 87.4 | 87.3 | 87.6 |
| PAPER AND ALLIED PRODUCTS. | 480 | 484 | 486 | 496 | 404 | 409 | 411 | 423 |
| Pulp, paper, and paperboard mills... | 245.4 | 245.6 | 246.1 | 242.4 | 210.8 | 212.2 | 211.9 | 209.2 |
| Paperboard containers and boxes. | 126.1 | 129.2 | 130.5 | 139.5 | 105.1 | 108.3 | 109.9 | 119.6 |
| Other paper and allied products. | 108.1 | 109.0 | 109.4 | 114.3 | 87.7 | 88.7 | 89.0 | 94.5 |
| PRINTING, PUBLISHING, AND ALLIED industries. | 768 | 773 | 773 | 758 | 514 | 519 | 519 | 510 |
| Newspapers. | 300.7 | 303.4 | 302.5 | 295.5 | 151.3 | 155.0 | 153.7 | 148.9 |
| Periodicals | 54.9 | 55.8 | 55.4 | 53.0 | 35.0 | 35.3 | 35.1 | 34.6 |
| Books. | 51.5 | 51.4 | 51.2 | 48.1 | 36.8 | 36.5 | 36.5 | 35.8 |
| Commercial printin | 207.1 | 206.9 | 207.1 | 207.3 | 170.2 | 170.0 | 169.6 | 170.0 |
| Lithographing. . | 40.5 | 41.2 | 41.9 | 40.8 | 31.3 | 32.1 | 32.6 | 31.7 |
| Other printing and publishing. | 113.5 | 114.4 | 115.2 | 113.2 | 89.2 | 90.4 | 91.0 | 88.6 |
| CHEMICALS AND ALLIED PRODUCTS. | 757 | 759 | 762 | 729 | 536 | 538 | 542 | 526 |
| Industrial inorganic chemicals. | 83.2 | 84.1 | 84.0 | 78.5 | 60.6 | 61.7 | 61.7 | 57.3 |
| Industrial organic chemicals. | 229.2 | 231.2 | 233.0 | 214.5 | 169.6 | 171.1 | 172.9 | 162.8 |
| Drugs and medicines.... | 108.2 | 108.7 | 108.3 | 101.1 | 70.1 | 70.8 | 70.4 | 66.9 |
| Paints, pigments, and fillers. | 74.4 | 74.1 | 74.4 | 73.1 | 47.9 | 47.9 | 47.9 | 47.5 |
| Fertilizers....... | 35.0 | 32.4 | 31.8 | 37.5 | 27.9 | 25.4 | 24.8 | 30.9 |
| Vegetable and animal oils and fats.. | 59.3 | 61.7 | 63.3 | 57.6 | 46.4 | 48.6 | 50.5 | 45.5 |
| Other chemicals and allied products. | 167.4 | 166.7 | 167.6 | 166.3 | 113.0 | 112.5 | 113.5 | 115.3 |

Industry Data
Table 3: All Employees and Production Workers in Mining and Manufacturing Industries - Continued
(In thousande)

| Industry group and industry | All employees |  |  |  | Production workers |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jan. $1952$ | $\begin{aligned} & \text { Dec. } \\ & 1951 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Nov. } \\ & 1951 \end{aligned}$ | Jan. $1951$ | Jan. $1952$ | Doc. $1951$ | $\begin{aligned} & \text { Kov. } \\ & 1951 \\ & \hline \end{aligned}$ | Jan. $1951$ |
| PRODUCTS OF PETROLEUM AND COAL | 266 | 269 | 269 | 254 | 193 | 196 | 197 | 190 |
| Petroleum refining | 216.4 | 218.5 | 217.0 | 202.3 | 152.6 | 154.5 | 154.1 | 147.1 |
| Coke and byproducts. | 22.0 | 22.1 | 21.3 | 21.3 | 18.7 | 18.9 | 18.2 | 18.5 |
| Other petroleum and coal produc | 27.2 | 28.5 | 30.4 | 30.1 | 21.2 | 22.4 | 24.2 | 24.3 |
| RUBBER PRODUCTS | 275 | 275 | 273 | 273 | 219 | 219 | 219 | $22 \%$ |
| Tires and inner tubes | 121.5 | 121.5 | 120.4 | 115.1 | 95.7 | 95.6 | 94.8 | 91.3 |
| Rubber footwear. | 31.0 | 31.1 | 31.2 | 30.1 | 25.4 | 25.5 | 25.6 | 24.9 |
| Other rubber products | 122.1 | 121.9 | 121.8 | 127.5 | 97.7 | 97.9 | 98.2 | 105.8 |
| LEATHER AND LEATHER PRODUCTS | 370 | 363 | 356 | 403 | 331 | 323 | 317 | 364 |
| Leather | 44.1 | 43.5 | 43.3 | 51.8 | 39.7 | 39.0 | 38.7 | 47.3 |
| Footwear lexcept rubber | 236.5 | 228.4 | 220.7 | 256.8 | 213.8 | 205.8 | 197.7 | 234.2 |
| Other leather products. | 89.2 | 90.6 | 92.3 | 94.5 | 77.4 | 78.6 | 80.3 | 82.8 |
| Stone, clay, and glass prooucts | 533 | 545 | 552 | 548 | 451 | 465 | 472 | 473 |
| Glass and glass products. | 138.3 | 141.8 | 143.2 | 143.8 | 119.5 | 123.2 | 124.7 | 127.5 |
| Cement, hydraulic.. | 43.0 | 43.0 | 43.2 | 42.0 | 36.6 | 36.7 | 37.0 | 35.9 |
| Structural clay products. | 87.6 | 91.8 | 93.0 | 88.2 | 78.7 | 83.2 | 84.4 | 79.8 |
| Pottery and related products........ | 54.5 | 55.4 | 56.2 | 60.4 | 48.9 | 49.9 | 50.6 | 54.7 |
| Concrete, bypsum, and plaster products | 97.5 | 100.5 | 102.1 | 97.8 | 80.8 | 84.0 | 85.6 | 83.0 |
| Other stone, clay, and glass products. | 111.6 | 112.6 | 113.8 | 115.3 | 86.5 | 87.9 | 89.4 | 91.8 |
| Primary metal industries. | 1,352 | 1,355 | 1,339 | 1,327 | 1,163 | 1,164 | 1,149 | 1,149 |
| Blast furnaces, steel works, and rolling mills. | 655.6 | 658.6 | 643.6 | 640.3 | 571.0 | 572.4 | 557.7 | 559.0 |
| Iron and steel foundries.. | 278.9 | 281.2 | 281.9 | 270.8 | 246.6 | 249.1 | 250.3 | 240.7 |
| Primary smelting and refining of nonferrous metals....................... | 56.3 | 56.3 | 56.2 | 56.9 | 47.1 | 47.0 | 47.1 | 47.2 |
| Rolling, drawing, and alloying of nonferrous metals....................... | 98.8 | 96.8 | 98.6 | 104.3 | 81.1 | 78.7 | 80.0 | 87.1 |
| Nonferrous foundries................ | 111.4 | 110.7 | 108.7 | 110.1 | 92.7 | 92.1 | 90.2 | 94.5 |
| Other primary metal industries...... | 151.3 | 151.1 | 149.8 | 144.1 | 124.2 | 124.4 | 123.3 | 120.5 |
| FABRICATED METAL PRODUCTS (EXCEPT ORDNANCE, MACHINERY, AND <br> TRAMSPORTATION EQUIPMENT)........ | 988 | 989 | 984 | 1,016 | 807 | 308 | 805 | 847 |
| Tin cans and other tinware | 44.4 | 45.9 | 45.9 | 50.7 | 38.6 | 40.1 | 40.0 | 44.2 |
| Cutlery, hand tools, and hardware... | 150.5 | 149.6 | 150.5 | 168.4 | 124.8 | 123.6 | 124.5 | 144.0 |
| Heating apparatus (except electric) and plumbers' supplies.............. | 143.3 | 147.3 | 148.7 | 158.6 | 114.0 | 118.1 | 120.0 | 129.9 |
| Fabricated structural metal products. | 240.4 | 239.7 | 235.6 | 220.4 | 186.5 | 186.0 | 183.1 | 173.2 |
| Metal stamping, coating, and engraving. | 174.9 | 171.9 | 169.1 | 187.4 | 147.3 | 144.8 | 142.2 | 161.5 |
| Other fabricated metal products | 234.9 | 234.9 | 234.3 | 230.0 | 195.5 | 195.7 | 195.2 | 193.7 |

Table 3: All Employees and Production Workers in Mining and Manufacturing Industries - Continued
(In thousande)

| Industry group and industry | All employees |  |  |  | Production workers |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Jan. } \\ & 1952 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Doc. } \\ & 1951 \end{aligned}$ | $\begin{aligned} & \text { Nov. } \\ & 1951 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Jan. } \\ & 1951 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Jan. } \\ & 1952 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Dec. } \\ & 1951 \end{aligned}$ | $\begin{aligned} & \text { Nov. } \\ & 1951 \end{aligned}$ | $\begin{aligned} & \text { Jan. } \\ & 1951 \\ & \hline \end{aligned}$ |
| MACHINERY (EXCEPT ELECTRICAL) | 1,645 | 1,640 | 1,625 | 1,528 | 1,276 | 1,270 | 1,255 | 1,192 |
| Engines and turbines | 98.9 | 98.7 | 97.9 | 83.2 | 74.2 | 73.8 | 73.0 | 63.7 |
| Agricultural machinery and tractors.. | 189.0 | 187.4 | 186.3 | 186.8 | 148.0 | 146.6 | 145.8 | 146.5 |
| Construction and mining machine | 130.0 | 128.3 | 126.2 | 114.0 | 98.7 | 97.4 | 95.5 | 84.7 |
| Metalworking machinery. | 310.4 | 309.2 | 303.5 | 268.1 | 246.5 | 245.5 | 240.7 | 211.3 |
| Special-industry machinery (except metalworking machinery)........... | 191.2 | 193.6 | 196.6 | 188.5 | 146.1 | 146.8 | 148.4 | 143.9 |
| General industry machinery. | 240.2 | 239.8 | 238.6 | 216.4 | 173.9 | 173.4 | 172.5 | 157.7 |
| Office and store machines and devices | 107.2 | 107.9 | 108.0 | 100.0 | 89.7 | 90.6 | 90.9 | 84.2 |
| Service-industry and household machines | 167.2 | 164.7 | 159.4 | 181.7 | 130.1 | 127.3 | 121.4 | 146.8 |
| Miscellaneous machinery parts........ | 210.9 | 210.2 | 208.8 | 188.9 | 168.3 | 168.8 | 166.6 | 153.0 |
| ELECTRICAL MACHINERY. | 961 | 963 | 955 | 924 | 723 | 725 | 718 | 711 |
| Electrical generating, transmission, distribution, and industrial |  |  |  |  |  |  |  |  |
| apparatus................... | 377.6 | 375.0 | 370.8 | 349.0 | 272.2 | 270.4 | 266.2 | 255.8 |
| Electrical equipment for vehicles.... | 81.9 | 82.7 | 82.7 | 77.9 | 66.3 | 67.1 | 67.4 | 63.4 |
| Communication equipment.............. | 360.9 | 361.4 | 357.3 | 345.1 | 270.7 | 272.1 | 268.4 | 267.8 |
| Electrical appliances, lamps, and miscellaneous products............. | 141.0 | 143.8 | 144.4 | 151.8 | 114.1 | 115.6 | 115.9 | 124.0 |
| TRANSPORTATION EQUIPMENT | 1,564 | 1,559 | 1,551 | 1,425 | 1,240 | 1,239 | 1,234 | 1,175 |
| Automobiles | 779.3 | 789.7 | 794.5 | 897.6 | 639.8 | 650.7 | 654.6 | 767.3 |
| Aircraft and parts. | 565.5 | 554.4 | 539.0 | 354.2 | 414.8 | 406.2 | 395.3 | 264.2 |
| Aircraft..... | 378.3 | 372.7 | 364.0 | 236.7 | 279.6 | 274.7 | 267.8 | 177.3 |
| Aircraft engines and parts.. | 115.4 | 111.9 | 106.5 | 70.4 | 80.8 | 78.3 | 74.8 | 51.3 |
| Aircraft propellers and parts. | 12.7 | 12.4 | 12.1 | 9.3 | 9.0 | 8.7 | 8.5 | 6.2 |
| Other aircraft parts and equipment.... | 59.1 | 57.4 | 56.4 | 37.8 | 45.4 | 44.5 | 44.2 | 29.4 |
| Ship and boat building and repairing.. | 131.5 | 125.6 | 127.0 | 96.5 | 115.0 | 109.3 | 111.1 | 82.7 |
| Ship building and repairing. | 117.4 | 111.7 | 113.6 | 82.4 | 102.5 | 97.0 | 99.3 | 70.3 |
| Boat building and repairing. | 14.1 | 13.9 | 13.4 | 14.1 | 12.5 | 12.3 | 11.8 | 12.4 |
| Railroad equipment... | 76.4 | 77.8 | 78.3 | 66.3 | 61.1 | 62.7 | 63.1 | 52.1 |
| Other transportation equipment. | 11.2 | 11.8 | 11.7 | 12.3 | 9.3 | 9.9 | 9.8 | 10.4 |
| instruments and related products | 316 | 315 | 313 | 280 | 231 | 232 | 230 | 211 |
| Ophthalmic goods. | 27.7 | 28.0 | 27.7 | 27.2 | 22.4 | 22.7 | 22.5 | 22.2 |
| Photographic apparat | 63.7 | 63.3 | 62.7 | 55.6 | 44.6 | 44.7 | 44.4 | 40.9 |
| Matches and clocks. | 35.7 | 35.7 | 35.5 | 33.3 | 30.2 | 30.2 | 30.0 | 28.3 |
| Professional and scientific instruments. | 188.4 | 187.7 | 186.9 | 164.1 | 134.2 | 134.0 | 133.2 | 119.6 |
| MISCELLANEOUS MANUFACTURING industries. | 455 | 463 | 469 | 489 | 374 | 381 | 388 | 113 |
| Jewelry, silverware, and plated ware. | 45.5 | 46.5 | 47.2 | 57.3 | 36.8 | 37.8 | 38.3 | 46.9 |
| Toys and sporting goods.. | 63.8 | 66.0 | 70.5 | 71.5 | 54.1 | 56.2 | 60.8 | 62.3 |
| Costume jewelry, buttons, notions.... | 52.1 | 52.8 | 53.7 | 62.0 | 43.2 | 43.6 | 44.5 | 52.8 |
| Other miscellaneous manufacturing industries. $\qquad$ | 293.4 | 297.7 | 297.9 | 298.3 | 239.4 | 243.8 | 244.6 | 250.6 |

Table 4: Production Workers in Selected Manufacturing Industries
(In thousands)

| Industry | 1952 | 1951 |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Jan. | Dec. | Nov. | Jan. |
| FOOD AND KINDKED PRODUCTS: |  |  |  |  |
| Meat packing, wholesale | 174.2 | 176.7 | 170.9 | 176.6 |
| Frepared meats. | 34.0 | 34.4 | 34.0 | 34.8 |
| Concentrated milk. | 11.2 | 11.4 | 11.8 | 11.6 |
| Ice cream and ice | 17.3 | 17.6 | 18.0 | 17.2 |
| Fiour and meal. | 27.9 | 28.1 | 28.1 | 27.6 |
| Cane-sugar refining. | 13.2 | 13.5 | 13.8 | 14.0 |
| Beet sugar.. | 5.9 | 15.0 | 21.8 | 7.7 |
| Confectionery products | 64.6 | 65.0 | 67.0 | 64.5 |
| Malt liquors... | 58.1 | 60.3 | 60.7 | 57.6 |
| Distilled liquors, except brandy. | 16.9 | 22.2 | 21.8 | 25.1 |
| TEXTILE-MILL PROOUCIS: |  |  |  |  |
| Yarn mills, wool (except carpet), cotton and silk systems.............................. | 103.5 | 103.7 | 103.6 | 113.5 |
| Cotton and rayon broad-woven fabrics | 392.6 | 394.5 | 392.9 | 426.5 |
| Woolen and worsted fabrics. | 85.2 | 89.3 | 88.1 | 105.8 |
| Full-fashioned hosiery milis | 56.8 | 56.4 | 56.6 | 67.4 |
| Seamless hosiery mills. | 51.8 | 52.3 | 51.5 | 57.2 |
| Knit underwear milis. | 30.3 | 31.3 | 30.8 | 35.6 |
| Wool carpets, rugs, and carpet ya | 29.5 | 28.9 | 27.7 | 39.2 |
| Fur-felt hats and hat bodies. | 8.4 | 8.3 | 8.1 | 9.? |
| APPAREL AND OTHER FINISHED TEXTILE PRODUCTS: | 76.3 | 78.8 | 78.9 | 84.8 |
| Work shirts........................ | 11.6 | 11.8 | 12.5 | 12.0 |
| FURNITURE AND FIXTURES: |  |  |  |  |
| Wood household furniture, except upholstered. | 105.7 | 104.9 | 104.6 | 125.7 |
| Mattresses and bedsprings..................... | 26.6 | 26.6 | 27.3 | 28.1 |
| CHEMICALS AND ALLIED PRODUCTS: |  |  |  |  |
| Plastic materials. | 21.8 | 21.8 | 22.0 | 21.7 |
| Synthetic rubber. | 7.6 | 7.5 | 7.5 | 7.0 |
| Synthetic fibers. | 50.2 | 51.9 | 53.3 | 56.2 |
| Soap and glycerin. | 18.5 | 17.8 | 18.5 | 20.2 |
| STONE, CLAY, AND GLASS PRODUCTS: |  |  |  |  |
| Pressed and blown glass, not elsewhere classified. | 33.0 | $34.4{ }^{\prime}$ | 35.1 | 36.4 |
| Brick and hollow tile | 24.6 | 27.2 | 28.1 | 27.8 |
| Sewer pipe. | 8.5 | 9.1 | 9.0 | 8.6 |

See Explanatory Notes, section G.

Table 4: Production Workers in Selected Manufacturing Industries - Continued
(In thousands)

| Industry | 1952 | 1951 |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Jan. | Dec. | Nov. | Jan. |
| PRIMARY METAL INDUSTRIES: |  |  |  |  |
| Gray-iron foundries.... | 150.5 | 152.9 | 154.3 | 161.0 |
| Malleable-iron foundrie | 27.0 | 27.6 | 28.0 | 26.8 |
| Steel foundries. | 67.3 | 66.8 | 66.3 | 55.2 |
| Primary copper, lead, and zinc | 25.9 | 25.7 | 25.9 | 26.4 |
| Primary aluminum. | 10.2 | 10.4 | 10.4 | 9.5 |
| Iron and steel forgings | 36.9 | 36.8 | 36.5 | 32.4 |
| Wire drawing. | 43.6 | 43.5 | 43.0 | 43.9 |
| FABRICATED METAL PRODUCTS (EXCEPT ORDNANCE, MACHINERY, AND TRANSPORTATION EQUIPMENT): |  |  |  |  |
| Cutlery and edge tools.......................... | 21.7 | 22.4 | 22.7 | 25.2 |
| Hand tools, not elsewhere classified, files, hand saws, and saw blades.................... | 37.1 | 37.0 | 36.7 | 38.1 |
| Hardware, not elsewhere classified.......... | 63.5 | 62.0 | 62.6 | 76.9 |
| Metal plumbing fixtures and fittings........ | 26.0 | 26.3 | 27.1 | 31.7 |
| Oil burners, heating and cooking apparatus, not elsewhere classified. | 72.0 | 75.4 | 75.8 | 78.5 |
| Structural and ornamental products.......... | 65.1 | 65.3 | 64.7 | 61.9 |
| Boiler shop products............. | 61.8 | 61.2 | 60.6 | 54.4 |
| Metal stampings................................. | 106.9 | 104.8 | 103.1 | 120.1 |
|  |  |  |  |  |
| Tractors.................... | 71.5 | 70.8 | 70.2 | 70.1 |
| Farm machinery, except tractors | 73.0 | 72.3 | 72.1 | $73.2$ |
| Machine tools......... | 65.2 | 65.0 | 62.7 | 53.4 |
| Metalworking machinery, not elsewhere classified. $\qquad$ | 44.1 | 44.0 | 43.8 | 41.2 |
| Cutting tools, jiss, fixtures, etc... | 95.8 | 95.2 | 94.4 | 81.9 |
| Computing and related machines... | 42.6 | 42.6 | 42.4 | 39.4 |
| Typewriters...................... | 21.5 | 22.4 | 22.5 | 20.7 103.4 |
| Refrigeration machinery | 88.9 | 86.7 | 81.7 | 103.4 |
| Ball and roller bearing | 50.2 | 50.5 | 50.2 | 44.4 |
| Machine shops.......... | 48.1 | 48.1 | 47.4 | 43.1 |
| ELECTRICAL MACHINERY: <br> Radios and related | 169.7 | 170.9 | 168.1 | 180.5 |
| Telephone and telegraph equipment and communication equipnent, not elsewhere classified. $\qquad$ | 45.8 | 46.1 | 45.8 | 37.0 |
| TRANSPORTATION EQUIPMENT: |  |  |  |  |
| Locomotives and parts.......................... | 26.2 36.0 | 37.1 | 26.9 37.5 | 29.4 |
| miscellanecus manufacturing industries: <br> Silverware and plated ware............ | 13.7 | 14.1 | 14.4 | 17.8 |

## Employment and Payrolls

Table 5: Indexes of Production Worker Employment and Weekly Payrolls in Manufacturing Industries
(1947-194c Average $=100)$.

| Period | Production-worker employment index 1/ | $\begin{aligned} & \text { Productiol،-worker } \\ & \text { pay-roll index } 2 / \end{aligned}$ |
| :---: | :---: | :---: |
| Annual average: |  |  |
| 1939.................... | 66.2 | 29.9 |
| 1940..................... | 71.2 | 34.0 |
| 1941.. | 87.9 | 49.3 |
| 1942................. | 103.9 | 72.2 |
| 1943. | 121.4 | 99.0 |
| 1944........ | 118.1 | 202.8 |
| 1945.................. | 104.0 | 87.8 |
| 1946..................... | 97.9 | 81.2 |
| 1947........ | 103.4 | 97.7 |
| 1948. .................. | 102.8 | 105.1 |
| 1949..................... | 93.8 | 97.2 |
| 1950. . . . . . . . . . . . . . . . | 99.2 | 111.2 |
| 1950 |  |  |
| November...................... | 105.5 | 124.0 |
| December...................... | 105.6 | 127.4 |
| 1951 |  |  |
| January........................ | 105.2 | 126.8 |
| February...................... | 106.6 | 128.5 |
| March........................ | 106.6 | 130.0 |
| April......................... | 106.0 | 129.5 |
| Мяу............................ | 105.0 | 128.1 |
| June.......................... | 105.6 | 129.8 |
| July.......................... | 104.2 | 126.4 |
| August........................ | 105.7 | 128.4 |
| September.................... | 105.8 | 130.9 |
| october...................... | 105.1 | 129.8 |
| November...................... | 104.3 | 129.8 |
| December..................... | 104.4 | 132.9 |
| 1952 |  |  |
| јanuary...................... | 103.3 | 130.9 |

[^1]Table 6: Employees in the Shipbuilding and Repairing Industry by Region 1
(In thousande)

| Region | 1952 | 1951 |  |  | $\begin{aligned} & 1950 \\ & \hline \text { Dec. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jan. | Dec. | Nov. | Jan. |  |
| ALL REGIONS. | 248.6 | 241.6 | 243.2 | 180.4 | 167.1 |
| private. | 117.4 | 111.7 | 113.6 | 82.4 | 77.8 |
| navy................ | 131.2 | 129.9 | 129.6 | 98.0 | 89.3 |
| north atlantic. | 112.0 | 112.5 | 112.0 | 82.5 | 77.2 |
| Private. | $\begin{aligned} & 53.6 \\ & 58.4 \end{aligned}$ | $\begin{aligned} & 54.4 \\ & 58.1 \end{aligned}$ | $\begin{aligned} & 53.8 \\ & 58.2 \end{aligned}$ | 39.143.4 | 38.938.3 |
| Navy. |  |  |  |  |  |
| south atlantic. | 43.2 | 42.7 | 42.5 | 31.5 | 30.1 |
| Private. | $\begin{aligned} & 18.8 \\ & 24.4 \end{aligned}$ | $\begin{aligned} & 18.4 \\ & 24.3 \end{aligned}$ | $\begin{aligned} & 18.2 \\ & 24.3 \end{aligned}$ | $\begin{aligned} & 11.9 \\ & 19.6 \end{aligned}$ | 11.418.7 |
| Navy....... |  |  |  |  |  |
| GULF : |  |  |  |  |  |
| Private. | 17.6 | 13.8 | 16.7 | 12.8 | 11.5 |
| PACIFIC. | 61.9 | 59.1 | 59.5 | 43.5 | 39.4 |
| Private. | $\begin{aligned} & 13.5 \\ & 48.4 \end{aligned}$ | $\begin{aligned} & 11.6 \\ & 47.5 \end{aligned}$ | $\begin{aligned} & 12.4 \\ & 47.1 \end{aligned}$ | $\begin{array}{r} 8.5 \\ 35.0 \end{array}$ | $\begin{array}{r} 7.1 \\ 32.3 \end{array}$ |
| Navy. |  |  |  |  |  |
| great lakes: |  |  |  |  |  |
| Private. | 9.2 | 8.8 | 7.6 | 5.8 | 4.4 |
| INLAND: |  |  |  |  |  |
| Private...... | 4.7 | 4.7 | 4.9 | 4.3 | 4.5 |

1 The North Atlantic region includes all yards bordering on the Atlantic in the following States: Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

The South Atlantic region includes all yards bordering on the Atlantic in the following States: Georgia, Virginiz, North Carolina, and South Carolina.

The Gulf region includes 311 yards bordering on the Gulf of Mexico in the foll lowing States: Alabama, Florida, Louisiana, Mississippi, and Texas.

The Pacific region includes all yards in California, Oregon, and Washington.

The Great Lakes region includes all yaxis bordering on the Great Lakes in the following States: Illinois, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin.

The Inland region includes all other $y a r d s$.

Federal Government
Table 7: Federal Civilian Employment and Pay Rolls in All Areas and in Continental United States and Total Government Civilian Employment and Payrolls in the District of Columbia

| (In thousands) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Area and branch | Employment (as of first of month) |  |  |  | $\begin{gathered} \text { Payrolls } \\ \text { (total for month) } \end{gathered}$ |  |  |  |
|  | $\begin{aligned} & 1952 \\ & \hline \mathrm{Jan} . \end{aligned}$ | 1951 |  |  | $\begin{aligned} & \hline 1952 \\ & \hline \text { Jan. } \end{aligned}$ | 1951 |  |  |
|  |  | Dec. | Nov. | Jan. |  | Dec. | Hov. | Jan. |
| all areas |  |  |  |  |  |  |  |  |
| total federal. | 2,524.3 | 2,871.2 | 2,517.5 | 2,204.3 | \$882,203 | \$856,123 | \$891,129 | \$680,926 |
| Executive 1/.......................... | 2,512.1 | 2,858.8 | 2,505.4 | 2,192.3 | 876,716 | 850,904 | 885,714 | 676,007 |
| Defense agencies $2 / . .$. .............. | 1,296.9 | 1,293.0 | 1,288.5 | 1,017.3 | 421,064 | 381,184 | 423,827 | 319,738 |
| Post Office Department 3/............. | 502.4 | 847.7 | 496.2 | 486.5 | 188,526 | 225,820 | 187,003 | 132,037 |
| Other agencies........................ | 712.8 | 718.1 | 720.7 | 688.5 | 267,126 | 243,900 | 274,884 | 224,232 |
| Legislative.. | 8.3 | 8.4 | 8.2 | 8.1 | 3,661 | 3,529 | 3,589 | 3,249 |
| Judicial. | 3.9 | 4.0 | 3.9 | 3.9 | 1,826 | 1,690 | 1,826 | 1,670 |
| CONTINENTAL UNITED STATES $4 /$ |  |  |  |  |  |  |  |  |
| TOTAL FEDERAL............................. | 2,350.0 | 2,696.1 | 2,344.0 | 2,047.4 | 830,673 | 808,960 | 840,879 | 641,330 |
| Executive 1/. | 2,337.8 | 2,683.8 | 2,332.0 | 2,035.5 | 825,233 | 803,786 | 835,515 | 636,455 |
| Defense agencies $\underline{\text { 2 } / . . . . . . . . . . . . . . . . . . . ~}$ | 1,181.1 | 1,177.8 | 1,174.0 | 905.1 | 389,328 | 352,230 | 391,089 | 292,875 |
|  | 500.3 | 844.3 | 494.1 | 484.7 | 187,746 | 224, 878 | 186,221 | 131,549 |
| Other agencies........................ | 656.4 | 661.7 | 663.9 | 645.7 | 248,159 | 226,678 | 258,205 | 212,031 |
| Legislative............................. | 8.3 | 8.4 | 8.2 | 8.1 | 3,661 | 3,529 | 3,589 | 3,249 |
| Judicial... | 3.9 | 3.9 | 3.8 | 3.8 | 1,779 | 1,645 | 1,775 | 1,626 |
| DISTRICT OF COLUMBIA |  |  |  |  |  |  |  |  |
| total government......................... | 272.0 | 278.3 | 273.5 | 253.8 | 109,447 | 101,177 | 111,480 | 91,052 |
| D. C. government. ....................... | 20.5 | 20.4 | 20.7 | 20.6 | 6,592 | 6,234 | 6,491 | 5,923 |
|  | 251.5 | 257.9 | 252.8 | 233.2 | 102,855 | 94,943 | 104,989 | 85,129 |
|  | 242.5 | 248.8 | 243.9 | 224.4 | 98,856 | 91,102 | 101,045 | 81,564 |
| Defense aǵencles $2 / \ldots . .$. | 86.5 | 86.5 | 86.7 | 74.8 | 35,191 | 31,920 | 37,729 | 26,543 |
| Post Office Department $3 / \ldots . .$. | 7.9 | 13.4 | 7.9 | 7.8 | 3,766 | 4,533 | 3,649 | 2,944 |
| Other agencies........................ | 148.1 | 148.9 | 149.3 | 141.8 | 59,899 | 54,649 | 59,667 | 52,077 |
| Legislative............................ | 8.3 | 8.4 | 8.2 | 8.1 | 3,661 | 3,529 | 3,589 | 3,249 |
| Judicial................................ | . 7 | . 7 | .7 | .7 | 338 | 312 | 355 | 316 |

[^2]Table 8: Employees in Nonagricultural Establishments by Industry Division, by State
(In thourands)

| State | Total |  |  | Mining |  |  | Contract Construction |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1952 | 1951 |  | 1952 | 1951 |  | 1952 | 1951 |  |
|  | Jan. | Dec. | Jan. | Tan. | Dec. | Tan. | Ian. | Dec. | Jen. |
| Alabama..1/. | 656.2 | 667.8 | 627.0 | 21.5 | 21.6 | 22.7 | 36.1 | 36.0 | 29.0 |
| Arizona... | 185.8 | 187.9 | 170.0 | 12.2 | 12.0 | 11.6 | 13.0 | 13.9 | 13.3 |
| Arkansas | 300.0 | 315.8 | 303.9 | 6.4 | 6.4 | 6.9 | 18.9 | 22.2 | 20.1 |
| California | 3,437.9 | 3,551.3 | 3,289.2 | 34.5 | 35.3 | 33.9 | 200.5 | 219.5 | 225.3 |
| Colorado | 381.0 | 395.4 | 358.2 | 10.3 | 10.1 | 10.4 | 30.0 | 31.2 | 27.4 |
| Connecticut | 827.9 | 850.5 | 799.1 | 3/ | 3/ | 3/ | 39.9 | 43.1 | 38.8 |
| Delaware. . |  |  |  |  |  |  |  |  |  |
| District of Colum | 514.3 | 532.2 | 497.2 | $4 /$ | $4 /$ | $4 /$ | 22.4 | 24.5 | 26.3 |
| Florida ....... | 753.4 | 754.2 | 745.6 | 6.7 | 6.7 | 6.5 | 67.2 | 69.2 | 70.6 |
| Ceorgia | 851.6 | 876.9 | 816.0 | 4.5 | 4.5 | 4.5 | 46.3 | 46.3 | 42.5 |
| Idaho | 129.2 | 136.8 | 129.8 | 5.9 | 5.8 | 5.6 | 9.5 | 10.4 | 10.4 |
| Illinois | 5/ | 3,279.3 | 3,156.1 | $\frac{5}{3}$ | 42.8 | 45.5 | $5 / 5$ | 146.8 | 131.8 |
| Indiana | 1,258.5 | 1,295.7 | 1,264.7 | $1 \overline{3} .1$ | 13.4 | 14.1 | 47.5 | 52.8 | 47.3 |
| Iowa | 621.9 | 643.3 | 609.6 | 3.0 | 3.1 | 3.1 | 28.3 | 34.3 | 28.7 |
| Kansas. | 510.5 | 524.7 | 470.7 | 17.9 | 17.7 | 17.4 | 32.4 | 35.0 | 28.1 |
| Kentucky |  |  |  | 58.6 | 57.7 | 60.4 |  |  |  |
| Louisiana . 1 |  |  |  | 28.9 | 29.3 | 26.7 |  |  |  |
| Maine.1. ... | 268.0 | 278.9 | 259.5 | . 6 | . 6 | . 5 | 11.0 | 12.6 | 8.9 |
| Maryland . 2/. | 733.6 | 757.5 | 703.6 | 2.6 | 2.6 | 2.3 | 49.9 | 53.9 | $50.1$ |
| Massachusetts | 1,760.0 | 1,832.8 | 1,769.6 | 4 | 4/ | 4/ | 55.3 | 66.4 | 61.2 |
| Michigan. |  |  |  |  |  |  |  |  |  |
| Minnesota | 816.4 | 842.3 | 808.8 | 16.7 | 16.8 | 16.1 | 38.4 | 40.5 | 39.9 |
| Mississippi | 1,225.6 | 1,271.7 | 1,191.9 | 9.2 | 9.5 | 9.1 | 52.6 | 58.8 | 55.3 |
| Missouri. | $1,225.6$ 142.9 | $1,271.7$ 148.9 | $1,191.9$ 144.7 | 9.2 10.9 | 9.5 10.8 | 9.1 11.2 | 6.6 | 8.4 | 8.2 |
| Nebraska | 323.9 | 339.2 | 313.4 | $4 \%$ | $4 /$ | $4{ }^{11}$ | 15.5 | 18.6 | 15.1 |
| Nevada | 56.6 | 58.8 | 53.8 | 2.9 | 3.1 | 2.9 | 4.4 | 4.7 | 4.2 |
| New Hampshire. | 166.7 | 170.8 | 167.7 | . 2 | . 3 | . 2 | 5.5 | 6.6 | 6.1 |
| New Jerscy. | 1,659.5 | 1,705.0 | 1,653.2 | 4.0 | 4.0 | 3.8 | 77.2 | 86.3 | 78.9 |
| New Mexico | 161.5 | 163.5 | 153.5 | 13.7 | 13.4 | 11.2 | 14.1 | 14.6 | 16.6 |
| New York | 5,787.9 | 5,987.8 | 5,677.7 | 10.8 | 11.4 | 10.6 | 205.2 | 230.9 | 212.5 |
| North Carolina | 977.2 | 1,002.8 | 956.2 | 3.5 | 3.5 | 3.5 | 73.9 | 72.2 | 57.8 |
| North Dakota | 5/ | 5/ | 110.6 | 5/ | 5 | . 8 | $5 /$ | 5/ | 7.3 |
| Ohio . . . |  |  |  |  |  |  |  |  |  |
| Oklahoma | 506.1 | 518.7 | 480.9 | 43.1 | 43.2 | 44.3 | 31.1 | 31.8 | 30.6 |
| Oregon. | 421.3 | 448.0 | 427.6 | 1.1 | 1.2 | 1.1 | 21.0 | 24.4 | 23.7 |
| Pennsylvania | 3,661.7 | 3,773.3 | 3,641.1 | 172.9 | 173.4 | 185.3 | 146.4 | 161.2 | 140.4 |
| Rhode Island | 5/ | 295.5 | 304.6 | $4)$ | 4/ | 4/ | $5 /$ | 16.6 | 14.6 |
| South Carolina | 499.4 | 511.6 | 470.5 | 1.2 | 1.2 | 1.2 | 48.1 | 46.8 | 25.1 |
| South Dakota | 120.8 | 124.8 | 120.0 | 2.2 | 2.0 | 2.5 | 5.4 | 6.3 | 5.8 |
| Tennessee | 736.6 | 759.8 | 739.1 | 12.1 | 12.4 | 13.0 | 37.3 | 39.4 | 42.4 |
| Texas | 2,104.3 | 2,161.8 | 1,993.0 | 115.4 | 114.9 | 104.6 | 161.2 | 164.9 | 152.7 |
| Utah | 204.0 | 213.0 | 192.0 | 14.1 | 13.9 | 13.6 | 8.7 | 10.5 | 11.2 |
| Vermont. $1 /$ | 97.8 | 100.5 | 98.3 | 1.2 | 1.2 | 1.1 | 2.8 | 3.4 | 3.9 |
| Virginia | 856.2 | 886.2 | 808.2 | 23.7 | 23.7 | 23.1 | 58.8 | 63.5 | 50.8 |
| Washington | 686.8 | 723.9 | 675.1 | 2.9 | 3.0 | 2.9 | 37.7 | 43.3 | 39.9 |
| West Virginia | 518.1 | 533.6 | 525.4 | 122.1 | 122.1 | 127.7 | 14.0 | 15.7 | 17.0 |
| Wisconsin | 1,038.7 | 1,070.4 | 1,031.1 | 3.5 | 3.6 | 3.3 | 46.4 | 50.5 | 44.6 |
| Wyoming . . . . . | 78.6 | 80.1 | 76.2 | 9.9 | 9.7 | 9.4 | 4.2 | 4.6 | 4.7 |

[^3]Table 8: Emplovees in Nonagricultural Establishments by Industry Division,


#### Abstract

by State - Continued


(In thousands)

| State | Manufacturing |  |  | Trans. and Public Util. |  |  | Trade |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1952 | 1951 |  | 1952 | 1951 |  | 1952 | 1951 |  |
|  | Jan. | Dec. | Tan. | Jan. | Dec. | Jan. | Jan. | Dec. | Jan. |
| Alabama. | 230.3 | 229.7 | 224.6 | 55.6 | 56.0 | 52.4 | 123.4 | 131.5 | 124.7 |
| Arizona | 21.4 | 20.0 | 16.9 | 20.3 | 20.3 | 20.4 | 46.5 | 47.8 | 43.1 |
| Arkansas | 75.9 | 76.1 | 79.2 | 31.2 | 32.0 | 31.7 | 70.2 | 79.0 | 71.0 |
| California | 878.7 | 887.8 | 804.4 | 316.1 | 320.9 | 306.6 | 799.7 | 852.8 | 785.7 |
| Colorado | 63.5 | 66.8 | 60.7 | 44.1 | 44.3 | 42.2 | 95.6 | 102.9 | 93.7 |
| Connecticut | 427.9 | 429.4 | 409.2 | 42.0 | 42.6 | 41.4 | 135.0 | 146.2 | 130.7 |
| Delaware | 50.4 | 50.4 | 48.7 |  |  |  |  |  |  |
| District of Colu | 17.3 | 17.7 | 16.8 | 30.4 | 31.0 | 28.9 | 90.6 | 99.3 | 91.8 |
| Florida...... | 112.8 | 109.2 | 110.2 | 74.1 | 72.7 | 70.5 | 221.4 | 227.6 | 223.9 |
| Georgia | 301.4 | 305.1 | 296.8 | 70.7 | 71.3 | 70.2 | 182.8 | 198.3 | 175.6 |
| Idaho. | 18.3 | 21.3 | 20.5 | 17.1 | 17.2 | 16.7 | 33.9 | 37.0 | 33.9 |
| Illinois | 5 | 1,216.1 | 1,211.7 | $5 /$ | 298.1 | 294.4 | 5 | 726.0 | 680.9 |
| Indiana | 584.9 | 587.6 | 598.4 | 109.3 | 109.6 | 111.2 | 237.0 | 258.3 | 235.5 |
| Iowa. | 170.2 | 171.4 | 161.6 | 61.4 | 62.2 | 61.7 | 170.9 | 177.8 | 167.1 |
| Kansas. | 128.1 | 127.5 | 104.1 | 63.6 | 64.1 | 62.2 | 121.8 | 129.7 | 117.5 |
| Kentucky | 151.9 | 153.9 | 156.4 | 59.4 | 60.1 | 58.4 | 118.0 | 131.9 | 114.5 |
| Louisiana | 144.0 | 152.3 | 140.9 | 85.4 | 85.0 | 81.4 | 150.2 | 159.7 | 149.1 |
| Maine | 115.3 | 117.4 | 115.3 | 19.0 | 19.3 | 19.0 | 48.1 | 52.5 | 48.0 |
| Maryland. | 252.3 | 2.55 .8 | 233.5 | 70.1 | 74.8 | 71.2 | 148.4 | 158.4 | 146.6 |
| Massachusetts | 721.7 | 728.3 | 741.6 | 122.1 | 126.3 | 127.4 | 358.8 | 393.7 | 361.3 |
| Michigan | $51$ | $1,056.6$ | $1,127.4$ |  |  |  |  |  |  |
| Minnesota. | 204.7 | $208.6$ | $199.7$ | 89.8 | 91.4 | 90.8 | 211.5 | 221.2 | 211.9 |
| Mississipp | 92.9 | 93.1 | 91.2 | 26.4 | 26.8 | 26.5 |  |  |  |
| Missouri.. | 377.7 | 377.7 | 364.9 | 126.6 | 131.1 | 124.3 | 319.7 | 339.1 | 308.3 |
| Montana | 15.9 | 17.5 | 17.8 | 21.9 | 22.5 | 21.8 | 36.2 | 37.3 | 35.6 |
| Nebraska | 57.4 | 59.1 | 51.5 | 42.1 | 42.7 | 41.6 | 92.0 | 97.3 | 91.0 |
| Nevada. | 3.6 | 3.7 | 3.5 | 8.7 | 8.9 | 8.4 | 11.6 | 12.4 | 10.7 |
| New Hampshirs | 82.5 | 82.0 | 83.2 | 10.2 | 10.3 | 10.4 | 27.2 | 29.4 | 27.6 |
| New Jersey ... | 759.6 | 762.5 | 768.2 | 141.0 | 141.9 | 136.4 | 269.9 | 290.5 | 269.4 |
| New Mexico. | 13.9 | 14.1 | 12.4 | 17.4 | 17.4 | 17.0 | 38.8 | 39.6 | 35.0 |
| New York . . . . | 1,956.3 | 1,966.9 | 1,903.6 | 506.6 | 512.9 | 501.4 | 1,239.7 | 1,335.4 | 1,243.3 |
| North Carolina | 428.4 | 430.9 | 439.3 | 60.4 | 60.5 | 57.9 | 181.5 | 201.9 | 175.5 |
| North Dakota. |  | $1.270$ | $6.3$ | 5 | 5 | 13.5 | 5/ | $5 /$ | 36.0 |
| Ohio. | $1,275.0$ | $1,279.3$ | 1,274.3 |  | 2 | 13.5 | 2 | 2 |  |
| Oklahana | 77.3 | 77.5 | 67.4 | 49.7 | 50.3 | 49.0 | 124.9 | 132.4 | 122.5 |
| Oregon... | 124.6 | 135.6 | 131.2 | 46.5 | 47.4 | 46.7 | 101.0 | $108.6$ | 100.4 |
| Pennsyl vania. | 1,475.4 | 1,479.8 | 1,493.4 | 350.3 | 354.7 | 338.8 | 670.9 | 731.2 | 675.8 |
| Rhode Island.. | $5$ | 140.5 | 156.9 |  | 15.1 | 15.3 |  | 55.6 | 52.9 |
| South Carolina | 216.3 | 217.8 | 217.7 | 27.4 | 27.3 | 27.2 | 88.3 | 97.5 | 86.4 |
| South Dakota.. | 11.4 | 11.5 | 11.5 | 10.5 | 10.7 | 10.5 | 35.3 | 37.0 | 36.4 |
| Tennessee | 249.4 | 251.5 | 257.2 | 60.0 | 60.6 | 59.0 | 168.1 | 181.1 | 162.6 |
| Texas. | 411.5 | 414.0 | 378.3 | 228.9 | 230.5 | 222.1 | 553.2 | 589.3 | 533.9 |
| Utah | 29.3 | 31.0 | 28.8 | 22.3 | 22.5 | 21.2 | 45.9 | 51.2 | 43.5 |
| Vermont | 38.4 | 38.7 | 38.1 | 8.5 | 8.5 | 8.8 | 17.4 | 18.4 | 17.4 |
| Virginia. | 246.0 | 248.2 | 237.6 | 84.4 | 84.8 | 79.9 | 181.8 | 197.8 | 173.9 |
| Washington. | 176.0 | 184.1 | 175.7 | 64.0 | 66.3 | 63.3 | 156.0 | 171.4 | 156.0 |
| West Virginia. | 135.0 | 137.2 | 137.8 | 53.6 | 54.0 | 52.6 | 85.6 | 94.2 | 84.9 |
| Wisconsin.... | 449.7 | 453.4 | 450.5 | 73.7 | 75.5 | 76.0 | 215.2 | 230.3 | 212.3 |
| Wyoming...... | 5.6 | 6.1 | 5.4 | 15.4 | 15.6 | 15.3 | 16.9 | 17.0 | 15.9 |

4/ Mining combined with service.
$5 /$ Not avalable.

Table 8: Employees in Nonagricultural Establishments by Industry Division,
by State - Continued
(In thousands)

| State | Finance |  |  | Service |  |  | Covernment |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1952 | 1951 |  | 1952 | 1951 |  | 1952 | 1951 |  |
|  | Jan. | Dec. | IRn. | Jan. | Dec. | Jan. | Jan. | Dec. | Tan. |
| Alabama | 18.9 | 18.9 | 18.1 | 53.7 | 53.9 | 51.4 | 116.7 | 120.2 | 104.1 |
| Arizona | 6.4 | 6.3 | 5.6 | 28.5 | 28.7 | 24.2 | 37.5 | 38.9 | 34.9 |
| Arkansas. | 7.7 | 7.9 | 8.0 | 35.9 | 35.9 | 34.3 | 53.8 | 56.3 | 52.7 |
| California | 154.2 | 154.6 | 148.3 | 452.1 | 454.5 | 435.0 | 602.1 | 625.9 | 550.0 |
| Colorado. | 14.9 | 14.9 | 13.6 | 47.5 | 47.5 | 43.8 | 75.1 | 77.7 | 66.4 |
| Connecticut | 38.1 | 38.0 | 37.1 | 78.7 | 79.6 | 76.8 | 66.3 | 71.6 | 65.2 |
| Delaware. |  |  |  |  |  |  | 11.0 | 11.6 | 10.6 |
| District of Columb | 23.8 | 23.7 | 22.6 | 57.8 | 57.5 | 57.1 | 272.0 | 278.5 | 253.7 |
| Florida | 31.8 | 31.8 | 30.9 | 115.6 | 108.6 | 116.1 | 123.8 | 128.4 | 116.9 |
| Georgia | 27.9 | 28.0 | 26.1 | 81.2 | 80.8 | 75.4 | 136.8 | 142.6 | 124.9 |
| Idaho. | 3.7 | 3.7 | 3.7 | 14.6 | 14.3 | 14.0 | 26.2 | 27.1 | 25.0 |
| Illinois | $5 /$ | 145.8 | 144.1 | $5 /$ | 343.3 | 331.8 | 334.5 | 360.4 | 316.0 |
| Indiana. | 35.7 | 36.0 | 34.2 | 88.9 | 89.3 | 89.6 | 142.0 | 148.7 | 134.4 |
| Iowa | 24.4 | 24.6 | 23.5 | 62.8 | 63.7 | 64.6 | 101.1 | 106.3 | 99.5 |
| Kansas | 18.0 | 17.0 | 16.2 | 47.0 | 47.9 | 46.5 | 81.7 | 85.8 | 78.7 |
| Kentucky | 14.5 | 15.7 | 15.3 | 59.0 | 60.2 | 57.7 | 88.0 | 91.4 | 84.0 |
| Louisiana | 21.5 | 21.4 | 19.6 | 69.1 | 69.5 | 69.0 | 102.3 | 106.4 | 98.9 |
| Maine. . | 6.7 | 6.8 | 6.6 | 23.4 | 24.1 | 23.5 | 43.9 | 45.6 | 37.7 |
| Maryland | 31.3 | 31.5 | 29.3 | 73.8 | 75.1 | 72.5 | 105.2 | 105.4 | 98.1 |
| Massachusetts | 81.9 | 83.8 | 79.6 | 189.4 | 191.7 | 188.2 | 230.8 | 242.6 | 210.3 |
| Michigan. |  |  |  |  |  |  | 235.6 | 246.4 | 225.8 |
| Minnesota | 37.2 | 37.4 | 36.2 | 97.1 | 97.3 | 96.0 | 120.9 | 129.1 | 118.3 |
| Mississippi | 7.6 | 7.6 | 7.5 |  |  |  | 68.5 | 70.8 | 66.5 |
| Missouri.. | 54.1 | 53.9 | 52.9 | 138.1 | 141.9 | 136.0 | 147.6 | 159.7 | 141.1 |
| Montana | 4.2 | 4.2 | 4.0 | 18.6 | 18.8 | 18.6 | 28.3 | 29.4 | 27.5 |
| Nebraska | 16.2 | 16.2 | 16.1 | 37.7 | 38.2 | 37.7 | 63.1 | 67.1 | 60.5 |
| Nevada | 1.2 | 1.3 | 1.2 | 12.4 | 12.6 | 11.5 | 11.8 | 12.1 | 11.4 |
| New Hampshire. | 4.6 | 4.6 | 4.5 | 16.3 | 16.3 | 16.3 | 20.2 | 21.3 | 19.6 |
| New Jersey. . . | 57.6 | 59.1 | 56.9 | 162.5 | 164.4 | 161.9 | 187.7 | 196.3 | 177.7 |
| New Mexico. | 4.4 | 4.4 | 5.0 | 22.1 | 21.9 | 21.4 | 37.1 | 38.1 | 34.9 |
| New York. . . | 399.9 | 403.9 | 392.6 | 770.5 | 777.0 | 754.9 | 698.8 | 749.4 | 658.8 |
| North Carolina | 24.1 | 23.0 | 22.2 | 85.9 | 86.3 | 83.5 | 119.5 | 124.5 | 116.5 |
| North Dakota. | 2/ | $5 /$ | 4.2 | 5 | $5 /$ | 13.5 | 29.8 | 31.2 | 29.1 |
| Onio |  |  |  |  |  |  | 319.7 | 337.9 | 301.3 |
| Oklahoma | 18.7 | 18.4 | 18.2 | 54.3 | 54.3 | 51.4 | 107.0 | 110.8 | 97.5 |
| Oregon... | 15.0 | 15.0 | 14.9 | 45.8 | 46.6 | 45.4 | 66.3 | 69.2 | 64.2 |
| Pennsylvania | 120.2 | 120.6 | 116.3 | 345.7 | 351.0 | 344.0 | 379.9 | 401.5 | 347.2 |
| Rhode Island ... | $15^{517}$ | 10.6 10.3 | 10.3 | 5/1 | 22.2 | 23.2 | 33.5 | 34.9 | 31.3 |
| South Carolina | 10.1 | 10.3 | 10.1 | 36.3 | 36.8 | 36.2 | 71.7 | 73.9 | 66.6 |
| South Dakota. | 4.2 | 4.2 | 3.9 | 16.3 | 16.3 | 15.1 | 35.5 | 36.9 | 34.4 |
| Tennessee | 23.7 | 23.8 | 22.9 | 75.1 | 75.6 | 75.1 | 110.9 | 115.4 | 106.9 |
| Texas. | 83.4 | 83.0 | 76.7 | 235.4 | 236.7 | 231.5 | 315.3 | 328.5 | 293.2 |
| Utah | 6.4 | 6.5 | 6.2 | 19.6 | 19.8 | 18.7 | 56.9 | 57.8 | 49.2 |
| Vermont | 3.0 | 2.9 | 2.9 | 11.1 | 11.0 | 11.0 | 15.5 | 16.4 | 15.1 |
| Virginia. | 28.2 | 28.5 | 26.0 | 75.0 | 75.7 | 73.4 | 158.3 | 164.0 | 143.5 |
| Washington | 26.1 | 26.6 | 26.0 | 78.1 | 79.4 | 74.9 | 146.0 | 149.8 | 136.4 |
| West Virginia | 9.2 | 9.4 | 9.6 | 41.0 | 40.9 | 39.6 | 57.6 | 60.1 | 56.2 |
| Wisconsin.... | 33.3 | 33.7 | 31.8 | 92.2 | 92.5 | 91.6 | 124.8 | 131.0 | 121.2 |
| Wyoming......... | 1.7 | 1.7 | 1.8 | 8.7 | 8.5 | 8.0 | 16.2 | 16.9 | 15.7 |

See Explanatory Notes and Glossary for definitions.

Table 9: Employees in Nonagricultural Establishments by Industry Division.
Selected Areas
(In thousands)


Table 9: Employees in Nonagricultural Establishments by Industry Division,
Selected Areas - Continued
(In thousends)


Table 9: Employees in Nonagricultural Establishments by Industry Division, Selected Areas - Continued
(In thousands)


Table 9: Employees in Nonagricultural Establishments by Industry Division,
Selected Areas - Continued
(In thousands)


Table 9: Employees in Nonagricultural Establishments by Industry Division, Selected Areas - Continued
(In thousands)


Table 9: Employees in Nonagricultural Establishments by Industry Division.
Selected Areas - Continued
(In thousands)


## Area Data

Table 9: Employees in Nonagricultural Establishments by Industry Division,
Selected Areas - Continued
(In thousands)

| area | Number of Employees |  |  | Area | Number of Employees |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1952 | 1951 |  |  | 1952 | 1251 |  |
|  | Jan. | Dec. | Jan. |  | Jan. Dec. ${ }_{\text {Jan, }}$ |  |  |
| WASHITGTOM - Continued |  |  |  | Charleston - Continued |  |  |  |
| Tacoma - Continued |  |  |  | Manufacturing........... | 27.4 | 28.0 | 27.1 |
| Menufacturing..... | 15.9 | 16.9 | 18.1 | Trans, and Pub. Util.... | 9.1 | 9.2 | 9.1 |
| Trans, and Pub. Util. | 6.2 | 6.5 | 6.3 | Trade. . . . . . . . . . . | 16.1 | 18.5 | 16.1 |
| Trade... | 14.7 | 15.9 | 14.4 | Finance. | 2.8 | 2.8 | 2.7 |
| Finance. | 2.5 | 2.4 | 2.4 | Service | 6.9 | 7.0 | 6.9 |
| Service 26. | 6.8 | 7.1 | 6.7 | Goverment. . . . . . . . . . . | 8.9 | 9.1 | 8.4 |
| Government. | 17.8 | 18.5 | 17.5 |  |  |  |  |
|  |  |  |  | WISCONSIN |  |  |  |
| WEST VIRGINIA |  |  |  | M1 1waukee |  |  |  |
| Charleston |  |  |  | Manufacturing........... | 193.9 | 196.8 | 193.5 |
| Total. | 95.6 | 99.0 | 97.0 |  |  |  |  |
| Mining. | 21.1 | 21.2 | 22.5 | Racine |  |  |  |
| Contract construction | 3.4 | 3.4 | 4.3 | Manufacturing........... | 24.4 | 24.5 | 24.2 |

See Explanatory Fotes and Glossary for definitione.
1/ Revised series; not atrictly comparable with previously published data.
$2 /$ Includes mining.
3/ Not availabie.
4 Includes mining and finance.
5 / Subarea of New York-Northeastern New Jersef.
6/ Excludes interstate railroeds.

# Explanatory Notes 

Section A. Purpose and Scope of the BLS Employment Statistics Program -
Employment statistics for nonfarm industries presented in this monthly Report are part of the broad program of the Bureau of Labor Statistics to provide timely, comprehensive, accurate and detailed information for the use of businessmen, government officials, legislators, labor unions, research workers and the general public. Current employment statistics furnish a basic indicator or changes in economic activity in various sectors of the economy and are widely used in following business developments and in making decisions in fields of marketing, personnel, plant location and government policy. The BLS employment statistics program, providing data used in making official indexes of production, productivity and national income, forms an important part of the Federal statistical system.

The BLS publishes monthly the national total of employees in nonagricultural establishments, giving totals by 8 major industrial groups: manufacturing, mining, contract construction, transporiation and public utilities, trade, finance, service, and government. Series on "all employees" and "production and related workers" are presented for the durable goods and nondurable goods subdivisions of manufacturing, 21 major industry groups in manufacturing, over 100 separate manufacturing industries; all employees and production workers are presented also for selected mining industries. "All employees" only are published for over 40 industry groups in contract construction, transportation and public utilities, trade, finance, service, and government. Statistics on the number and proportion of women employees in manufacturing industries are published quarterly. In addition, the Bureau of Labor Statistics publishes monthly employment data by industry division for State and local areas, compiled by cooperating State agencies.

Current national, state, and area statistics are published monthly in the Employment and Payrolls Report. Employment data for thirteen months are presented in the Current Statistics Section of each issue of the Monthly Labor Review. Historical data are also presented in the BLS Handbook of Labor Statistics (1950 edition). Summary tables showing national data for prior months and years may be obtained by writing to the BLS Division of Manpower and Employment Statistics. Similar information is available for States and areas. A detailed explanation of the technique of preparing employment statistics is presented in the Monthly Labor Review, January 1950 and in BLS Bulletin No. 993, Techniques of Preparing Major BLS Statistical Series.

Section B. Definition of Employment -
BLS employment statistics represent the number of persons employed in establishments in nonagricultural industries in the continental United States during a specified payroll period. Employment data for nongovernmental establishments refer to persons who worked during, or received pay for, any part of the pay period ending nearest the 15 th of the month. Current data for Federal government establishments generally refer to persons who worked during, or received pay for, any part of the last pay period of the previous month; for state and local government, persons who received pay for any part of the pay period ending on, or inmediately prior to, the last day of the current month.

Employed persons include those who are working full- or parttime, on a temporary or permanent basis. Persons on establishment payrolls who are on paid sick-leave, paid holiday or paid vacation, or who work during a part of a specified pay period and are unemployed or on strike during the other part of the period are considered employed. Persons on the payroll of more than one establishment during the pay period are counted each time reported. On the other hand, persons who are laid off or are an leave without pay, who are on strike for the entire pay period, or who are hired but do not report to work during the pay period are not considered employed. Since proprietors, self-employed persons, and unpaid family workers do not have the status of "employee", they are not covered by BLS reports. Persons working as farm workers or as domestic workers in households are not within the scope of data for nonagricultural establishments. Government employment statistics refer to civilian employees only and hence exclude members of the Armed Forces.

Section C. Method of Preparing Employment Series -
The BLS prepares monthly employment figures from statistical reports voluntarily furnished by a group of establishments and from industry benchmark data, i.e, a complete count of employees generally compiled from establishment reports required in the administration of the unemployment insurance and old age and survivors insurance programs. Based on establishment reports, employment statistics are prepared for numerous industry classifications. Monthly employment data for each industry are collected and prepared from these sources according to the methods outlined in the following sections.

Section D. Collection of Establishment Reports -
The BLS, with the cooperation of State agencies, collects current employment information for most industries by means of questionnaires (BLS 790 Forms) mailed monthly to individual establishments. State agencies mail most of the forms and when returned, examine them for

Section D. Collection of Establishment Reports (Continued) -
consistency, accuracy and completeness. States use the information to prepare State and area series and send the schedules to the BLS Division of Manpower and Employment Statistics for use in preparing the national series. Each questionnaire providea space for reporting data for December of the previous year and each month of the calendar year; the same form is returned each month to the reporting establishment to be completed. Definitions of terms are described in detail in the instructions on each form. This type of "shuttle" schedule is designed to assist firms to report consistently, accurately and with a minimum of cost. An establishment is defined as a single physical location, such as a factory, mine, or store where business is conducted. In the case of a company with several plants or establishments, the BLS endeavors to obtain separate reports from each business unit which maintains separate payroll records since euch may be classified in a different industry.

Section E. Coverage of Establishment Reports -
The Bureau of Labor Statistics obtains monthly reports from approximately 150,000 establishments, distributed by industry as shown by the table below. The table also shows the approximate proportion of total employment in each industry division covered by the group of establishments furnishing monthly employment data. The coverage for individual industries within the divisions may vary from the proportions show.

APPROXIMAIE SIZE AND COVERAGE OF MONTHLY SAMPIE USED IN BLS HMPLOYNEXTT AND PAY-ROIJ SIATISTICS

|  | Number | Emplo | yees |
| :---: | :---: | :---: | :---: |
| Division or industry | $: ~ o f ~$ $:$ establishments | :Number in : sample | :Percent :of totel |
| Mining | 3,300 | 502,000 | 55 |
| Contract construction | 19,500 | 776,000 | 28 |
| Manufacturing | 42,000 | 10,660,000 | 66 |
| Transportation and public utilities: Interstate railroads (ICC) | - | 1,406,000 | 96 |
| Other transportation and public utilities (BLS) | 13,000 | 1,341,000 | 49 |
| Trade | 58,500 | 1,765,000 | 18 |
| Finance | 9,200 | 639,000 | 23 |
| Service: |  |  |  |
| Hotels | 1,300 | 139,000 | 29 |
| Laundries and cleaning and dyeing plants | 2,200 | 99,000 | 19 |
| Government: |  |  |  |
| Federal (Civil Service Commissiom) | - | 2,336,000 | 100 |
| State and local (Bureau of Census quarterly) | - | 2,645,000 | 65 |

Section F. Classification of Establishments Reports -
To present meaningful tabulations of employment data, establishments are classified into industries on the basis of the principal product or activity determined from information on annual sales volume for a recent year. In the case of an establishment making more than one product, the entire employment of the plant is included under the industry indicated by the most important product. The titles and descriptions of industries presented in the 1945 Standard Industrial Classification Manual, Vol. I: (U. S. Bureau of the Budget, Washington, D. C.) are used for classifying reports from manufacturing establishments; the 1942 Industrial Classification Code, (U. S. Social Security Board) for reports from nonmanufacturing establishments.

## Section G. Benchmark Data -

Basic sources of benchmark information are periodic tabulations of employment data, by industry, compiled by State agencies from reports of establishments covered under State unemployment insurance laws. Supplementary tabulations prepared by the U. S. Bureau of Old Age and Survivors Insurance are used for the group of establishments exempt from State unemployment insurance laws because of their small size. For industries not covered by either of the two programs, benchmarks are compiled from special establishment censuses: for example, for interstate railroads, from establishment data reported to the ICC; for State and local government, from data reported to the Bureau of the Census; for the Federal government, from agency data compiled by the Civil Service Commission. Establishments are classified into the same industrial groupings for benchmark purposes as they are for monthly reporting.

Because the industry data from :nemployment insurance and OASI tabulations are not sufficiently detailed, the ELS has prepared for selected manufacturing industries special benclaanka based on data from the 1947 Census of Manufactures. Table 4 shows curient data on production workers in these selected industries, based on Cennus benchmarks. Since there are important differences in the methods of preparing the two sets of benchmark data, monthly statistics derived from them are not strictly comparable. Hence, totals for industry groupn (e.g. broadwoven fabric mills, iron and steel foundries) derived by adding the figures for the individual component industries shown in Table 4 , differ from the industry group totals shown in Table 3, based on benchmarks from social insurance programs.

Section H. Estimating Method -
The estimating procedure for industries for which data on both all employees and production and related workers are published (i.e.

## Section H. Estimating Method (Continued) -

manufacturing and selected mining industries) is outlined below; substantially the same method is used for industries for which only figures on either a.ll employees or production workers are published.

The first step is to determine total production-worker employment in the industry in the benchmark period since neither of the social insurance programs furnishes benchmark data for production workers. The all employee benchmark figure is multiplied by the ratio of the number of production workers to all employees. The ratio is computed from establishment reports wich ahow data for both iteas for the benchmark period. Thus, if 75 firms'report in the benchnark period 25,000 production workers and an all employee total of 31,250 , the production worker - all employee ratio would be 80 , ( 25,000 divided by 31,250 ). If the all-employee benchmark is 50,000, the production-worker totel in the benchmark period would be . 80 times 50,000 or 40,000 .

The second step is to compute the total production-worker employment in the month following the benchmark period. The productionworker total for the benchmark period is multiplied by the percent change over the month in production-worker employment in a group of establishments reporting in both months. Thus, if firms in the BIS sample report employment of 30,000 production workers in March and 31,200 in April, the percentage increase would be 4 percent (1,200 divided by 30,000). The producticn-worker total in April would be 104 percent of 40,000, the production-worker total in March, the benchmark month, or 41,600.

The third step is to compute the all-employee total for the industry in the month following the benchmark period. The productionworker total for the month is divided by the ratio of production workers to all employees. This ratio is computed from establishment reports for the month showing data for both items. Thus, if these firms in April report 24,000 production workers and a total of 29,600 employees, the ratio of production workers to all employees would be .81 ( 24,000 divided by 29,600). The all-employee total in April would be 51,358, (41,600 divided by .81).

Figures for subsequent monthe are computed by carrying forward the totals for the previous month according to the method described above. When annual benchmark data becone available, the BLS employment figures for the benchmark period are carpared with the total count. If differences are found, the BLS series are adjusted to agree with the benchmark count.

Section I. Comparability with other Employment Estimates -
Data published by other government and private agencies differ from BLS employment statistics because of differences in definition, sources of informetion, and methods of collection, classification and estimation. BIS monthly figures are not comparable, for example, with the estimates of the Bureau of the Census Monthly Report on the Labor Force. Census data are obtained by perscnal interviews with individual members of a sample of households and are designed to provide information on the work status of the whole population, classified into broad social and economic groups. The BLS, on the other hand, obtains by mail questionnaire data on employees, based on payroll records of business units and prepares detailed statistics on the industrial and geographic distribution of employment and on hours of work and earnings.

Employment estimates derived by the Bureau of the Census from its quinquennial census and annual sample surveys of manufacturing establishments also differ from BLS employment statistics. Among the important reasons for disagreement are differences in industries covered, in the business units considered parts of an establishment, and in the industrial classification of establishments.

Section J. Employment Statistics for States and Areas -
State and area employment statistica are collected and prepared by State agencies in cooperation with the Bureau of Labor Statistics. The names and addresses of these agencies are listed on the last page of the Report. State agencies use the same basic schedule as the Bureau of Labor Statistics in collecting employment statistics. State series are adjusted to benchmark data from State unemployment insurance agencies and the Bureau of Old Age and Survivors Insurance. Because some States have more recent benchmarks than others and use slightly varying methods of computation, the sum of the State figures differs from the of ficial U.S. totals prepared by the Bureau of Labor Statistice. State and area data in greater industry detail and for earlier periods may be secured directly upon request to the appropriate State agency or to the Bureau of Labor Statistics.

## Glossary

All Employees - Includes production and related workers as defined below and workers engaged in the following activities: executive, purchasing, finance, accounting, legal, personnel (including cafeterias, medical, etc.,), professional and technical activities, sales, sales-delivery, advertising, credit collection, and in installation and servicing of own products, routine office functions, factory supervision (above the working foreman level). Also includes employees on the establishment payroll engaged in new construction and major additions or alterations to the plant who are utilized as a separate workforce (force-account construction workers).

Contract Construction - Covers only firms engaged in the construction business on a contract basis for others. Force-account construction workers, i.e.s. hired directly by and on the payrolls of Federal, State, and local government, public utilities, and private establishments, are excluded from contract construction and included in the employment for such establishments.

Durable Goods - The durable goods subdivision includes the following major industry groups: 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 (excert electrical); electrical machinery; transportation equipment; instruments and related products; and miscellaneous manufacturing industries.

Finance - Covers establishments operating in the fields of finance, insurance, and real estate; excludes the Federal Reserve Banks and the mixed-ownership banks of the Farm Credit Administration which are included under Sovernment.

Government - Covers Federal, State, and local government establishments performing legislative, executive, and judicial functions, including Government corporations, Government force-account construction, and such units as arsenals, navy yards, hospitals. Fourth-class postmasters are excluded from table 2 ; they are included, however, in table 7. State and local government employment excludes, as nominal employees, paid volunteer firemen and elected officials of small local units.

Manufacturing - Covers only private establishments; Government manufacturing operations such as arsenals and navy yards are excluded from manufacturing and included under Government.

Mining - Covers establishments engaged in the extraction from the earth of organic and inorganic minerals which occur in nature as solids, liquids, or gases; includes various contract services required in mining operations, such as removal of overburden, tunneling and shafting, and the drilling or acidizing of oil wells; also includes ore dressing, beneficiating, and concentration.

Nondurable Goods - The nondurable goods subdivision includes the following major industry groups: food and kindred products; tobacco manufactures; textilemill 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.

Payrolls - Private payrolls represent weekly payrolls of both full- and part-time production and related workers who worked during, or received pay for, any part of the pay period ending nearest the $15 t h$ of the month, before deduction for old-age and unemployment insurance, group insurance, withholding tax, bonds, and union dues; also, includes pay for sick leave, holidays, and vacations taken. Excludes cash payments for vacations not taken, retroactive pay not earned during period reported, value of payments in kind, and bonuses, unless earned and paid regularly each pay period. Federal civilian payrolls are for the calendar month.

Production and Related Workers - Includes working foremen and all nonsupervisory workers (including lead men and trainees) engaged in fabricating, processing, assembling, inspection, receiving, storage, handing, packing, warehousing, shipping, maintenance, repair, janitorial, watchman services, products development, auxiliary production for plant's own use (e.g., power plant), and recordkeeping and other services closely associated with the above production operations.

Service - Covers establishments primarily engaged in rendering services to individuals and business firms, including automobile repair services. Excludes domestic service workers. Nongovernment schools, hospitals, museums, etc., are included under Service; similar Government establishments are included under Government.

Trade - Covers establishments engaged in wholesale trade, i.e., selling merchandise to retailers, and in retail trade, i.e., selling merchandise for personal or household consumption, and rendering services incidental to the sales of goods. Similar Government establishments are included under Government.

Transportation and Public Utilities - Covers only private establishments engaged in providing all types of transportation and related services; telephone, telegraph, and other communication services; or providing electricity, gas, steam, water, or sanitary service. Similar Government establishments are included under Government.

## List of Cooperating State Agencies

| alabama | - Department of Industrial Relations, Montgomery 5. |
| :---: | :---: |
| ARIIZNA | - Unemployment Compensation Division, Employment Security Commission. Phoenix. |
| ARKAKSAS | - Employment Security Division. Department of Labor, Little Rock. |
| CALIFORMIA | - Division of Labor Statistics and Research, Department of Industrial Relations, San Francisco 1. |
| COLORADO | - U. S. Bureau of Labor Statistics, Denver 2. |
| COMMECTICUT | - Employment Security Division, Department of Labor, Hartford 15. |
| delaware | - Federal Reserve Bank of Philadelphia, Philadelphia 1, Pennsylvania. |
| DISTRICT OF |  |
| columbia | U. S. Employment Service for D. C.. Washington 25. |
| FLORIDA | - Unemployment Compensation Division, Industrial Commission, Tallahassee. |
| georgia | - Employment Security Agency, Department of Labor, Atlanta 3. |
| IDAHO | - Employment Security Agency, Boise. |
| illimois | - Division of Placement and Unemployment Compensation, Department of Labor, Chicago 54. |
| imdiama | - Employment security Division. Indianapolis 9. |
| IOWA | - Employment Security Commission, Des Moines 8. |
| KANSAS | - Employment Security Division, State Labor Department. Topeka. |
| KEMTUCKY | - Bureau of Employment Security, Department of Economic Security, Frankfort. |
| LOUISIAMA | - Division of Employment Security, Department of Labor, Baton Rouge 4. |
| maine | - Employment Security Commission, Augusta. |
| MARYLAMD | - Department of Employment Security, Baltimore 1. |
| MASSACHUSETTS | - Division of statistics, Department of Labor and Industries. Boston 10. |
| MICHIGAM | - Employment Security Commission, Detroit 2. |
| minnesota | - Division of Employment and Security, St. Paul i. |
| MISSISSIPPI | - Employment Security Commission. Jackson. |
| MISSOURI | - Division of Employment Security, Department of Labor and Industrial Relations. Jefferson city. |
| montana | - Unemployment Compensation Commission, Helena. |
| mebraska | - Division of Employment Security, Department of Labor, Lincoln 1. |
| MEVADA | - Employment Security Department, Carson City. |
| NEM HAMPSHIRE | - Division of Employment Security, Department of Labor, Concord. |
| MEW JERSEY | - Department of Labor and Industry, Trenton 8. |
| NEW MEXICO | - Employment Security Commission, Albuquerque. |
| NEW YORK | - Bureau of Research and Statistics, Division of Placement and Unemployment Insurance, New York Department of Labor, 1440 Broadway, New York 18. |
| MORTH CAROLIMA | - Department of Labor, Raleigh. |
| NORTH DAKOTA | - Unemployment Compensation Division, Bismarck. |
| OHIO | - Burear of Unemployment Compensation, Columbus 16. |
| OKLAhOMA | - Employment security Commission, oklahoma City 2. |
| OREGON | - Unemployment Compensation Commission, Salem. |
| PEMnsylvanla | - Federal Reserve Bank of Philadelphia, Philadelphia 1 (mfg.); Bureau of Research and Information, Department of Labor and Industry, Harrisburg (nonmfg.). |
| RHODE ISLAMD | - Department of Labor, Providence 3. |
| SOUTH CAROLIMA | - Employment security Commission, Columbia 1. |
| SOUTH DAKOTA | - Employment Security Department, Aberdeen. |
| TEMMESSEE | - Department of Employment Security, Mashville 3. |
| texas | - Employment Commission, Austin 19. |
| UTAH | - Department of Employment Security, industrial Commission, salt Lake city 13. |
| VERMONT | - Unemployment Compensation Commission, Montpelier. |
| virginia | - Division of Research and statistics. Department of Labor and Industry, Richmond 29. |
| WASHIMGTOM | - Employment security Department, Olympia. |
| WEST VIRGIMIA | - Department of Employment Security, Charleston 5. |
| WISCOMSIM | - Industrial Commission, Madison 3. |
| WYOMIMG | - Employment Security Commission, Casper. |

# Other <br> Publications on <br> EMPLOYMENT DEVELOPMENTS 

STATE AND AREA DATA-EMPLOYMENT, HOURS, AND EARNINGS Data available for $S t a t e s$ and areas in varying industry detail since 1947.
MANPOWER REPORTS - Special studies of manpower problems in activities of importance to the defense effort. Reports numbered consecutively as issued. Those not 1 isted are either out of date or restricted for security reasons.

MANPOWER REPORT No. 3 - The Nation's Scientific and Technical Manpower
MANPOWER REPORT No. 8 - Manpower Requirements of the Machine Tool Industry in the Current Mobilization Program
MANPOWER REPORT No. 10 - Manpower Requirements for the Merchant Marine
MANPOWER REPORT No. 11 - Manpower Requirements in Metal Mining
MANPCIWER REPORT No. 12 - Defense Manpower Requiremen es in Electronics Production MANPOWER REPORT No. 13 - The Effects of Defense Program on Employment in Automobile Industry

EMPLOYMENT AND SHIFT OPERATION; IN METALWORKING INDUSTRIES - Number of workers employed and their distribution by shift in selected metalworking industries. Frepared quarterly and available beginning with the third quarter of 1951.
OCCUPATIONAL OUTLOOK HANDBOOK, 2d EDITION, Bulletin No. 998 of Bureau of Labor Statistics issued in cooperation with the Veterans Administration. 575 pF. - Available from the Superintendent of Documents, Government Printing Office, Washington 25 , D. C., at $\$ 3.00$ a copy. A comprehensive coverage of major occupations for use in guidance with reports on each of 433 occupations and industries including industrial, professional, "whitecollar," and farming occupations in which most young people will find jobs. Trends and outlook are emphasized to depict the changing nature of occupational and industrial 1 ife, and to help in long-range educational and career planning. Occupation reports describe employment outlook, nature of work, industries and localities in which workers are employed, training and qualifications needed, earnings, working conditions, and sources of further information. This material is current as of late 1950. New editions of the Handbook will be issued from time to time.

FACT BOOK ON MANPOWER, January 1951, 52 pp . - Statistics on the population and labor force of the United States, on its industrial and occupational distribution, and on potential manpower resources under conditions of national emergency.
SELECTED FACTS ON THE EMPLOYMENT AND ECONOMIC STATUS OF OLDER MEN AND WOMEN, January 1952, 32 pp . - Basic data pertaining to older workers, including information on population and labor force trends, industrial and occupational characteristics, and on income and employment.
TABLES OF WORKING LIFE, LENGTH OF WORKING LIFE FOR MEN, Bulletin No. 1001, August 1950, 74 pp . - Tables comparing a man's life span with his work span. Also labor force entry rates, and separation rates due to death and retirement.


[^0]:    1 Preliminary

[^1]:    2f Represents number of production and related workers in manufacturing expressed as a percentage of average monthly production worker employment in 1947-1949 period.

    2f Fepresents production worker average weekly payroli expressed as percentage of average weekly payroll for $1847-1940$ period. Aggregate weekly payroll for all manufarturing is derived by multiplying gross average weekly earnings by production worker employment.

    - 3et Novig torrents page.

[^2]:    I/ Includes all executive agencies (except the Central Intelligence Agency), Government corporations, Federal Reserve Banks, and mixed-ownership banks of the Farm Credit Administration. Civlifan employment in navy yards, arsenals, hospitals, and on force-account construction is included in total for executive agencies.
    $\underline{2} /$ Covers civilian employees of the Department of Defense (Secretary of Defense, Army, Navy, and Air Force), National Advisory Committee for Aeronautics, The Papama Canal, Selective Service System, National Securities Resources Board, and National Security Council.

    3/ Includes Fourth Class Fostmasters, exoluded from Federal total in Table 2.
    4/ Includes the 48 States and the District of Columbia.
    5/ Includes all Federal civilian employment in Washington Standard Metropolitan area (District of Columbia, adjacent Maryland and Virginia counties).

[^3]:    1/ Revised series; not strictly comparable with previously published data.
    2) See Footnote 5/, Table 7, for explanatory note on government.
    $\overline{3} / \mathrm{Mining}$ combined with construction.

