# EMPLOYMENT AND PAY ROLLS 

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# Employment and Pay Rolls 

## SUMMARY OF REPORTS FOR DECEMBER 1939

## Total Nonagricultural Employment

NONAGRICULTTURAL employment increased by nearly a quarter of a million workers from mid-November to mid-December, due primarily to an increase of 390,000 workers in retail stores to handle increased volume of Christmas trade. This gain brought employment in nonagricultural industries in December to the highest level recorded since October 1937, the total being more than $1,200,000$ greater than in December 1938. The resumption of full activity by certain automobile plants which had been on strike resulted in factory employment showing a slight contraseasonal increase.

These figures do not include emergency employment, which increased 144,000 in December. Increases of 136,000 on projects operated by the Work Projects Administration and 34,000 on work projects of the National Youth Administration were partly offset by a decrease of 26,000 in the Civilian Conservation Corps.

## Industrial and Business Employment

Increases in employment were shown by 37 of the 90 manufacturing industrics surveyed by the Bureau of Labor Statistics and by 5 of the 16 nonmanufacturing industrics covered. Pay-roll gains were reported by 46 of the manufacturing and 8 of the nonmanufacturing industrics.

The net gain from November of 0.3 pereent, or 20,000 wage carners, in factory employment was the seventh consecutive monthly increase for this group and was in contrast to a scasonally expected decline of 1 percent, or 80,000 wage carners. Weekly factory pay rolls rose by 2.0 percent, or about $\$ 3,800,000$, the average December change being an increase of about 0.2 percent. The December factory employment and pay-roll indexes were 10.7 and 18.9 percent, respectively, higher than a year ago. They were also higher than any recorded since the fall months of 1937, but were still substantially below the levels reached in the carlicr months of that yoar.

The durable-goods group of industries continued to rise, while the nondurable-goods group showed a decline. The gains in the former
(1)
group were chielly contraseasonal or larger than seasonal, while the declines among the industries comprising the latter group were largely of a seasonal nature. Among the more important increases in employment were: Automobiles ( 64,800 wage earners) ; foundries and machine shops ( 7,200 wage earners); blast furnaces, steel works, and rolling mills ( 6,100 wage earners) ; slaughtering and meat packing (5,300 wage carners) ; clectrical machinery ( 4,900 wage earners); book and job printing (4,200 wage earners) ; aircraft (3,800 wage earners) ; boots and shoes (3,800 wage earners) ; clectric- and steam-railroad car building ( 3,600 wage earners) ; shipbuilding ( 3,500 wage earners) ; engines, turbines, and water whecls ( 3,200 wage earners) ; and newspaper and periodical printing (2,300 wage earners). Employment in the aircraft industry has expanded each month since Scptember 1938, when the index stood at 774.2 percent of the 1923-25 level. In December it stood at $1,886.0$, which was more than three and a half times the 1929 average. Among the manufacturing industries reporting large declines were canning and preserving ( 16,500 wage earners), sawmills ( 10,500 wage earners), woolen and worsted goods ( 6,600 wage earners), hosiery ( 6,200 wage earners), radios and phonographs ( 5,100 wage earners), women's clothing ( 4,300 wage earners), and silk and rayon goods ( 3,000 wage earners).

Retail stores reported a larger than seasonal employment gain of 12.3 percent for the Christmas trade. The general merchandising group, which includes department, variety, and general merchandising stores and mail-order houses, took on 37 percent more workers to handle the holiday trade. The employment index for this group climbed to 151.2 percent of the 1929 average, the highest point recorded over an 11-year interval. Apparel stores took on 11.9 percent more workers, jewlery stores added 24.5 percent more employees to their pay rolls, furniture stores showed an increase of 3.9 percent in the number of workers employed by them, and hardware stores showed a gain of 5.2 percent. The remaining lines of retail trade also showed employment gains with the exception of "lumber and building materials," which showed a seasonal recession of 2.2 percent.

Wholesale trade as a whole showed virtually no change in employment since November. Among the more important lines showing employment gains were farm products, clectrical goods, and paper and paper products. Among the lines showing declines were dry goods and apparel, metals and minerals, furniture and house furnishings, and lumber and building materials. Anthracite and bituminous coal mines reported small decreases in employment, coupled with substantial losses in pay rolls, resulting from sharply decreased production during the first half of December. Public utilities and other service industries reported small employment changes. Winter weather conditions brought a seasonal curtailment of employment in quarries.

Employment in metal mines showed a gain of 1.2 percent, with the index standing at the highest level recorded in any month since January 1938.

Employment and pay rolls in private building construction deereaser 6.9 and 7.0 percent, respectively, from November to December according to reports from 14,132 contractors employing 132,965 workers. These declines were less than the average decrease in December of the previous 7 years. Comparisons with December 1938 showed a gain of 5.0 percent in employment and 12.0 percent in weekly pay rolls. Seasonal reductions in employment from November to December were general throughout all parts of the country, ranging from 2.6 percent to over 10 percent, with the exception of the East South Central area, which showed a 3.5 -percent gain. The reports on which these figures are based do not cover construction projects financed by the Work Projects Administration, the Public Works Administration, and the Reconstruction Finance Corporation, or by regular appropriations of the Federal, State, or local goveruments.

Average pay rolls for the year 1939 were above those for 1938 for all of the industrial groups surveyed monthly by the Bureau except crude-petroleum producing, dyeing and cleaning, and brokerage. Average employment was higher for 8 groups as follows: Manufacturing ( 7.9 percent), metalliferous mining ( 6.3 percent), quarrying and nonmetallic mining ( 5.4 percent), private building construction ( 1.9 percent), retail trade ( 1.5 percent), insurance ( 1.1 percent), wholesale trade ( 0.5 percent), and laundries ( 0.2 percent). Average employment was lower for the following industrial groups: Bituminous-coal mining ( 9.2 percent), crude-petroleum producing ( 8.7 percent), brokerage ( 3.7 percent), anthracite mining ( 3.3 percent), dyeing and cleaning ( 2.9 percent), electric-railroad and motorbus operation and maintenance ( 1.0 percent), year-round hotels ( 0.8 percent), telephone and telegraph ( 0.5 percent), and electric light and power and manufactured gas ( 0.4 percent).

A preliminary report of the Interstate Commerce Commission showed an employment decline by class I railroads from November to Deceinber of 2.8 percent, the total number of workers in December being $1,009,526$. Corresponding pay rolls were not available when this report was prepared. For November they were $\$ 163,721,972$, a decline of 4.8 percent over the October figure.

Hours and earnings.-The average hours worked per week by wage earners in manufacturing industries were 38.6 in December, an increase of 0.1 percent since November. The average hourly earnings of these workers were 66.2 cents, an increase of 1.4 percent as compared with the preceding month. Average weekly earnings of factory workers were $\$ 26.27$, a gain of 1.6 percent since November.

Of the 14 nonmanufacturing industries for which man-hours are available 6 showed increases in average hours worked per week and 10 reported gains in average hourly earnings. Eight of the 16 nonmanufacturing industries surveyed reported higher average weekly carnings.

Employment and pay-roll indexes and average weekly carnings in December 1939 for all manufacturing industries combined, for selecter nonmanufacturing industries and for class I railroads, with percentage changes over the month and year intervals, are presented in table 1.

Table 1.-Employment, Pay Rolls, and Earnings in All Manufacturing Industries Combined and in Nonmanufacturing Industries, Decermber 1939

| Industry | Employment |  |  | l'ay rolls |  |  | Average weekly carnings |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Index Decem ber 1938 | Percentage change from- |  | Index ber 1939 | Percentage change from- |  | A verage in Decem.ber 1939 | Average change from- |  |
|  |  | $\begin{gathered} \text { No- } \\ \text { vem- } \\ \text { ber } \\ 1939 \end{gathered}$ | Decom- |  | $\begin{gathered} \text { no- } \\ \text { vem- } \\ \text { her } \\ 1939 \end{gathered}$ | Decem ber 1938 |  | $\begin{gathered} \text { No- } \\ \text { vem- } \\ \text { ber } \\ \text { ber } \end{gathered}$ | December 1938 |
| All manufacturing industries combined | $\left\|\begin{array}{c} (1929-25 \\ =100) \\ 104 \end{array}\right\|$ | +0.3 | +10.7 | $\left\|\begin{array}{c} (1923-25 \mid \\ =100) \\ 103.6 \end{array}\right\|$ | +2.0 | +18.9 | \$26. 27 | +1.6 | +7.3 |
| Class I steam railroads : | 56.5 | -2.8 | +7.0 | (3) | (3) | ${ }^{(3)}$ | ${ }^{(3)}$ | ${ }^{(3)}$ | ${ }^{(3)}$ |
| Coal mining: | ${ }_{(1999}{ }_{109}=$ |  |  | ${ }_{(1099}(190)$ |  |  |  |  |  |
| Anthracite ${ }^{4}$ | 51.0 | -. 7 | -. 6 | 26.6 | $-36.7$ | -37.4 | 17. 16 | -36. 2 | -37.0 |
| Bituminous ${ }^{\text {a }}$ - | 93.2 | -1.8 | +4.3 +8 | 85.0 | -11.7 | +5.0 | 17.183 30.43 | $\stackrel{-10.1}{+1.0}$ | +.6 +1.7 |
| Quataliferous mining and nonmetailic | 67.2 | +1.2 | +8.0 | 65.3 | +2.2 | +20.6 | 30.43 | +1.0 | +11.7 |
| mining -----.-.- | 44.0 | $-6.5$ | +6.2 | 39.1 | -8.9 | +16.2 | 22.07 | -2.6 | +9.4 |
| Crude-petroleum producing. | 63.8 | +(5) | -5. | 59.1 | -. 8 | -5.3 | 33.46 | -. 9 | . 6 |
| Telephone and tolegraph | 74.7 | -. 4 | +.f | 95.0 | +. 6 | +2.8 | 031.29 | +1.1 | +2.2 |
| Electric light and power |  |  |  |  |  |  |  |  |  |
| Electric-railroad and motor- | 93.0 | -. 4 | +1.7 | 101.1 | -. 4 | +2.9 | - 34.09 | -. 1 | +1.1 |
| bus operation and main- |  |  |  |  | + | +1.6 | ${ }^{8} 33.32$ |  | +1.2 |
| rade: | ${ }^{69.6}$ | -. 3 | +. 3 | 70.8 | +. 4 | +1.6 |  |  |  |
| Wholesale | 92.2 | +. 1 | +2.4 | 79.1 |  | +4.5 | ${ }^{8} 29.85$ | +. | +2.1 |
| Retail | 101.0 | +12.3 | +3.0 | 82.7 | $+10.7$ | +4.4 | ${ }^{8} 20.19$ | -1.5 | +1.5 |
| General merchandising | 151.2 | +37.0 | +4.9 | 129.7 | +35.4 | +5.6 | ${ }^{\circ} 17.05$ | -1.2 | +. 6 |
| Other than general merchandising |  |  |  |  | +3.7 |  |  |  |  |
| Hotels (year-round) ${ }^{\text {d }}$ | 90.8 | ${ }_{-1.1}^{+3.8}$ | ${ }_{-1.3}^{+2.0}$ | 81.1 | +3.9 | 0 | ${ }^{-15.59}$ | $+.2$ | +1.3 |
| Laundrios ${ }^{\text {a }}$ | 95.5 | -. 1 | +2.3 | 83.7 | +1.0 | +4.6 | 18.07 | +1.1 | +2.2 |
| Drokerage | ${ }^{97.3}$ | -. 5 |  |  |  | +2.00 |  |  | +2.6 |
| Prokerage- | ${ }^{(3)}$ | -. 6 | -1.2 +1.5 | ${ }^{(3)}$ | +1.8 +1.3 | -1.3 + + | ${ }_{6}^{8} 37.41$ | +2.5 +1.2 | -1.1 |
| Building construction. | (3) | -6. 9 | +5.0 | (3) | - -1.0 | +12.0 | 30.91 | --. 1 | +6.6 |

1 Revised indexes-Adjusted to 1937 Census of Manufactures.
${ }^{2}$ Preliminary-Source: Interstate Commerce Commission.
3 Not a vailable.
4 Indexes adjusted to 1935 census. Comparable scries back to January 1929 presented in January 1938 issuc of this pamphlet.
${ }^{5}$ Less than 3 fo of 1 percent.
${ }^{6}$ A verage weekly earnings not strictly comparable with figures publisbed in issues of this pamphlet dated carlicr than January 1938 as they now exelude corporation oflicers, exccutives, and other employees whose duties are mainly supervisory.
${ }^{7}$ Cash payments only; the additional value of board, room, and tips cannot be computed.

## Public Employment

The completion of a number of projects brought employment on construction projects financed from Public Works Administration funds down to 167,000 in the month ending December 15, a decrease of 37,000 from the preceding month. The $\$ 15,913,000$ paid to workers on these projects was $\$ 3,239,000$ less than the amount paid in November.

Approximately 3,000 more building trades workers found employment on low-rent housing projects of the United States Housing Authority during the month ending December 15. Because of inclement weather that slowed work on some northern projects and the fact that a considerable number of the new employees worked only a small part of the month, wage payments to the $33,000 \mathrm{men} \mathrm{em}-$ ployed were $\$ 68,000$ less than in November. Pay rolls for December totaled $\$ 3,547,000$. These figures cover new construction and demolition and pertain only to those projects started under the United States Housing Authority; those formerly under the Public Works Administration are shown under the Public Works Administration building construction projects in this report.

Seasonal curtailment of works on public-road projects was again responsible for decreased employment on construction projects financed from regular Federal appropriations. Increases were reported on reclamation, ship construction, water and sewerage, and miscellancous projects while all other types of projects showed decreases. Employment on all types of projects for the month ending December 15 was 255,000 , a decrease of 21,000 from November. Pay-roll disbursements for the month were $\$ 27,294,000$.

Employment on construction projects financed by the Reconstruction Finance Corporation showed a loss of 300 , leaving 2,300 employed in the month ending December 15. Wage payments for the month amounted to $\$ 251,000$.

The seasomal increase of activity on work-relief projects of the Work Projects Administration continued in December, when 136,000 more persons were given employment. During the month $2,076,000$ persons were employed as compared with $1,940,000$ in November. Pay rolls of $\$ 107,856,000$ were $\$ 6,324,000$ greater than in November. Employment on Federal agency projects financed by the Work Projects Administration rose from 88,000 in November to 98,000 in December. Pay rolls were $\$ 4,745,000$.

Work projects of the National Youth Administration furnished employment to 34,000 additional youths during December, and 11,000 more students were added to the rolls of the Student Aid program. Pay-roll disbursements on the work projects amounted to $\$ 5,428,000$ and on the Student $\Lambda$ id program to $\$ 2,967,000$.

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The end of an enlistment period caused the number of persons employed in camps of the Civilian Conservation Corps to drop 26,000 in December. Of the 309,000 on the pay roll, 272,000 were enrollees; 200 , reserve officers; 1,600, educational advisers; 300, nurses; and 34,900 , supervisory and technical employees. Pay-roll disbursements for the whole group were $\$ 13,776,000$.

In the regular services of the Federal Gorernment increases were reported in the executive, judicial, and military services, while a decrease was reported in the legislative service. Of the 988,000 employees in the executive service 128,000 were working in the District of Columbia and 860,000 outside the District. Force-account employees (employees who are on the Federal pay roll and are engaged on construction projects) were 9.4 percent of the total number of employees in the executive service. Increased employment was reported in the Post Office Department, the Department of the Interior, and the War and Navy Departments, while a decrease was reported in the Federal Works Agency.

## Table 2.-Summary of Federal Employment and Pay Rolls, December and November 19391

[Preliminary figures]

| Class |  |
| :---: | :---: | ---: | ---: | ---: | ---: | ---: |

[^0]Further seasonal curtailment of work on State-financed road projects resulted in a decrease of 15,000 in the month ending December 15. Of the 122,900 at work, 19,100 were engaged in the construction of new roads and 103,800 on maintenance. Pay rolls for both types of road work were $\$ 9,030,000$.

A summary of Federal employment and pay-roll data for December is given in table 2.

The value of material orders placed on projects financed from regular Federal appropriations during the fourth quarter of 1939 amounted to $\$ 134,127,000$. Approximately 256,000 man-months of labor were involved in the final fabrication of these materials. On P. W. A. projects orders were placed for $\$ 110,913,000$ worth of matcrials, for which it is estimated 246,000 man-months of labor were required in final fabrication processes.

The value of material orders placed on the various programs financed by Federal funds during the fourth quarter of 1939, the third quarter of 1939, and the fourth quarter of 1938, and the man-months of employment created in the final fabrication of the materials used are shown in table 3 .

Table 3.-Value of Material Orders Placed on Projects Financed Wholly or Partially From Federal Funds and Number of Man-Months of Labor Created
[Subject to revision]

| I'rogram | Value of nıaterial orders placed |  |  | Man-months of labor created in final fabrication |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | lourth quarter of 1939 | Third quarter of 1939 | Fourth quarter of 1938 | Fourth quarter of 1039 | Third quarter of 1839 | Fourth quarter of 1938 |
| 1'ublic Works Administration ${ }^{1}$.-- | \$110, 913, 497 | \$125, 182, 989 | \$98, 308, 311 | 246, 106 | 278, 558 | 225, 427 |
| U. S. H. A. low-rent housing .-... | 16, 891, 497 | 10,377, 907 | 777, 340 | 39,586 | 23,818 | 1,816 |
| Reconstruction Finance Corporation 2 | 1,289,226 | 1,333, 694 | 2, 167, 276 | 2,628 | 2,711 | 4,899 |
| Regular Federal appropriations. | 134, 126, 867 | 136,010, 243 | 95, 778, 006 | 255,933 | 253, 612 | 179,002 |
| Federal agency projects financed from W. P. A. funds ${ }^{3}$ | 2, 108, 885 | 2,153,037 | 4,535,813 | 4,329 | 4, 270 | 9,332 |
| Projects operated by W. P. $\Lambda \ldots \ldots$. Rentals and services on projects |  | 81, 042,086 | 91, 685, 578 | (4) |  | 201, 381 |
| operated by W. P. A....-.......- | (1) | 58, 344, 111 | 67,257, 539 | (4) | (4) | (4) |

[^1]
## DETAILED TABLES FOR DECEMBER 1939

## Industrial and Business Employment

MONTHLY reports on employment and pay rolls are available for the following groups: 90 manufacturing industries; 16 nonmanufacturing industries, including private building construction; and class I steam railroads. The reports for the first two of these groupsmanufacturing and nonmanufacturing-are based on sample surveys by the Bureau of Labor Statistics. The figures on class I steam railroads are compiled by the Interstate Commerce Commission and are presented in the foregoing summary.

## EMPLOYMENT, PAY ROLLS, HOURS, AND EARNINGS

The indexes of employment and pay rolls as well as average hours worked per week, average hourly earnings, and average weekly carnings in manufacturing and nonmanufacturing industries in December 1939 are shown in table 4. Percentage changes from November 1939 and December 1938 are also given.

The employment and pay-roll indexes, as well as average hours worked per week, average hourly earnings, and average weekly earnings for October, November, and December 1939, where available, are presented in table 5. The October and November figures, where given, may differ in some instances from those previously published, because of revisions necessitated primarily by the inclusion of late reports.

The average weekly earnings shown in tables 4 and 5 are computed by dividing the total weekly pay rolls in the reporting establishments by the total number of full- and part-time employees reported. As not all reporting establishments supply man-hours, average hours worked per week and average hourly earnings are necessarily based on data furnished by a smaller number of reporting firms. The size and composition of the reporting sample vary slightly from month to montl. Therefore, the average hours per week, average hourly earnings, and average weekly carnings shown nay not be strictly comparable from month to month. The sample, however, is believed to be sufficiently adequate in virtually all instances to indicate the general movements of earnings and hours over the period shown. The changes from the preceding month, expressed as percentages, are based on identical lists of firms for the 2 months, but the changes from December 1938 are computed from chain indexes based on the month-to-month percentage changes.

Table 4.-Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, December 1939

## manufacturing

[Indexes are based on 3 -sear average, $1923-25=100$. New series-adjusted to 1037 Census of Manufactures for all industries except autoniobiles, and not comparable to indexes published in the July 1939 and carlier issues of the pamphlet. Comparable series available upon request]

| Industry | Employment |  |  | Puy rolls |  |  | A vorage weekly earnings ${ }^{1}$ |  |  | Average hours worked per week I |  |  | $\begin{gathered} \text { A verage hourly } \\ \text { earnings } 1 \end{gathered}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Index Decem ber1939 1939 | Percentage change from- |  | Index ber 1939 | Percentage change fron- |  | Decem-ber1939 | Pcrcentage change from- |  | Decem- <br> ber <br> 1930 | Percentage change from- |  | $\begin{gathered} \text { Decem }- \\ \text { ber } \\ 1939 \end{gathered}$ | Percentage change frota- |  |
|  |  | $\begin{gathered} \text { Novern- } \\ \text { ber } \\ 1939 \end{gathered}$ | December 1938 |  | Norem ber 1939 | $\begin{gathered} \text { Decem. } \\ \text { ber } \\ 1938 \end{gathered}$ |  | Novem- ber 1939 | Decem- <br> ber <br> 1038 |  | Novem- ber 1939 | $\left\|\begin{array}{c} \text { Decem- } \\ \text { ber } \\ 1938 \end{array}\right\|$ |  | $\begin{gathered} \text { Novem- } \\ \text { ber } \\ 1939 \end{gathered}$ | $\begin{aligned} & \text { Decem- } \\ & \text { her } \\ & 1935 \end{aligned}$ |
|  | 104.1 | +0.3 | +10.7 | 108.6 | +2.0 | +18.9 | \$26.27 | +1.6 | +7.3 | 38.6 | +0.1 | +3.1 | Cents | +1.4 | +3.2 |
| Durable goods..... Nondurable goods. | 100.1 | +1.9 -1.2 | +19.5 +8.9 | $\begin{aligned} & 104.4 \\ & 102.8 \end{aligned}$ | +8.5 +.4 | +31.2 +7.8 | $30.08$ $22.32$ | +1.6 +1.6 | +9.8 +3.7 | $\begin{array}{r} 39.5 \\ 87.7 \end{array}$ | -.3 +.8 | +6.3 +.3 | 72.8 60.5 | +1.5 +1.0 | +2.4 +2.7 |
| Durable goods |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Iron and steel and their products, not including machinery | 111.4 | +. 2 | +23.5 | 115.4 | +. 6 | +39.6 | 30.72 | +. 5 | +13.0 | 39.4 | -. 5 | +10.2 | 77.2 | +. 6 | +19 |
| Blast furnaces, steel works, and rolling milis. | 123.3 | +1.2 | +23.5 | 129.2 | +1.4 | +50.8 | 33.19 | +. 2 | +15.5 | 39.0 | -. 5 | +14.7 | 85.1 | +. 4 | +.9 |
| Bolts, nuts, washers, and rivets..........-...-- | 119.8 | +1.2 | +23.6 | 143.4 | +. 7 | +37.3 | 29.20 | $-.5$ | +11.0 | 42.7 | $-.7$ | +12.3 | 68.4 | +. 1 | $-.8$ |
|  | 77.5 | +.1 | +8.9 | 71.7 | $-2.9$ | +21.1 | 22.43 | -3.0 | +11.2 | 37.9 | $-3.7$ | +10.9 | 58.7 | $+.8$ | +. 2 |
| Cutlery (not including silver and plated cutlery) and edge tools | 108.7 | -. 5 | +20.8 | 101.0 | +. 1 | +21.4 | 24.46 | $+.7$ | +. 4 | 41.3 | -. 1 | +2.8 | 60.2 | +. 4 | $-1.7$ |
| Forgings, iron and steel. | 72.6 | +3.6 | +29.0 | 88.2 | +5.3 | +46.3 | 33.05 | +1.7 | +13. 1 | 42.1 | +. 8 | +9.7 | 78.6 | +. 9 | $+3.4$ |
| Lardware..... | 105.6 | -. ${ }^{\text {S }}$ | $+16.2$ | 117.0 | -1.3 | +25.6 | 27.44 | -. 5 | +8. 3 | 40.2 | +. 1 | +6.2 | 68.0 | $-.7$ | $+1.8$ |
| Plumbers' supplies--- | 83.9 | +. 9 | +14.0 | 77.7 | $+{ }^{(2)}$ | $+27.6$ | 26.96 | -. 9 | +12. 1 | 39.4 | -. 7 | +10.1 | 68.4 | -. 2 | +1.8 |
| Stamped and enameled ware .-................... | 165.6 | -. 4 | +12.7 | 173.7 | +1.4 | +14.6 | 25.01 | +1.8 | +1.7 | 39.4 | -. 2 | +2.0 | 63.4 | +2.1 | -. 1 |
| steam and hot-water heating apparatus and steam fittings. | 86.2 | $-1.3$ | +17.0 | 79.9 | +. 2 | $+32.6$ | 28.38 | +1.5 | +13.2 | 40.2 | +. 3 | +12.4 | 70.5 | +1.1 | +. 7 |
|  | 89.3 | $-7.0$ | $+13.0$ | 78. 5 | -11.3 | +16.8 | 25.24 | -4.6 | +3.0 | 38.0 | -3.5 | +3.4 | 66.9 | -. 6 | -. 1 |
| Structural and ornamental metalwork.......... | 75.3 96.1 | -5.8 | +22.9 +8.8 | 67.7 100.4 | $\pm$ | +31.2 +125 | 29.03 23.63 | +1.8 +.5 | +6.7 +3.5 | 39.6 38.6 | $\pm$ | +5.1 +8 | 73.4 61.9 | +1.2 + | +1.4 +2.1 |
| Tin cans and other tinware ${ }_{\text {Tools }}$ (not including edlge tools, machine tools, | 96.1 | -5.2 | +8.8 | 100.4 | -4.7 | +12.5 | 23.63 | +. 5 | +3.5 | 38. 6 | -. 8 | +. 8 | 61.9 | +. 7 | +2.1 |
| fles, and saws) ................................... | 97.0 | +1.7 | +16.0 | 102.2 | $+5.0$ | +27.7 | 26.60 | +3.2 | +10.3 | 43.0 | +2.5 | +7.1 | 62.2 | +. 6 | +2.9 |
| Wirework.......- | 176.4, | , +2.1 | +8.8 | 204.4 | +2.4 | $+21.0$ | 28.81 | +.3 | +11.2 | 40.9 | -. 4 | $+6.6$ | 70.5 | +. 7 | +4.4 |

Table 4.-Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, December 1939-Continued MANUFACTURING-Continued
[Indexes are based on 3 -year average, $1923-25=100$. Now series-adjusted to 1937 Census of Manufactures for all industries except automobiles and not comparable to indexes published in the July 1939 and earlier issues of the pamphlet. Comparable series available upon request]

| Industry | Employment |  |  | Pay rolls |  |  | A verage weekly earnings |  |  | A verage hours worked per week |  |  | $\begin{aligned} & \text { A reraze hour!y } \\ & \text { earnings } \end{aligned}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Index ber 1939 | Percentage change from- |  | IndexDecem:ber1938 | Percentage change from- |  | $\begin{gathered} \text { Decem- } \\ \text { ber } \\ 1939 \end{gathered}$ | Percentare change from- |  | $\begin{gathered} \text { Decem- } \\ \text { ber } \\ 1939 \end{gathered}$ | Percentage change from- |  | Decem-ber1939 | Percentage change from- |  |
|  |  | Novem- ber 1939 | $\begin{gathered} \text { Decem- } \\ \text { ber } \\ 1938 \end{gathered}$ |  | Novem-1 ber 1939 | $\begin{aligned} & \text { ecerm } \\ & \text { ber } \\ & 1938 \end{aligned}$ |  | Novem- ber 1939 | December 1938 |  | $\left\lvert\, \begin{gathered} \text { Norern-i } \\ \text { ber } \\ 1939 \end{gathered}\right.$ | Decem ber 1938 |  | $\begin{gathered} \text { Novem. } \\ \text { ber } \\ 1939 \end{gathered}$ | Decern- ber 1939 |
| Durable goods-Continued |  |  |  |  |  |  |  |  |  |  |  |  | Cents |  |  |
| Machinery, not including transportation equipment | 113.1 | +1.9 | +23.1 | 122.1 | +4.3 | +38.0 | \$30. 25 | +2.4 | +12. 1 | 41.8 | +1.1 | +10.2 | 73.2 | +1.1 | +1.5 |
| Agricultural implements (including tractors).. | 130.9 | +5.1 | +18.7 | 151.5 | +7.8 | +23.7 | 31.07 | +2.6 | +4.2 | 39.3 | +1.7 | +5.2 | 79.3 | +. 7 | -1.1 |
| lating machines .-.............................. | 128. 1 | +. 8 | $-3.3$ | 131.6 | +2.3 | +9.8 | 32.48 | +1. 5 | +13.6 | 39.4 | +1.2 | +12. 2 | 82.8 | +. 3 | +. 6 |
| Electrical machinery, apparatus, and supplies | 102.6 | +2.1 | +21.2 | 114.2 | +4.1 | +32.6 | 29.89 | +2.0 | +9.2 | 40.4 | +. 3 | +8.6 | 74.2 | +1.6 | $+.6$ |
| Engines, turbines, water wheels, and windmills. | 119.8 | +9.1 | +41.3 | 156.8 | +12.8 | +64. 6 | 34.56 | +3.4 | +16.5 | 43.0 | +2.2 | +14.0 | 80.7 | +1.0 |  |
| Foundry and machineshop products. | 97.2 | +1.9 | +22. 6 | 98.6 | +4.6 | $+39.2$ | 30.35 | +2.6 | +13.5 | 41.7 | +1.8 | +11.6 | 72.7 | +. 7 | +1.8 |
| Machine tools.. | 192. 2 | +4.5 | +51.6 | 256.2 | $+7.7$ | +97.5 | 37.03 | +3.1 | +30.3 | 48.2 | +2.2 | +25.4 | 77.0 | +. 8 | +4.1 |
| Radios and phonographs. | 162.3 | -9.6 | +24.5 | 148.8 | $-12.6$ | +26.0 | 22.71 | -3.3 | +1.2 | 38.6 | -4.2 | $-1.0$ | 59.0 | +1.0 | +2.1 |
| Textile machinery and par | 85.7 | +1.7 | +24.5 | 85.7 | +3.9 | +31.8 | 27.48 | +2.2 | +5.7 | 41.5 | +1.0 | $+1.5$ | 66.3 | +1.1 | +4.0 |
| Typewriters and parts Transportation equipment | 127.3 | $\begin{array}{r}\text {-1. } \\ +1.4 \\ \hline\end{array}$ | -1.2 +20.4 | 121.5 122.5 | -3.3 +16.9 | -5.4 +25.4 | 23.41 84.08 | -2.8 +2.2 | -4.3 +4.2 | 3 A. 6 38.1 | -3.6 +1.8 | +4.0 +5.3 | 64.0 89.6 | +.8 +1.1 | -. 3 |
| A ircraft ............. | 1,886.0 | +7.8 | +119.5 | 1,777.9 | +3.5 | +103.9 | 29.39 | -4.0 | -7.1 | 42.3 | +1.2 | +.5 + | 73.5 | -1.8 | -3.7 |
| Automobiles. | 118.4 | $+15.7$ | +10.8 | 125.8 | +18.5 | +17.1 | 35. 13 | +2.4 | +5.6 | 37.6 | +1.2 | +4.6 | 93.3 | +1.1 | +. 9 |
| Cars, electric- | 52.1 | +12.0 | $+60.9$ | 46.8 | $+16.3$ | +75.9 | 28.12 | $+3.9$ | +9.3 | 38.6 | $+3.9$ | +9.2 | 72.9 | $-1$ | -( ${ }^{\text {P }}$ |
| Locomotives | 28.0 | $+7.4$ | +67.2 | 27. 5 | +9.5 | $+99.3$ | 30. 12 | +2.0 | +18.9 | 38.6 | $+1.6$ | +17.2 | 78.1 | $+.4$ | +1.4 |
| Shipbuilding Nonferrous metals and their products | 139.4 112.9 | +5.0 +.5 | +34.2 +19.5 | 152.8 116.5 | +8.4 +1.0 | +38.4 | 32.90 28.67 | +3.3 +1.5 | +3.1 +11.9 | 38.2 40.9 | +1.1 +.8 | +2.0 +5.8 | 85.8 70.3 | +1.5 +1.9 | +1.2 +5.0 |
| Aluminum manufactures........ | 170.4 | -2. 2 | +30.0 | 196.8 | +. 7 | +40.4 | 28.22 | +3.0 | +8.1 | 40.3 | $-.7$ | +4.9 | 70.0 | +3.6 | +2.6 |
| Brass, bronze, and copper products.......-.... | 137.7 | +. 3 | +30.1 | 158.9 | +1.2 | +54.3 | 31.63 | +1.0 | +18.5 | 41.8 | +. 2 | +10.6 | 75.8 | +.8 | +7.2 |
| Clocks and watches and time-recording devices. | 93.1 | -. 1 | +12.3 | 96.9 | -2.8 | +21.6 | 23.09 | -2.7 | +8.3 | 39.1 | -3.2 | +4.0 | 59.6 | $+.5$ | +4.1 |
| Jewelry... | 98.6 | -7.9 | +5.7 | 86.5 | -4.9 | +6.7 | 24.63 | +3.2 | +1.1 | 40.1 | -2.2 | -1.9 | 61.2 | +5.9 | +1.6 |
| Lighting equipment. | 98.0 | +4.9 | +11.4 | 84.7 | +8.3 | +20.3 | 27.88 | +3.2 | $+8.0$ | 39.9 | +. 2 | $+6.4$ | 70.0 | +3.1 | +1.8 |
| Silverware and plated ware .-.-..-.....-.-...- Smelting and refining-copper, lead, and zine-- | 76.7 86.9 | +.7 +1.1 | +10.8 +11.3 | 76.2 87.8 | +1.4 +3.0 | +13.5 +19.1 | 28.72 28.36 | +7 <br> +1.9 | +2.3 +6.9 | 44.2 39.6 | +.6 +1.3 | +2.0 +2.9 | 65.1 7 | +.3 +.8 | +4.1 |



Table 4.-Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, December 1939-Continued MANUFACTURING-Continued
[Indexes are based on 3-year average, $1923-25=100$. New series-adjusted to 1937 Census of Nanufactures for all industries except automobiles, and not comparable to indexes e, $1923-25=100$ New series-adjusted to 1937 Census of NTanufactures for all industries except automot
published in the July 1939 and carlier issues of the pamphlet. Comparable series available upon rerquesi]

| Indusiry | Employment |  |  | Pay rolls |  |  | Average weekly earnings |  |  | Averaze hours worked per week |  |  | Average hourly earnings |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | IndexDecern-ber1939 | Percentage change from- |  | Index December 1939 | Pereentage change from- |  | $\begin{gathered} \text { 1)eccm- } \\ \text { ber } \\ 1939 \end{gathered}$ | Pereentage change from- |  | $\begin{aligned} & \text { Decem- } \\ & \text { ber } \\ & \mathbf{1 9 3 9} \end{aligned}$ | Percentage change from- |  | Decem-ber1939 | Percentage change from- |  |
|  |  | Novem-ber <br> 1939 | Decem ber 1938 |  | Novem- ber 1939 | ccem ber 1938 |  | Novem- ber 1939 | Decem her 1938 |  | $\left\lvert\, \begin{gathered} \text { Novem- } \\ \text { ber } \\ 1939 \end{gathered}\right.$ | $\begin{gathered} \text { Decem- } \\ \text { ber } \\ 1938 \end{gathered}$ |  | $\begin{gathered} \text { Novem } \\ \text { ber } \\ 1939 \end{gathered}$ | $\begin{aligned} & \text { Deceml- } \\ & \text { ber } \\ & 1988 \end{aligned}$ |
| Nondurable goods-Centinued |  |  |  |  |  |  |  |  |  |  |  |  | Cents |  |  |
| Paper and printing | 118.5 | +0.9 | +4.7 | 116.8 | +2.3 | +7.6 | 829.51 | +1.4 | +2.9 | 39.4 | + ${ }^{(2)}$ | +2.1 | 78.2 | +0.9 | +1.2 |
| Boxes, paper. | 124.9 | -3.1 | +10.6 | 136.9 ! | -5.8 | +12.3 | 21.92 | -2.8 | +1.4 | 40.1 | $-3.7$ | +(2) | 55.0 | $+8$ | +1.3 |
| Paper and pulp ${ }^{\text {Printing and publishing:-7, }}$ | 115.1 |  | +8.3 | 122.5 | -1.7 | +18.4 | 26.19 | -1.6 | +9.2 | 41.6 | -1.9 | +6.5 | 63.1 | +. 3 | +2.6 |
| Hook and job--...- | 104.1 | +3.0 | +1.4 | 94.1 | +6.2 | +3.0 | 31.63 | +3.0 | +1.0 | 39.6 | +2.5 | +1.0 | 80.9 | +. 4 | +1.4 |
| Newspapers and periodicals | 118.6 |  |  | 115.0 | +5.2 | +2.9 | 39.04 | +3.4 | +1.0 | 36.7 | +2.2 | 7.5 | 102.7 | +. 8 | +2.2 |
| Chemical, petroleum, and coal products Petroleum refining | 122.3 | -.2 <br> -1.1 | +7.0 +2.5 | 133.8 <br> 137.6 <br> 1 | +.2 +.2 | +11.7 +2.5 | 29.68 <br> 35.27 | +.4 +.9 | +4.4 +.1 | 39.0 30.4 | +.8 <br> +1.1 | +1.9 +.3 | 75.2 97.2 | -.1 -.1 | +2.7 +.1 |
| Otrolcum refining----.--7.-. | 122.3 <br> 122 | -1.1 | +2.5 +8.0 | 137.6 132.0 | +. ${ }_{+}$ | +2.5 +15.1 | 35.27 <br> 27.37 | +.9 +.4 | +6.15 | 36.4 39.8 | +1.1 +1 | +2.8 | 97.2 67.7 | +. 1 | +4.1 +4.8 |
| Chemicals...- | 137.4 | $-1$ | +15. 5 | 162.1 | +. 5 | +22.6 | 32. 45 | +. 6 | +6.2 | 40.3 | +. 1 | +2.8 | 80.2 | +. 4 | +3.1 |
| Cottonsecd-oil, cake, and mea | 114.9 | -4.0 | $-12.3$ | 110.2 | -4.0 | +4.1 | 15. 64 | 0 | +18.6 | 46.2 | +. 5 | +4.1 | 33.1 | $-.1$ | +13.3 |
| Druggists' preparation | 118.8 | +.9 | +7.5 | 132.2 | +. 8 | +10.2 | 25. 22 | $-1$ | $+2.6$ | 40.2 | $-1.0$ | +1.2 | 60.0 | +. 7 | +1.6 |
| Explosives......- | 107.8 | $+1.6$ | +25.0 | 128.7 | $+.9$ | +29.1 | 32.74 | $-.7$ | $+3.3$ | 39.5 | -1.1 | $-1$ | 82.8 | $+3$ | $+3.3$ |
| Fertilizers.- | 102.2 | +11.7 | +10.8 | 82.2 | +8.3 | +16.9 | 14.65 | $-3.6$ | +3.9 | 34. 2 | $+6$ | $+{ }_{+}^{+3}$ | 42.8 | -4.2 | +5.4 |
| Paints and varnishes.-- Rayou and allied produ | 124.2 312.2 | -. 7 | +6.1 +4.6 | 130.5 314.0 | +-. 7 | +10.9 +13.5 | 28.75 25.82 | 0 +1.6 | +3.6 +8.5 +8.5 | 40.3 <br> 38.8 | +.2 +.6 | +1.9 +5.0 | 71.4 66.5 | -.3 +.9 | +1.7 +3.4 |
| Rayon and allied product | ${ }^{312.2}$ 85. ${ }^{\text {a }}$ | -3.9 | + +7.8 | 102.1 | +2.3 | +9.5 +9.4 | 28.09 <br> 28.09 | +1.8 | +8.5 <br> +1.4 | 38.7 39.7 | +. | +5.0 +2.0 | 70.7 | +1.5 | --4 |
| Rubber products. | 93.0 1 | -1.0 | +11.4 | 100.5 | +.7 | +15.8 | 29.50 | +1.7 | +3.9 | 38. 1 | +. 2 | +1.4 | 77.6 | +1.1 | +2.2 |
| Rubber boots and shoes | 63.11 | +1.2 | +.3 | 65.7 | $-1.3$ | +3.4 | 23.90 | $-2.5$ | +3.2 | 39.1 | -2.4 | +.8 | 61.1 | -1 | $+2.4$ |
| Rubber tires and inner tubes | 74.7 | +.2 | +12.1 | 89.9 | +4.6 | +16.8 | 35.11 | +4.4 | +4.2 +3.5 | 36.1 | $\pm 3.0$ | +2.7 | 97.4 | +1.4 | +1.5 +3.0 |
| Rubber goods, other. | 156.5 | -3.0 | +14.6 | 155.4 | -4.4 | +18.6 | 24.19 | -1.5 | +3.5 | 39.9 | -1.5 | +. 5 | 61.2 | +. 1 | +3.0 |

NONMANUFACTURING
[Indexes are based on 12-month arerage, 1929=100]

| Coal mining: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Anthracite ${ }^{3}$ | 51.0 | -0.7 | -0.6 | 26.6 | $-36.7$ | $-37.4$ | \$17.16 | $-36.2$ | -37.0 | 18.9 | -34. 6 | -36.3 | 91.2 | -1.2 | -0.7 |
| Bituminous ${ }^{3}$. | 93.2 | -1.8 | +4.3 | 85.0 | -11.7 | +5.0 | 24.83 | -10.1 | +. 6 | 28.3 | $-10.3$ | +1.5 | 89.0 | +. 4 | -. 3 |
| Metalliferous mining | 67.2 | +1.2 | +8.0 | 65.3 | +2.2 | +20.6 | 30.43 | +1.0 | +11. 7 | 41.4 | +. 5 | +4.8 | 73.9 | $+.5$ | +6.8 |
| Quarrying and nommetallie mining | 44.0 | -6.5 | +6.2 | 39.1 | -8.9 | +16. 2 | 22.07 | -2.6 | $+9.4$ | 39.5 | -2.0 | +4.1 | 56. J | +. 1 | +5.2 |
| Crude-petroleum producing .---..- | 63.8 | +( ${ }^{2}$ ) | $-5.9$ | 59.1 | -. 8 | -6. 3 | 33.46 | -. 9 | +. 6 | 38.0 | $-1.0$ | $-1.5$ | 88.5 | +. 1 | +1.9 |
| Public utilities: <br> Telcphone and telegraph 4 . | 74.7 | -. 4 | +. 6 | 95.0 | +. 6 | $+2.8$ | 31.29 | +1.1 | +2.2 | 38.9 | 0 | -. 3 | 80.8 | +1.1 | +2.7 |
| Electric light and power and manufactured |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 93.1 | -. 4 | +1.7 | 101.1 | -. 4 | +2.9 | 34.09 | -. 1 | +1.1 | 39.6 | -. 9 | -. 5 | 86.0 | +. 8 | +1. 5 |
| maintenance ${ }^{\text {a }}$ and motor bus operation and | 69.6 | -. 3 | +. 3 | 70.8 | +. 4 | +1.6 | 33.32 | +. 7 | +1.2 | 46.1 | +. 7 | +. 6 | 71.7 | +. 2 | +. 9 |
| Trade: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wholesale ${ }^{4}$ | 92.2 | +. 1 | +2.4 |  | +. 1 | +4.5 | 29.85 | +. 1 | +2.1 | 41.7 | +. 4 | -. 5 | 71.3 | -. 3 |  |
|  | 101.0 151.2 | +19.3 +37.0 | +3.0 +4.9 | 82.7 109.7 | +10.7 +35.4 | +4.4 +5.8 +5.8 | 20.19 17.05 | -1.5 | +1.5 +6 | 42.9 41.2 | +1.3 +6.1 | -. 2 | 52.8 43.9 | -3.7 | +1.2 |
| General merchandising ${ }^{\text {a }}$--- Other than general nichandising | 151.2 87.8 8 | +37.0 +3.8 | +4.9 +2.0 | 129.7 73.0 | +35.4 +3.7 | +5.8 +4.0 | 17.05 24.01 | -1.2 | +.6 +1.9 | 41.2 43.7 | +6.1 +.3 | +.3 +.3 | 43.9 56.8 | -7.5 -.9 | +.1 +1.9 |
| Other than general nicrchandising Hotels (year-round) | 87.8 90.8 | +3.8 -1.1 | +2.0 -1.3 | 73.0 81.1 | +3.7 +.9 | +4.0 0 | 24.01 | -.1 +.2 | +1.9 +1.3 | 43.7 <br> 48.4 | +.3 | -(3) | 56.8 <br> 33.1 <br> 1 | -.9 +.2 | +1.9 +1.2 |
| Laundries ${ }^{3}$. | 95.5 | $-1.1$ | +2.3 | 83.7 | +1.0 | +4.6 | 18.07 | +1.1 | +2.2 | 42.9 | +.8 | $-.1$ | 42.2 | +.2 | +2.1 |
| 1)ycing and cleaning | 97.3 | -. 5 | $-6$ | 69.7 | $-1.6$ | +2.0 | 19.83 | $-1.1$ | +2.6 | 41.4 |  | $\bigcirc$ | 49.5 | -1.1 | +3.5 |
| Brokerage ${ }^{\text {4 }}$ - . . .-.... | (i) | $-.6$ | $-1.2$ | (i) | +1.8 | $-1.3$ | 37.41 | +2.5 | -. 1 | ${ }^{(0)}$ | (6) | (6) | ${ }^{(6)}$ | (6) | (6) |
| Insurance ${ }^{\text {d }}$ | (3) | +. 1 | +1.5 | (i) | +1.3 | +. 4 | 35.63 | +1.2 | -1.1 | $\left.{ }^{6}\right)$ | (6) | (5) | (6) | (6) |  |
| Building constructio | (9) | $-6.9$ | +5.0 | (6) | -7.0 | +12.0 | 30.91 | -. 1 | +6.6 | 32.8 | -1.9 | +3.2 | 94.3 | +1.7 | +3.0 |

[^2]2 Iess than $1 / 0$ of 1 percent
Indexes adjusted to 1935 census. Comparable series back to January 1929 presented \& Average weekly carnings, hourly earnings, and hours not. strictly comparable with figures published in pamphlets prior to January 1939 as they now exclutce corporation hecrs, executives, and other employees whose duties are maing and fisory. puted.

Table 5.-Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries

## MANUFACTURING

[Indexes are based on 3-year average, 1923-25 $=100$, and are adjusted to 1937 Census of Manufactures for all industries except automobiles and not comparable to indexes published in pamphlets prior to August 1939. Comparable series available upon request]

| Industry | Employment index |  |  | Pay-roll index |  |  | A verage weekly earnings 1 |  |  | A verage hours worked per week ${ }^{1}$ |  |  | A verage hourly earnings 1 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Decem- ber 1039 | $\begin{gathered} \text { Novem- } \\ \text { ber } \\ 1939 \end{gathered}$ | October 1939 | $\begin{gathered} \text { Decem- } \\ \text { ber } \\ 1939 \end{gathered}$ | $\begin{gathered} \text { Novem- } \\ \text { ber } \\ 1039 \end{gathered}$ | October 1939 | $\begin{gathered} \text { Decem- } \\ \text { ber } \\ 1939 \end{gathered}$ | Novemher 1939 | October 1939 | $\begin{gathered} \text { Decem- } \\ \text { ber } \\ 1939 \end{gathered}$ | $\begin{gathered} \text { Novem- } \\ \text { ber } \\ 1939 \end{gathered}$ | $\begin{aligned} & \text { Octo- } \\ & \text { ber } \\ & 1939 \end{aligned}$ | $\begin{gathered} \text { Decem- } \\ \text { ber } \\ 1939 \end{gathered}$ | $\begin{gathered} \text { Novem- } \\ \text { ber } \\ 1939 \end{gathered}$ | $\begin{gathered} \text { Octo- } \\ \text { ber } \\ 1939 \end{gathered}$ |
| All manufacturing | 104.1 | 103.8 | 103.6 | 109.6 | 101.6 | 101. 6 | \$26.27 | \$25.73 | \$25.81 | 38.6 | 38.5 | 39.1 | Cents 66.2 | $\begin{array}{r} \text { Cents } \\ 65.3 \end{array}$ | Cents 64.6 |
| Durable goods.-. Nondurable goods | 100.1 107.9 | 98.2 109.2 | 98.1 110.8 | 104.4 102.8 | 100.9 102.4 | $\begin{array}{r} 99.6 \\ 103.9 \end{array}$ | $\begin{aligned} & 30.08 \\ & 22.32 \end{aligned}$ | 29.42 22.02 | $\begin{aligned} & 29.71 \\ & 22.02 \end{aligned}$ | 39.5 | 39.6 37.6 | 40.1 38.2 | 72.8 60.5 | 71.5 58.9 | $\begin{aligned} & \overline{71.3} \\ & 59.0 \end{aligned}$ |
| Durable goods |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Iron and steel and their products, not including machinery | 111.4 | 111.2 | 108. 8 | 115.4 | 114.7 | 112.1 | 30.72 | 30. 54 | 31.09 | 39.4 | 39.6 | 40.3 | 77.2 | 78.7 | 76.4 |
| Blast furnaces, steel works, and rolling mills.... | 123.3 | 121.8 | 115.1 | 129.2 | 127.3 | 123.6 | 33.19 | 33.08 | 33.91 | 39.0 | $39: 2$ | 40.0 | 85.1 | 84.7 | 84.8 |
| Bolts, nuts, washers, and rivets | 119.8 | 118.3 | 113.4 | 143.4 | 142.4 | 137.5 | 29.20 | 29.32 | 29.56 | 42.7 | 43.0 | 42.8 | 68.4 | 68.2 | 68.9 |
|  | 77.5 | 77.4 | 76.6 | 71.7 | 73.9 | 71.4 | 22.43 | 23.12 | 22.60 | 37.9 | 39.4 | 38.5 | 58.7 | 58.3 | 58.3 |
| lery) and edge tools. | 108.7 | 109.3 | 103.9 | 101. 9 | 101.7 | 94.2 | 24.46 | 24. 22 | 23.54 | 41.3 | 41.3 | 41.0 | 60.2 | 59.8 | 58.8 |
| Forgings, iron and steel | 72.6 | 70.1 | 65.2 | 88.2 | 83.7 | 74.7 | 33.05 | 32. 59 | 31.24 | 42.1 | 41.8 | 40.4 | 78.6 | 78.1 | 77.4 |
| Hardware,-....-.- | 105.6 | 106.4 | 99.7 | 117.0 | 118.6 | 109.6 | 27.44 | 27.58 | 27.13 | 40.2 | 40.3 | 40.2 | 68.0 | 68.5 | 67.6 |
| Plumbers' supplies. | 83.9 | 83.2 | 82.1 | 77.7 | 77.6 | 79.9 | 26.96 | 27.07 | 28.18 | 39.4 | 39.7 | 41.3 | 68.4 | 68. 2 | 68.3 |
| Stamped and enameled ware | 165.6 | 166.3 | 163.6 | 173.7 | 171.3 | 172.7 | 25.01 | 24.49 | 25.08 | 39.4 | 39.3 | 40.4 | 63.4 | 62.2 | 62.1 |
| Steam and hot-water heating apparatus and steam fittings. | 86.2 | 87.3 | 86.4 | 79.9 | 79.8 | 83.3 | 28.38 | 28.00 | 29.49 | 40.2 | 40.1 | 41.8 | 70.5 | 69.9 | 70.6 |
| Stoves -------. | 89.3 | 96.0 | 97.4 | 78.5 | 88.4 | 93.9 | 25.24 | 26.51 | 27.68 | 38.0 | 39.3 | 41.2 | 66.9 | $6 \overline{6} .4$ | 67.4 |
| Structural and ornamental metalwork | 75.3 | 76.0 | 76.3 | 67.7 | 67. 1 | 68.3 | 29.03 | 28. 52 | 28.87 | 39.6 | 39.3 | 39.9 | 73.4 | 72.5 | 72.5 |
| Tin cans and other tinware | 96.1 | 101.3 | 105.7 | 100.4 | 105.4 | 111.3 | 23.63 | 23.52 | 23.86 | 38.6 | 38.6 | 39.1 | 61.9 | 61.4 | 61.0 |
| Tools (not including edge tools, machine tools, files, and saws) | 97.0 | 95.3 | 91.1 | 102.2 | 97.3 | 92.2 | 26.60 | 25.77 | 25.58 | 43.0 | 41.7 | 41.2 | 62.2 | 62.0 | 62.2 |
|  | 176.4 | 172.8 | 165.9 | 204.4 | 199.7 | 183.3 | 28.81 | 28.73 | 27.47 | 40.9 | 41.1 | 40.3 | 70.5 | 70.0 | 68.2 |
| Machinery, not including transportation equipment. | 113.1 | 111.0 | 108. 6 | 122.1 | 117.1 | 111.0 | 30.25 | 29.51 | 29.20 | 41.3 | 40.9 | 40.6 | 78.2 | 72.3 | 72.1 |
| Agricultural implements (including tractors)-- | 130.9 | 124.6 | 117.8 | 151. 5 | 140.5 | 131.3 | 31.07 | 30.27 | 29.92 | 39.3 | 38.7 | 38.4 | 79.3 | 78.7 | 78.2 |
| Cash registers, adding machines, and calculating machines | 128.1 | 127.1 | 126.3 | 131.6 | 128.6 | 126.1 | 32.48 | 31.93 | 31.50 | 39.4 | 38.9 | 38.4 | 82.8 | 82.3 | 82.2 |
| Electrical machinery, apparatus, and supplies- | 102.6 | 100.4 | 97.3 | 114.2 | 109.6 | 105.7 | 29.89 | 29.34 | 29.24 | 40.4 | 40.2 | 40.0 | 74.2 | 73.1 | 73.3 |
| Engines, turbines, water wheels, and windmills. | 119.8 | 109. S | 105.2 | 156.8 | 139.1 | 129.2 | 34.56 | 33.46 | 32.48 | 43.0 | 42.1 | 41.1 | 80.7 | 79.9 | 79.4 |


| Foundry and machine-shop products. | 97.2 | 05.4 | 91.2 | 98.6 | 04.3 | 89.5 | 30.35 | 29.43 | 29. 27 | 41.7 | 40.9 | 40.8 | 72.7 | 72.0 | 71.8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Machine tools. | 192.2 | 183.9 | 170.6 | 256.2 | 237.8 | 207.6 | 37.03 | 35.91 | 33. 80 | 48.2 | 47.0 | 44.9 | 77.0 | 76.5 | 7 7. 4 |
| Radios and phonographs. | 162.3 | 170.7 | 176.5 | 148.8 | 170.3 | 169.6 | 22. 71 | 23. 47 | 23.79 | 38.6 | 40.3 | 41.6 | 50.0 | 58.3 | 57.3 |
| Textile machinery and parts. | 85.7 | 84.3 | 70.7 | 85.7 | 82.4 | 75.7 | 27.48 | 27.01 | 26.14 | 41.5 | 41.2 | 40.2 | 66.3 | 65.7 | 65.0 |
| 'T'ypewriters and parts. | 127.3 | 128.0 | 124.1 | 121.5 | 125.7 | 125.9 | 23.41 | 24.09 | 24.88 | 36.6 | 37.9 | 39.2 | 64.0 | 63.5 | 63.5 |
| Transportation equipment | 116.7 | 102. 9 | 105.3 | 122.5 | 105.7 | 109.9 | 34.03 | 33.30 | 33.82 | 38.1 | 37.6 | 38.1 | 89.6 | 88.7 | 89.1 |
| Aircraft | 1,886.0 | 1,749.5 | 1, 556, 4 | 1,777.9 | 1, 718.0 | 1, 512.1 | 20.39 | 30. 65 | 30.30 | 42.3 | 41.8 | 41.8 | 73.5 | 74.8 | 74.8 |
| Automobiles. | 118.4 | 102.3 | 107.8 | 125.8 | 106.1 | 113.3 | 35. 13 | 34.30 | 34.75 | 37.6 | 37.2 | 37.7 | 93.3 | 92.4 | 92.2 |
| Cars, clectric- and stearn-railroad | 52.1 | 46.5 | 40.7 | 46.8 | 40.2 | 37.5 | 28.12 \| | 27.03 | 28.85 | 38.6 | 37.1 | 37.5 | 72.9 | 72.8 | 76.8 |
| Locomotives. | 28.0 | 26.1 | 25.5 | 27.5 | 25. 1 | 24.6 | 30.12 | 29.51 | 29.75 | 38.6 | 38.0 | 38.5 | 78.1 | 77.8 | 77.3 |
| Shipbuilding | 139.4 | 132.9 | 133.6 | 152.8 | 141.0 | 143.6 | 32.90 | 31.85 | 32.26 | 3 K .2 | 37.9 | 38.3 | 85.8 | 84.4 | 84.2 |
| Nonferrous metals and their products | 112.9 | 113.5 | 110.4 | 116.5 | 115.4 | 118.6 | 28.67 | 28.26 | 28. 58 | 40.9 | 41.0 | 41.4 | 70.3 | 69.0 | 69.1 |
| Alurrinum manufactures.... | 170.4 | 174.3 | 165.1 | 196.8 | 195.5 | 100.8 | 2 2 .22 | 27.37 | 27.70 | 40.3 | 40.6 | 41.2 | 70.0 | 67.4 | 67.0 |
| Brass, bronze, and copper products | 337.7 | 137.4 | 131.1 | 158.9 | 157.0 | 154.1 | 31. 63 | 31.39 | 32.21 | 41.8 | 41.7 | 42.6 | 75.8 | 75. 3 | 75.7 |
| Clocks and watches and time-recording derices- | 93.1 | 93.1 | 90.0 | 06.9 | 99.8 | 98.6 | 23.09 | 23.34 ! | -27.39 | 39.1 | 40.4 | 41.1 | 59.6 | 59.1 | 59.0 |
|  | 98.6 | 107.0 | 106.7 | 86.5 | 90.9 | 92.6 | 24.63 | 23.94 | 24.50 | 40.1 | 41.0 | 41.5 | $\underline{61.2}$ | 57.7 | 58.2 |
| Lighting equipment | 98.0 | 93.4 | 98.4 | 84.7 | 78.2 | 82.4 | 27.88 | 27.01 | ${ }^{27.03}$ | 39.9 | 39.9 | 39.5 | 70.0 | 67.7 | 68.3 |
| Silverware and plated ware | 76.7 | 76.2 | 73.1 | 76.2 | 75.1 | 70.8 | 2x. 72 | 28.52 | 27.98 | 44.2 | 4.4.0 | 43.6 | 65.1 | 65. 2 | 64.8 |
| Smelting and refining-copper, lead, and zinc- | 86.9 | 86.0 | 83.8 | 87.8 | 85.3 | 81.3 | 28.36 | 27.80 | 27.20 | 39.6 | 39.1 | 38.5 | 71.7 | 71.2 | 70.7 |
|  | 71.1 | 73.0 | 72.4 | 85.2 | 88.8 | 88.7 | 20.18 | 20.64 | 20.80 | 38. 6 | 39.7 | 40.9 | 51.3 | 51.5 | 50.2 |
| Furniture | 94.8 | 96.8 | 94.6 | 85.5 | 86.2 | 84.9 | 21.87 | 21.63 | 21.72 | 40.3 | 40.5 | 41.3 | F4. 4 | 53.6 | 52.7 |
| Lumber: <br> Millwork | 63.6 | 64.1 | 63.6 | 52.0 | 52.8 | 52.0 | 22. 88 | 23.04 | 22.91 | 41.0 | 42.6 | 43.0 | 54.2 | 54.2 | 53.2 |
| Sawmills. | 63.3 | 65.5 | 6 5 .5 | 55.4 | 60.8 | 61.6 | 18. 11 | 19.20 | 19.45 | 37.0 | 38.6 | 40.3 | 48.9 | 49.7 | 48.3 |
| Stone, clay, and glass products | 83.7 | 85.5 | 84.8 | 76.4 | 78.9 | 80.3 | 25.01 | 25.23 | 25.88 | 37.5 | 37.9 | 39.2 | 66.0 | 65.7 | 65.4 |
| Brick, tile, and terra cotta | 62.6 | 64.7 | 64.8 | 51.6 | 54.3 | 56.6 | 21.18 | 21.58 | 22.51 | 37.9 | 38.5 | 40.5 | 55.8 | 55.6 | 55.1 |
| Cement | 66.4 | 70.2 | 71.6 | 63.2 | 66.5 | 71.3 | 27.33 | 27.06 | 28.48 | 39.0 | 38.8 | 40.4 | 70.1 | 69.8 | 70.5 |
| Glass | 108.5 | 109.3 | 106.9 | 118.9 | 121.0 | 121.2 | 26.78 | 27.06 | 27.71 | 36.4 | 36.9 | 38.0 | 73.7 | 73.4 | 73.0 |
| Marble, granite, slate, and ot | 48.7 | 50.1 | 51.2 | 35.0 | 38.5 | 30.2 | 25.18 | 26. 76 | 26.71 | 36.0 | 38.0 | 38.2 | 70.7 | 71.4 | 70.0 |
| Pottery | 95.0 | 95.3 | 91.6 | 90.2 | 89.2 | 87.0 | 24.04 | 23.75 | 24.15 | 39.0 | 38.5 | 38.8 | 62.8 | 62.1 | 61.8 |
| Nondurable goods |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Textiles and their products. | 105.8 | 107.9 | 108.3 | 91.8 | 92.9 | 93.7 | 17.74 | 17.68 | 17. 58 | 35.9 | 38.1 | 36.7 | 49.7 | 49.3 | 48.6 |
| Fabrics... | 98.7 | 100.9 | 98.8 | 89.5 | 91.7 | 88.0 | 17. 55 | 17. 64 | 17. 21 | 37.2 | 37.4 | 37.8 | 47.9 | 47.7 | 46.4 |
| Carpets and rug | 84.4 | 85.1 | 83.2 | 75.8 | 75.8 | 74.8 | 24. 86 | 24. 66 | 25.01 | 37.7 | 37.5 | 37.7 | 66.0 | 65.7 | 66.4 |
| Cotton goods. | 96.8 | 96.9 | 94.3 | 01.5 | 90.9 | 84.2 | 15. 44 | 15. 36 | 14.81 | 37.6 | 37.4 | 38.0 | 41.0 | 41.0 | 38.4 |
| Cotton small wares | 91.0 | 92.9 | 91.9 | 87.3 | 90.3 | 89.0 | 18.61 | 18.89 | 18.85 | 39.0 | 39.7 | 39.6 | 48.3 | 48.3 | 48.2 |
| Dyeing and finishing textiles | 133.2 | 134.2 | 132.9 | 116.4 | 115.2 | 115.5 | 21. 33 | 20.96 | 21.21 | 39.1 | 38.7 | 39.5 | 54.0 | 53.7 | 53.1 |
| Hats. fur-felt | 91.4 | 88.4 | 85.7 | 89.0 | 73.1 | 61.4 | 26.41 | 22.41 | 19.34 | 36.8 | 31.4 | 27.6 | 72.8 | 71.2 | 69.7 |
| Iosiery- | 148.2 | 154.6 | 153.8 | 159.0 | 170.0 | 173.8 | 19.52 | 19.95 | 20.40 | 35.4 | 36.0 | 37.1 | 55.4 | 55.4 | 55.5 |
| Knitted outerwear | 64.8 | 77.7 | 81.7 | 49.9 | 63. 5 | 69.7 | 16. 54 | 17.62 | 18.31 | 34.7 | 37.2 | 39.4 | 47.1 | 46.8 | 45. 9 |
| Knitted underwear | 78.9 | 80.8 | 80.2 | 72.4 | 75.0 | 74.1 | 15.48 | 15. 72 | 15.60 | 36.8 | 37.5 | 38.4 | 42.2 | 42.1 | 40.7 |
| Knitted eloth. | 144.2 | 154.1 | 152.1 | 118.3 | 131.4 | 132.2 | 18.22 | 19.27 | 19.74 | 36. 9 | 38.2 | 41.0 | 48.4 | 48.0 | 46.8 |
| Silk and rayon goods. | 65.2 | 67.6 | 66.7 | 56.8 | 60.0 | 57.1 | 16. 58 | 16.90 | 16.31 | 36.5 | 37.4 | 38.0 | 45.2 | 44.9 | 42.6 |
| Woolen and worsted goods | 91.3 | 95.0 | 90.9 | 78.4 | 81.9 | 76.6 | 19.83 | 19.89 | 19.46 | 37.1 | 37.8 | 37.1 | 53.4 | 52.7 | 52.5 |
| Wearing apparel. | 116.9 | 118.7 | 124.7 | 90.3 | 89.2 | 98.7 | 18. 30 | 17.81 | 18.63 | 33.5 | 33.7 | 34.5 | 53.3 | 52.5 | 52.7 |
| Cloihing, men's | 105.2 | 104. 7 | 109.4 | 80.3 | 76. 1 | 82.9 | 19.72 | 18.84 | 19.65 | 33.5 | 32.2 | 33.6 | 59.1 | 58.4 | 57.8 |
| Clothing, women's | 164.6 | 168.0 | 178.2 | 117.6 | 116.1 | 133.2 | 19.26 | 18.64 | 20.15 | 32. 6 | 33.6 | 33. 6 | 53.3 | 51.8 | 54.0 |
| Corsets and allied garm | 116.3 | 116.9 | 117.6 | 120.4 | 121.6 | 126.5 | 17.06 | 17.14 | 17.78 | 35.7 | 36.7 | 38.6 | 46.5 | 46.0 | 45.6 |
| Men's furnishings | 129.0 | 136.7 | 143.7 | 126.0 | 138.8 | 142.9 | 15. 13 | 15. 73 | 15.33 | 35. 2 | 37.4 | 39.0 | 41.3 | 41.1 | 38.4 |
| Millinery | 66. 1 | 66.5 | 82.0 | 46.5 | 48.5 | 61.5 | 19.81 | 20. 53 | 21.11 | 32.5 | 32.5 | 34.9 | ${ }^{*} 61.6$ | *63.6 | *60.8 |
| Shirts and collars. | 122.3 | 127.6 | 126.9 | 110.8 | 117.5 | 115.7 | 14. 55 | 14.80 | 14.64 | 35.3 | 36.1 | 37.3 | 41.4 | 40.9 | 39.3 |

MANUFACTURING-Continued

| Industry | Employment index |  |  | Pay-roll index |  |  | A verage weekly earnings |  |  | A verage hours worked per week |  |  | A verage hourly earnings |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Decerm- ber 1939 | $\begin{gathered} \text { Novem- } \\ \text { ber } \\ 1939 \end{gathered}$ | October 1939 | Decem- ber 1939 | $\left\{\begin{array}{c} \text { Nover } \\ \text { ber } \\ 1939 \end{array}\right.$ | $\begin{aligned} & \text { Octo- } \\ & \text { ber } \\ & 1939 \end{aligned}$ | Decern- ber 1939 | $\begin{gathered} \text { Novem- } \\ \text { ber } \\ 1939 \end{gathered}$ | $\begin{aligned} & \text { Octo- } \\ & \text { ber } \\ & 1939 \end{aligned}$ | $\begin{gathered} \text { Decem- } \\ \text { ber } \\ 1939 \end{gathered}$ | $\begin{gathered} \text { Novem- } \\ \text { ber } \\ 1939 \end{gathered}$ | Octoher 1939 | Decem- ber 1939 | November 1939 | $\begin{aligned} & \text { Octo- } \\ & \text { ber } \\ & 1939 \end{aligned}$ |
| Nondurable goods-Continued |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Cents |
| Leather and its manufactures. | 93.2 | 91.9 | 98.2 | 75.4 | 71.1 | 76.5 | \$19.09 | \$18. 20 | \$18.74 | 35.7 | 39.8 | 35.3 | 53.7 | 53.9 | 53.2 |
| Boots and shoes. | 90.8 | 89.0 | 94.1 | 70.2 | 64.6 | 71.1 | 17.62 | 16. 46 | 17.20 | 34.9 | 32.5 | 34.3 | 51.1 | 51.4 | 50.8 |
| Leather. | 87.0 | 87.9 | 88.4 | 86.5 | 87.2 | 88.2 | 24. 88 | 24. 76 | 24.91 | 38.8 | 38.7 | 39.4 | 64.3 | 63.9 | 63.3 |
| Food and kindred products | 125.9 | 129.7 | 137.7 | 124.4 | 125.4 | 130.0 | 25.51 | 24.87 | 24. 34 | 40.5 | 40.1 | 40.5 | 68.4 | 62.5 | 60.8 |
| Baking | 144.8 | 146.5 | 148.0 | 134.1 | 136.9 | 136.6 | ${ }^{25} 583$ | 25.97 | 25. 65 | 41.0 | 41. 7 | 41.4 | 63.3 | 62.7 | 62.3 |
| Beverages | 260.6 | 261.2 | 270.9 | 298.8 | 293.7 | 309.0 | 33. 56 | 32. 89 | 33. 29 | 38.4 | 37.7 | 38.7 | 88.1 | 88.1 | 87.1 |
| Butter- | 92.5 | 94.1 | 95.0 | 78.1 | 79.1 | 81.6 | 22.51 | 22. 49 | 22.99 | 45.8 | 46. 1 | 47.2 | 48.8 | 48.4 | 48.7 |
| Canning and preserving | 100.7 | 120.4 | 182.1 | 89.1 | 101.0 | 156.0 | 17.64 | 16. 72 | 16.97 | 35.6 | 34.5 | 38.3 | 50.6 | 49.0 | 45.6 |
| Confectionery | 96.0 | 98.0 | 96.8 | 99.8 | 96.2 | 96.0 | 20.25 | 19.06 | 19.25 | 41.4 | 39. 5 | 40.7 | 49.3 | 48.8 | 48.0 |
| Flour | 78.7 | 77.9 | 82.3 | 72.2 | 70.5 | 82.6 | 24.83 | 24.48 | 27.06 | 40.8 | 40.5 | 43.1 | 60.4 | 60.2 | 61.4 |
| lce cream. | 68.0 | 69.3 | 73.0 | 57.3 | 57.81 | 62. 2 | 29.48 | 29.32 | 29.97 | 45.2 | 44.1 | 46.3 | 64.0 | 64.2 | 63.9 |
| Slaughtering and meat packing | 112.1 | 107.9 | 102.7 | 121.5 | 112.7 i | 107.7 | 28.51 | 27.45 | 27.60 | 42.1 | 40.1 | 40.3 | 67.8 | 68.4 | 68.5 |
| Sugar, beet | 190.7 | 286.8 | 286.5 | 177.7 | 288.3 | 244.9 | 24.27 | 26.16 | 22.25 | 45.3 | 50.3 | 42.3 | 54.2 | 52.7 | 52.6 |
| Sugar refining, cane | 95.2 | 93.8 | 100.9 | 75.8 | 77.4 | 86.5 | 22.39 | 23.21 | 24. 12 | 36.2 | 36.9 | 38.1 | 61.8 | 62.8 | 63.3 |
| Tobacco manufactures | 65.8 | 66.4 | 66.7 | 62. 3 | 62.9 | 63.4 | 17.47 | 17.50 | 17.55 | 35. 8 | 36. 6 | 37.0 | 48.9 | 47.9 | 47.4 |
| Chewing and smoking tobacco and | 60.8 | 61.0 | 62.4 | 67.2 | 67.7 ! | 70.8 | 17.90 | 17. 92 | 18. 37 | 34.2 | 34. 2 | 35. 2 | 52.5 | 52.4 | 52.1 |
| Cigars and cigarettes. | 68.3 | 66.9 | 67.2 | 61.6 | 62.2 | 62.4 | 17.37 | 17.40 | 17.36 | 36.0 | 36.9 | 37.2 | 48.4 | 47.4 | 46.9 |
| Paper and printing....- | 118.5 | 117.5 | 116.5 | 116.8 | 114.2 | 113.8 | 29.51 | 29. 22 | 29.40 | 39.4 | 39.5 | 39.7 | 78.2 | 77.3 | 77.3 |
| Boxes, paper | 124.9 | 128.9 | 128.3 | 136.9 | 145.4 ! | 150.6 | 21.92 | 22. 60 | 23.46 | 40. 1 | 41.7 | 43.4 | 55.0 | 84.5 | 54.6 |
| Paper and pulp | 115.1 | 115.2 | 113.6 | 122.5 | 124.6 | 125.6 | 26.19 | 26.61 | 27.19 | 41.6 | 42.5 | 43.2 | 63.1 | 62.7 | 62.9 |
| Printing and publishing: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Book and job -.... Newspapers and periodicals | 104.1 118.6 | 101.0 116.6 | 99.1 117.2 | 94.1 115.0 | 88.7 109.3 | 84.4 110.4 | 31.63 <br> 39.04 | 30.71 37.83 | 29.76 37.92 | 39.6 36.7 | 38.7 36.2 | 37.8 36.2 | 80.9 102.7 | 80.6 101.3 | 80.1 101.3 |
| Chemical, petroleum, and coal products | 122.3 | 122.5 | 122.3 | 133.3 | 133.0 | 183.3 | 29.63 | 29.43 | 29. 54 | 39.0 | 38.9 | 39.8 | 75.2 | 75.2 | 73.8 |
| Petroleum refining. | 122.3 | 123.7 | 122.7 | ${ }^{137} .6$ ! | 137.9 | 140.0 | 35.27 | 34.94 | 35.75 | 36.4 | 36.1 | 36.0 | 97.2 | 97.2 | 97.4 |
| Other than petroleum refining | 122.2 | 122.2 | 122.2 | 132.0 | 131.5 | 131.2 | 27.37 | 27.16 | 26. 99 | 39.8 | 39.9 | 40.8 | 67.7 | 67.5 | 65.7 |
| Chemicals....- | 137.4 | 137.5 | 133.6 | 162.1 | 181.2 | 157.9 | 32. 45 | 32. 26 | 32.51 | 40.3 | 40.3 | 41.2 | 80.2 | 79.9 | 78.9 |
| Cottonseed-oil, cake, and meal | 114.9 | 119.7 | 138.7 | 110.2 | 114.8 | 120.2 | 15.64 | 15.60 | 14.21 | 40.2 | 400 | 48.5 | 33.1 | 33.0 | 28.6 |
| Druggists' preparations. | 118.8 | 117.7 | 116.7 | 132.2 | 131.1 | 133.0 | 25.22 | 25.24 | 25.82 | 40.2 | 40.6 | 41.5 | 60.0 | 59.5 | 59.5 |
| Explosives. | 107.8 | 106.1 | 104.2 | 128.7 | 127.6 | 125.2 | 32.74 | 32.98 | 33.07 | 39.5 | 39.9 | 39.9 | 82.8 | 82.6 | 83.0 |
| Fertilizers. | 102.2 | 91.5 | 98.5 | 82.2 | 75.9 | 79.8 | 14.65 | 15.32 | 14.91 | 34.2 | 34.0 | 35.5 | 42.8 | 45.1 | 42.0 |
| Paints and rarnishes. | 124.2 | 125. 1 | 125.1 | 130.5 | 131.5 | 134.6 | 28.75 | 28.72 | 29.46 | 40.3 | 40.2 | 41.4 | 71.4 | 71.5 | 71.2 |
| Kayon and allied products | 312.2 | 313.4 | 310.2 | 314.0 | 310.4 | 303.0 | 25.82 | 25. 42 | 25. 03 | 38.8 | 38.6 | 38.7 | 66.5 | 65.9 | 64.6 |
| Soap.--.-. | 85.1 | 88.6 | 90.4 | 102.1 | 104. 4 | 109.0 | 28.09 | 27.60 | 28.23 | 39.7 | 39.6 | 40.6 | 70.7 | 69.7 | 69.6 |


| Rubber products | 98.0 | 93.9 | 92.4 | 100. 5 | 99.8 | 101.9 | 29. 50 | 28.95 | 30. 11 | 38.1 | 38.0 | 39.2 | 77.6 | 76.8 | 76.9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rubber boots and shoes | 63.1 | 62.3 | 62.2 | 65.7 | 66.6 | 63.5 | ${ }^{23.90}$ | 24.51 | 23.45 | 39.1 | 40.1 | 38.4 | 01.1 | 61.1 | 61.1 |
| Rubber tires and inner tubes | 74.7 | 74.5 | 73.6 | 89.9 | 85.9 | 90.6 | 35. 11 | 33.64 | 35.91 | 36.1 | 35.1 | $3 \overline{4} .5$ | 97.4 | 96.1 | 96.1 |
| Rubber goods, other. | 156.5 | 161.3 | 157.5 | 155.4 | 162.6 | 161.2 | 24.19 | 24. 55 | 25.01 | 39.9 | 40.4 | 41.3 | 61.2 | 61.2 | 01.2 |
| Coal mining: ${ }^{\text {Anthracite }}$ | 51.0 | 51.3 | 51.9 | 26.6 | 42.0 | 52.2 | 17.16 | 26.90 | 33.03 | 18.9 | 28.8 | 35.6 | 91.2 | 92.3 | 93.0 |
| Bituminous ${ }^{2}$ | 93.2 | 94.9 | 93.0 | 85.0 | 96.3 | 97.6 | 24.83 | 27.59 | 28.48 | 28.3 | 31.4 | 32.6 | 89.0 | 88.8 | 88.2 |
| Metalliferous mining | 67.2 | 616.5 | 65.3 | 65.3 | 63.9 | 63.4 | 30.43 | 30. 36 | 30.64 | 41.4 | 41.5 | 42.4 | 73.9 | 73.6 | 72.7 |
| Quarrying and nonmetallic miuing | 44.0 | 47.1 | 48.0 | 39.1 | 42.9 | 45.6 | 22.07 | 22. 14 | 23.23 | 39.5 | 40. 1 | 42.3 | 56.1 | 54.8 | 54.3 |
| Crude-petroleum producing .- | 63.8 | 63.8 | 64.3 | 54.1 | 59.6 | 58.8 | 33.46 | 34.31 | 33.71 | 38.0 | 38.3 | 37.5 | 88.5 | 87.8 | 88.5 |
| l'ublic utilities: <br> Telephone and telegraph ${ }^{3}$ | 74.7 | 75.0 | 75.4 | 95.0 | 94.4 | 95.2 | 31.29 | 31.22 | 31.25 | 38.9 | 34.1 | 39.1 | 80.8 | 80.3 | 80.5 |
| Electric light and power and manufactured gas ${ }^{3}$ | 93.0 | 93.4 | 93.5 | 101.1 | 101.5 | 101.0 | 34.09 | 33.93 | 33.68 | 39.6 | 40. I | 39.2 | 86.0 | 84.7 | 85.6 |
| Electric-railroad and notorbus operation and maintenance ${ }^{3}$ - | 69.6 | 60.9 | 70.1 | 70.8 | 70.6 | 72.4 | 33.32 | 33.02 | 33.75 | 46.1 | 45.7 | 46.5 | 71.7 | 71.5 | 71.6 |
| Jrade: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wholesale ${ }^{3}$ Retail ${ }^{3}$ | 92.2 101.0 | 92.1 89.9 | 92. 9 | 79.1 82.7 | 79.0 74.8 | 80.3 74.1 | 29.85 20.19 | 30.18 20.82 | 30.27 21.17 | 41.7 42.9 | 41.5 42.4 | 42.1 42.7 | 71.3 52.8 | 72.4 55.1 | 71.8 55.1 |
| Retail ${ }^{3}-{ }^{\text {General merchandising }}{ }^{3}$ | 101.0 151.2 | 89.9 110.4 | 88.4 103.2 | 82.7 129.7 | 74.8 <br> 95 <br> 8.8 | 74.1 | 20.19 17.05 | 20.82 <br> 17.30 | 21.17 17.71 | 42.9 41.2 | 42.4 38.8 | 42.7 39.0 | 52.8 43.9 | 55.1 47.5 | 55.1 48.4 |
| Other than general merchandising | 87.8 | 84.5 | 84.5 | 73.0 | 70.4 | 70.5 | 24.01 | 24.10 | 24. 16 | 43.7 | 43.6 | 43.9 | 56.8 | 57.6 | 57.2 |
| Hotels (year-round) ${ }^{23+\ldots}$ | 90.8 | 91.8 | 92.9 | 81.1 | 81.8 | 82.2 | 15.59 | 15.54 | 15.43 | 46.4 | 46.5 | 46.4 | 33.4 | 33.2 | 33.0 |
| Laundries ${ }^{2}$ | 95.5 | 95.6 | 96.0 | 83.7 | 82.9 | 83.9 | 18.07 | 17.68 | 17.84 | 42.9 | 42.4 | 42.7 | 42.2 | 41.7 | 41.8 |
| 1) yeing and cleaning ${ }^{2}$ | 97.3 | 97.8 | 105.1 | 69.7 | 70.8 | 77.3 | 19.83 | 19.80 | 20.32 | 41.4 | 41.2 | 42.5 | 49.5 | 50.0 | 49.1 |
| Brokerage ${ }^{3} 5$ | $-.6$ | -. 9 | -. 6 | +1.8 | -1.2 | $-1.3$ | 37.41 | 36. 44 | 36. 65 |  |  | (6) | (6) | (8) |  |
| Insurance ${ }^{3}$ 5. | +. 1 | -. 1 | -. 2 | +1.3 | $+.3$ | -(i) | 35.63 | 36.21 | 36.14 |  |  | ${ }^{(6)}$ |  |  | (b) |
| Building construction ${ }^{\text {s }}$. | 6.9 | -3.1 | -. 6 | -7.0 | -3.6 | -1.0 | 30.91 | 30.89 | 31.08 | 32.8 | 33.4 | 34.0 | 94.3 | 92. 6 | 91.6 |

1 levised series for "all manuracturing," for various groups under nanufacturing, for sawnills, fertilizers, soap, and telephone and telegraph. Nimeographed sheets giving inclusive, and by mont hs, January 1938 to September 1939 inclusje, available on request A verage weekly earnings are computed from figures furnished by all report ing establish ments. A verage hours and average hourly earnings are computed rom data supplied by a smafler number of establishments, as not alt reporting firms furnish man-hours, The figures are not strictly comparahle from month to month because of changes in reportine sample in January 1938 issue of this pub)ication.

3 Average weekly earnings, hourly earnings, and hours not strictly comparable with fipures published in pamphlets prior 10 Jantary 1938 as they now exclude corporation pervisory computed. preceding of emplosment and bay rolls are not available, percentage changes from : Notavailable

* Not comparable to previously published ayerages because of change in reporting sample due to the addition of new firms. Comparable September figure is 66.0 cents.


## INDEXES OF EMPLOYMENT AND PAY ROLLS

Indexes of employment and pay rolls are given in table 6 for all manufacturing industries combined, for the durable- and nondurablegoods groups of manufacturing industries, and for each of 13 nonmanufacturing industries, including 2 subgroups under retail trade, by months, from December 1938 to December 1939, inclusive. The accompanying chart indicates the trend of factory employment and pay rolls from January 1919 to December 1939.

The indexes of factory employment and pay rolls are based on the 3 -year average $1923-25$ as 100 . They relate to wage earners only and are computed from reports supplied by representative manufacturing establishments in 90 manufacturing industries. These reports cover more than 55 percent of the total wage carners in all manufacturing industries of the country and more than 65 percent of the wage earners in the 90 industries included in the monthly survey of the Burcau of Labor Statistics.

The indexes for the nonmanufacturing industries are based on the 12 -month average for 1929 as 100 . Figures for mining, laundries, and dyeing and cleaning cover wage earners only, but the figures for public utilities, trade, and hotels relate to all employees except corporation officers, executives, and other employees whose duties are mainly supervisory. For crude-petroleum production they cover wage carners and the clerical field force. The coverage of the reporting samples for the various nonmanufacturing industries ranges from approximately 25 percent for wholesale trade and dycing and cleaning to approximately 80 percent for quarrying and nonmetallic mining, anthracite mining, and public utilities.

Data for both manufacturing and nonmanufacturing industries are based on reports of the number of employees and amount of pay rolls for the pay period ending nearest the 15 th of the month.


Table 6.-Indexes of Employment and Pay Rolls in Selected Manufacturing ${ }^{1}$ and Nonmanufacturing ${ }^{2}$ Industries, December 1938 to December 1939, Inclusive


[^3]
## TREND OF INDUSTRIAL AND BUSINESS EMPLOYMENT, BY STATES

A comparison of employment and pay rolls, by States and geographical divisions, in November and December 1939 is shown in table 7 for all groups combined and for all manufacturing industries combined based on data supplied by reporting establishments. The percontage changes shown, unless otherwise noted, are unweightedthat is, the industries included in the manufacturing group and in the total for all groups have not been weighted according to their relative importance.

The totals for all manufacturing industries combined include figures for miscellaneous manufacturing industries in addition to the 90 manufacturing industries presented in table 4. The totals for all groups combined include all manufacturing industries, cach of the nonmanufacturing industries presented in table 4 (except building construction), and scasonal hotels.

Similar comparisons showing only percentage changes are available in mimeographed form for all groups combined, all manufacturing, anthracite mining, bituminous-coal mining, metalliferous mining, quarrying and nonmetallic mining, crude-petroleum production, public utilities, wholesale trade, retail trade, hotels, laundries, dyeing and cleaning, and brokerage and insurance.

Table 7.-Comparison of Employment and Pay Rolls in Identical Establishments in November and Decomber 1939, by Geographic Divisions and by States
[Figures in italies are not compiled by the Bureau of Labor Statisties, but are taken from reports issued by cooperatiug State organimations]

| Geographic division and State | Total all groups |  |  |  |  | Manufacturing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of cstablish ments | Number on pay roll December 1939 | ]er-centage change from Novert 1939 | Amount of pay roll ( 1 week) December 1939 | Per-eentage change from No-vember 1939 | Vuinber of estab-lishments | Num-her onpay rollDecem-ber 1939 | Per-cent-agechangefromNo-rem-bor1930 | Amount of pay roll (1 week) Deeember 1939 | Per-cent-agechangefromNo-rom-her1938 |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| New England | 12, 888 | 941, 365 | $\begin{array}{r} \text { Mollars } \\ +1.022,721,188 \end{array}$ |  | +-1. 5 |  | 651, 501 | $-0.8$ | $\begin{gathered} \text { Dollars } \\ 15,507,640 \end{gathered}$ | +0.8 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Maine-.... | 815 | 57, 698 | $+.3$ | 1, 222, (143 | +1. 7 | - 277 | 47,966 |  | $086,607$ | +1.8 |
| New Hampshire | 5904.59 | 41,49318,826 | -(1) | 879,2151365 | +. 4 | $20{ }^{2}$ | 35, 715 | $-(1)$ -1.0 |  | -. 2 |
| Vermont --.... |  |  | -. 61 |  | $-1.5$ |  | 12,039 - (1) |  | $\begin{aligned} & 752,659 \\ & 279,548 \end{aligned}$ | -. 1 |
| Nassichusetts. | 2 $\sim$, 611 | 502,499 | +1.6112.038, 579 |  | +1.8 | 1, 800 | 291,5741 |  | $\begin{array}{r} 279,548 \\ 6,800,903 \end{array}$ |  |
| Thode Island | 1,118 | 100,959219,893 | $+1.2$ | 2. 254,973 | -.4+2.0 | 421 | 83, 313 | -2.5+.3 | $1,827,711$$4,860,212$ | +.9 -1.7 |
| Connceticut |  |  |  |  |  |  | 180, 804 |  |  | -1.7 |
| Middle Atlantic. | 31, 354 2, 307, 392 |  | +1.9,62, 316, 567 |  | +. 6 | 6,811 $1,375,171$ |  | $-.237,987,696$ |  | $+.8$ |
| New York | 19,299 $1,018,309 \mid$ |  | +3. $2128,158,096$ |  | +2.8 | $\left\|\begin{array}{r} 32,760 \\ 1,600 \end{array}\right\|$ | 1, 375, 171 | +. $713,608,885$ |  | +1.8 |
| Now Jersey | 3,816 | 373,935915,148 | $+1.7$ | 10, 233, 788 | $\begin{array}{r} 18 \\ -1.8 \\ -1.3 \end{array}$ |  | 317,169574,970 | -1.3 | 8,642,034 | -1.3$4+.4$ |
| l'ennsyivania. | 8,239 |  |  |  |  | $\begin{aligned} & 1,609 \\ & 2,42 \end{aligned}$ |  | + - . 8 | $15,716,777$ |  |
| East North Central. | 23, $540.2,341,311$ |  | +4.267, 888,963 |  | +5.5 | 8, 201 $1,766,118$ |  | +3.4.53, 494, 734 |  | +6.7+2.9 |
| Ohio.....-.-. - | 6, 1932,823 | 57, | +2.516, 766, 196 |  | +3.2 +3.2 | 2, 322 442,971 |  | +.7'13, 420, 906 |  |  |
| Indiana |  | 297, $0 / 8$ |  |  | $\begin{array}{r} +5.2 \\ +2.6 \end{array}$ | 1,0552,3342, | 240.396$4+35.563$ | ( $\begin{array}{r}+1.9 \\ +.1\end{array}$ | $7,002,059$ <br> 12,094 | $\begin{array}{r} +2.9 \\ +4.2 \end{array}$ |
| nllinois. | $\begin{array}{r} 36,750 \\ 3,713 \end{array}$ | 655, 77z |  |  | $\begin{array}{r} +1.2 \\ +1.7 \\ +17.6 \end{array}$ |  |  |  |  |  |
| Miehigan |  | $\begin{aligned} & 545,337 \\ & 241,686 \end{aligned}$ | $\begin{aligned} & +11.31 \\ & +1.61 \end{aligned}$ | $(17,887,260$ |  | $\begin{array}{r} +13.6 \\ +.2 \end{array}$ | 1 1,48 |  | $\left.3 \begin{aligned} & +11.2 \\ & 4+1,2 \mid 6,018,089 \\ & 4,958,817 \end{aligned} \right\rvert\,$ |  |
| Wiscons | 64,202 |  |  |  | 182, 205 |  |  | ${ }_{4}^{+1.9}$ |  |  |  |

See footnotes at end of table.

Table 7.-Comparison of Employment and Pay Rolls in Identical Establishments in November and December 1939, by Geographic Divisions and by States-Continued
[Figures in italics are not compiled by the Bureau of Labor Statisties, but are taken from reports issued by cooperating State organizations?

| Geographic division and State | Total-all groups |  |  |  |  | Manufacturing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of establish ments | Number on pay roll December 1939 | Per-centage change from No-vember 1930 | A mount of pay roll (1 week) December 1939 | Per- cent- age change fromn No- vern- ber 1939 | Number of estab-lishments | Number on pay roll December 1939 | Per- cont- age change fromt No- rem- ber 1939 | Amount of pay roll (l week) Jecetnber 1939 | Per-centage change from No-vember 1939 |
|  |  |  |  | Dollars |  |  |  |  | Dollars |  |
|  | 3, 761 | 136,018 |  | \% \%18, 730 |  | 609 | 52,056 | - |  |  |
| Iowa.... | 1,720 | 65, 660 | +2.9 | $1,620,621$ | +4.3 | 315 | 39, 929 | +3.5 | 1, 037,591 | +6. 7 |
| Missouri | 2,531 | 157, 507 | +3.4 | 3, 916, 347 | +5.0 | 781 | 98, 051 | +3.4 | 2, 387, 369 | +6.5 |
| North 1)akota | 402 | 4,209 | +1. 1 | 101,810 | -. 9 | 27 | 402 | +.8 | 10, 393 | +. 7 |
| South Dakol | 389 | 7,209 | +. 2 | 196,985 | +. 1 | 26 | 2,540 | +1.6 | 65, 233 | 7 |
| Nebraska | 897 | 26,853 |  | 607,906 | -1.8 | 136 | 10. 241 | -7.5 | 258, 626 | -8.2 |
| Kansas. | 92, 396 | $57,697 \%$ | +1.5 | 1,398, 91.4 | ${ }^{4}+.6$ | 49 | 25,768 | -. 4 | 658, 144 | +1.5 |
| South Atlanti | 10, 198 | 917, 682 | +1.6 | 18, 611, 488 | +. 1 | 2,882 | 638, 843 | +. 1 | 12. 316, 288 | +. 5 |
| Delaware. | 230 | 16, 465 | +1.6 | 404, 857 | +2.4 | 79 | 11, 80.31 | +. 8 | 289,806 | +2.6 |
| Maryland | 1,540 | 1馬, 057 | +2.8 | 3, 936,893 | +1.0 | 628 | 108, 740 | ${ }^{4}+.1$ | 2.780,999 | $4-.2$ |
| District of Columbia. | 1, 016 | 30, 780 |  | 1.037, 528 | +4. 7 | 39 | 3, 296 | +1.4 | 116, 949 | +2.5 |
| Virginia | 1,823 | 121, 826 | +1.0 | 2, 410, 845 | +1.9 | 42 | 85, 463! | $1-7$ | 1, 691, 619 | +1.7 |
| West Virginia | 1,034 | 131, 808 | -. 4 | 3, 447, 728 | $-7.9$ | 210 | 55, 423 | +.3 | 1, 485, 588 | $+$ |
| North Carolina.. | 1,571 | 182, 586 | +1.0 | 2, 968, 734 | +1.1 | f6is | 162, 572 | -. 2 | 2, 663, 788 | +1.0 |
| South Carolina -- | 776 | 94, 632 | -. 1 | 1, 447, 773 |  | 2681 | 86, 849 |  | 1, 305, 105 | -. 6 |
| Georgia. | 1,363 | 126. 269 | $+.4$ | 2, 110, 036 | +2.3 | 377 | 100, 46 |  | 1,575, 967 | +1.4 |
| Flon | 843 | 45. 279 | +10.9 | 847, 051 | +11.0 | 179 | 24, 380 | +11.3 | 406, 4\%. | +7.8 |
| East South Central | 4,281 | 311,988 | +1.6 | 5, 949, 242 | +(1) | 1,018 | 203, 962 | - 3 | 3, 796, 101 | +. 7 |
| Kenlucky | 1,229 | 80, 609 | +1.2 | 1, 717, 2618 | $-5.3$ | 286 | 38, 551] | - -91 | 856, 062 | - 8.8 |
| 'Tennesse | 1,154 | 103, 707 | $+.9$ | 1, 11010,783 | +1.3 | 351 | 74, 231 | -1.3 | 1, 435, 816 | +.5 |
| Alabama. | 1,324 | 104, 50] | +2.9 | 1,9066, 154 | +3.9 | 28. | 71, 819 | +1.4 | 1, 273, 607 | +2.4 |
| Mississippi | 524 | 23, 171 | $+.9$ | 355, 041 | . 3 | 97 | 16,361 | \| -1.1 | 230, 599 | $-1.7$ |
| West South Central_ | 5,331 | 223, 454 | +. 7 | 5, 008, 762 | +1.3 | 1,260 | 114, 558 | -1.9 | 2,493, 918 | +. 4 |
| Arkansas.- | ${ }^{11} 7505$ | 27, 188 | -. 7 | 451,618 | -. | 29 | 18,902! | ! -2.7 | 311,0:7 | -1.2 |
| Louisiana | 925 | 56, 766 | +1. 7 | 1, 136, 537 | +1.4 | 231 | 32, 034 | - 9 | 612,078 | $-.7$ |
| Oklahom | 1, 130 | 36,498 | +. 1 | 903, 429 | +. 4 | 139 | 11, 693 | -2. 6 | 268, 378 | - -4 |
| 'Texas. | 2,52t | 103, 062 | +. 8 | 2,517,178 | +1.8 | 638 | 51,929 | 1-2.0 | 1,302,415 | ${ }^{4}+3.1$ |
| Mountain | 3,890 | 119, 134 | -1.8 | 3, 138, 674 | -3.1 | 537 | 36,667 | $-10.7$ | 956, 635 | $-11.5$ |
| Montana | 550 | 17, 891 | +1.1 | 513, 6100 | +2.4 | 73 | 5, 196 | -5.0 | 141,614 | -4.6 |
| Idaho. | 461 | 0,761 | $-1.6$ | 248.303 | -3.3 | 55 | 3, 121 | -10.0 | 81,214 | $-11.0$ |
| Wyoming | 304 | 7,867 | -4.0 | 221,766 | -6.0 | 35 | 1,207 | -19.6 | 43, 710 | -3.4 |
| Colorado | 1,076 | 38, 948 | -5.4 | 986, 727 | -8.6 | 191 | 16,488 | -15.3 | 433, 194 | $-17.9$ |
| New Mexico | 209 | 5, 243 | +.9 | 110,923 | -2.7 | 30 | 734 | +1.5 | 14,504 | +2.9 |
| Arizona | 369 | 16, 051 | +2. 2 | 464, 624 | +3.1 | 38 | 2,857 | + | 70, 081 | $-3.3$ |
| Utah | 517 | 20,867 | -(1) | 515, 443 | -1.1 | 102 | 6,756 | \| -7.9 | 164, 106 | $-5.4$ |
| Nevada | 154 | 2,506 | -1.8 | 77, 288 | $-1.1$ | 13 | 288 | +7.9 | 8, 122 | +6.3 |
| Pacific | 10, 138 | 495, 821 | +1.9 | 14, 226, 850 | +. 6 | 2, 702 | 260, 628 | - -2.7 | 7, 451, 003 | $-3.0$ |
| Washington | 2, 468 | 92,002 | -. 9 | 2, 526, 554 | -2.8 | 534 | 53, 712 | , -4.6 | 1, 469, 410 | -7.0 |
| Oregon. | 1,044 | 42, 160 | $-2.2$ | 1,078, 799 | -3.6 | 291 | 27, 900 | -5.4 | 708,648 | $-7.3$ |
| Californ | 126,626 | 361,659 | +3.2 | 10,621, 497 | +2.0 | 1,877 | 179,016 | \|-1.6| | 5, 272,945 | -1.2 |

1 Less than $1 / 0$ of 1 percent.
2 Includes banks and trust companies; construction, municipal, arricultural, and office employment; amusement and recreation; professional services; and trucking and landling.
${ }^{3}$ Includes laundering and cleaning; and water, light, and power.
4 Weighted percentage change.
${ }^{5}$ Includes autonobile and miseellancous services; restaurants; and building and contracting.
Includes construction but not public works.
7 Does not include logging.
${ }^{8}$ Includes banks; real estate; pipe-line transportation; motor transportation (other than operation and maintenance); water transportation; hospitals and clinies; and personal, business, mechanical repair, aud miscellancous services.

Includes financial institutions, misecllancous scrviees, and restaurants.
10 Weighted percentage change, including hired farm labor.
${ }^{11}$ Includes automobile dealers and garages; and sand, gravel, and building stone.
${ }^{12}$ Includes banks, insurance, and office employment.

## INDUSTRIAL AND BUSINESS EMPLOYMENT IN PRINCIPAL METROPOLITAN AREAS

A comparison of employment and pay rolls in November and December 1939 is made in table 8 for 13 metropolitan areas, each of which had a population of 100,000 or over in 1930. Cities within these areas, but having a population of 100,000 or over, are not included. Footnotes to the table specify which cities are excluded. Data concerning them have been prepared in a supplementary tabulation which is available on request. The figures represent reports from cooperating establishments and cover both full- and part-time workers in the manufacturing and nonmanufacturing industries presented in table 4, with the exception of building construction, and include also miscellaneous industries.
Revisions made in the figures after they have gone to press, cliefly because of late reports by cooperating firms, are incorporated in the supplementary tabulation mentioned above. This supplementary tabulation covers these 13 metropolitan areas as well as other metropolitan areas and citics having a population of 100,000 or more according to the 1930 Census of Population.

Tabse 8.-Comparison of Employment and Pay Rolls in Identical Establishments in November and December 1939, by Principal Metropolitan Areas

| Metropolitan area | Number of establishments Decemnber 1939 | Number on pay roll December 1939 | Percentage change from November 1939 | $\begin{gathered} \text { A mount of } \\ \text { pay roll } \\ \text { (1 week) } \\ \text { December } \\ 1939 \end{gathered}$ | Percentage change from November 1939 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| New York ${ }^{1}$ | 13,611 | 672, 958 | +3.0 | \$18, 316,499 | +2.7 |
| Chicago ${ }^{2}$ | 4, 194 | 468, 520 | +2.1 | 13,328, 609 | +4.0 |
| Philadelphia ${ }^{3}$ | 2,261 | 235, 180 | +1.4 | 6, 514, 278 | +2.1 |
| Detroit.- | 1,566 | 355, 725 | +17.4 | 12, 314,597 | +19.6 |
| Los Angeles ${ }^{\text {a }}$ | 2,810 | 164, 612 | +6.0 | 4, 734,067 | +5.1 |
| Cleveland | 1,188 | 120,584 | +2.6 | 3, 682, 602 | +3.7 |
| St. Louis. | 1. 292 | 118, 449 | +3.2 | 3, 081, 888 | +5.2 |
| Baltimore. | 1, 075 | 119,843 | +2.5 | 3,020, 373 | +. 6 |
| 13 oston ${ }^{3}$ | 2,610 | 199, 588 | +2.6 | 4,991, 844 | +2.4 |
| Pittsburgh. | 1,152 | 200,348 | +2.8 | 6,099, 334 | +2.3 |
| San Francisco ${ }^{6}$ | 1,605 | 81,374 | +2.7 | 2, 424, 180 | +1.3 |
| Buffalo. | 777 | 77, 761 | +3.6 | 2, 215, 790 | +5.0 |
| Milwankee | 951 | 109, 036 | +3.9 | 3, 090, 135 | +2.6 |

[^4]
## Public Employment

Employment created by the Federal Government includes employment financed from both regular and emergency appropriations.

## EXECUTIVE SERVICE OF THE FEDERAL GOVERNMENT

Statistics of employment and pay rolls for the executive service of the Federal Government in December and November 1939 are given in table 9 .

Tanle 9.-Employment and Pay Rolls for the Executive Service of the United States Government, December and November 19391
[Subject to revision]

| Class | Employment |  |  | l'ay rolls |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Decem- } \\ \text { ber } \end{gathered}$ | $\begin{gathered} \text { Novem- } \\ \text { ber }^{2} \end{gathered}$ | Percentage change | December | November ${ }^{2}$ | Pcrcentage change |
| Entire serviec: Total | 987,538 | 932, 641 | +5.9 | \$152, 331, 559 | \$141, 406, 641 | +7.7 |
| Regular appropriation | 836,446 | 782, 728 | +6.9 | 134, 220, 802 | 122, 721, 610 | +9.4 |
| Emergency appropriation | 57,918 | 57, 474 | +. 8 | 7,399,442 | 7,407,583 | $-1$ |
| Force-account...--....-. .-. | 93, 174 | 92,439 | +.8 | 10,711, 315 | 11, 277, 448 | $-5.0$ |
| Inside the District of Columbia: Total. | 127, 507 | 126, 277 | +1.0 | 22, 611, 637 | 22,513, 260 | +. 4 |
| Regular appropriation.. | 112.466 | 110, 862 | +1.4 | 20, 266, 885 | 20, 103, 286 | $+.8$ |
| Fmergency appropriation. | 8, 854 | 8, 874 | $-.2$ | 1,381, 159 | 1,380, 604 | ${ }^{(3)}$ |
| Force-account | 6, 277 | 6,541 | -4.0 | 063, 593 | 1,029,370 | -6. 4 |
| Outside the District of Columbia: Total | 859,941 | 806, 304 | +6. 6 | 129, 710, 922 | 118,893, 381 | +9.1 |
| Regular appropriation. | 723, 980 | 671,866 | +7.8 | 113, 953, 917 | 102, 618, 324 | +11.0 |
| Emergency appropriation | 49,064 | 48, 600 | +1.0 | 6, 018, 283 | 6, 026, 979 | -. 1 |
| Force-account..-......- | 86,897 | 85, 898 | +1.2 | 9, 747, 722 | 10,248, 078 | -4.9 |

1 Data include number of employees receiving pay during the last pay period of the month.
${ }_{2}$ Revised.
${ }^{3}$ Increase less than 1/io of 1 percent.

## CONSTRUCTION PROJECTS FINANCED BY THE PUBLIC WORKS ADMINISTRATION

Details concerning employment, pay rolls, and man-hours worked during December on construction projects financed by Public Works Administration funds are given in table 10, by type of project.

Table 10.-Wmployment and Pay Rolls on Projects Financed From Public Works Administration Funds, December 1939 :
[Subject to revision]

| 'rype of project | Wage caruers |  | Monthly pay-roll disbunsements | Number of man-hours worked during month | Average earuings per hour | Value of material orders placed during month |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Maximum nunuber employed ${ }^{2}$ | Weekly average |  |  |  |  |
| All programs..........-............. | 166, 657 | 140, 326 | \$15,912, 909 | 17,046,006 | \$0.934 | \$31, 785, 616 |
|  | Federal projects financed from National Industrial Recovery Aet funds |  |  |  |  |  |
| All projects.----------------------- | 3884 | 774 | \$78.453 | 104, 694 | \$0. 749 | \$88, 103 |
| Building construction ... | 222 3 | 180 3 | 26, 674 | 21, 485 | 1.242 .806 | 12,677 87 |
| Public roads ${ }^{\text {a }}$ |  | 243 | 21,423 | 30,082 | .712 | 42,900 |
| Reclamation.- | 140 | 117 | 17,601 | 20,901 | . 839 | 10,321 |
| River, harbor, and lood control | 78 | 48 | 4,214 | 6,718 | . 627 | 9,514 |
| Water and sewerage.-. .-.....- | 174 | 159 | 5,147 | 21, 165 | . 243 | 11, 910 |
| Miscellaneous. | 24 | 24 | 3,240 | 4,062 | . 798 | 754 |

See footnotes at end of table.

Table 10.- Limployment and lay Rolls on Projects Financed From I'mblic Iforks Administration Funds, December 1939-Continued

| 'rype of project | Wagre earners |  | Monthly pay-roll disbursements | Number of man-hours worked during month | Average earnings per hour | Valuo of material orders placed during month |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  | Maximum number cmployed | Weekly average |  |  |  |  |
|  | Federal projeeln financed from Public Works Adminisiration Appropriation Aet 1938 funds |  |  |  |  |  |
| All projects.-------------------- | 17,247 | 14, 748 | \$1,758, 8\%1 | 1,819, 208 | \$0.967 | \$2,030, 482 |
| Airport construction (exclusive of buildings) | 038 | 627 | 85,055 | 138, 160 | 616 | 73,853 |
| Building construction.-...--- | 12,079 | 10, 187 | 1,210,063 | 1, 163, 680 | 1.040 | 1,616, 283 |
| Electrification | 807 | ${ }^{7} 762$ | 108, 617 | 107, 288 | 1.012 | 63,961 |
| Reclamation...-.-...........- | 1,338 | 1,194 | 143, 016 | 168, 666 | . 851 | -8, 648 |
| River, harbor, and flood control | 824 | 092 | 76,001 | 87, 136 | . 872 | 96, 119 |
| Ship construction.---.---.- | 258 | 205 | 23,538 | 22, 229 | 1.059 | 37, 132 |
| Streets and roads .-.----...- | 192 | 145 | 12, 408 | 14,593 | . 850 | 12, 669 |
| Water and sewerage.-.-...- | 283 | 239 | 16,192 | 21,554 | . 751 | 34,589 |
| Miscellancous...-............. | 477 | 452 | 43, 445 | 51,682 | . 841 | 14,541 |
| Professional, technical, and clerical | 351 | 245 | 39, 932 | 44, 222 | . 903 | 2, 687 |
|  | Non-Fedra | I projects | inanced from fil | National I ads | dustrial k | covery Act |
| All projcets | 5,824 | 5,366 | \$623,375 | 696, 464 | \$0.895 | \$1, 471,086 |
| Building construction ${ }^{6}$....- | 2,947 | 2, 741 | 462, 134 | 352, 191 | 1.312 | 833,651 |
| Railroad construction....- | 10 | 10 |  |  | . 486 |  |
| Strects and roads. | 471 | 420 | 22,586 | 34, 740 | . 650 | 94, 727 |
| Water and sewerage.------- | 120 | 89 | 12, 150 | -7,841 | 1. 422 | 71, 761 |
| Miscellancous ................- | 2, 276 | 2,106 | 12', $48{ }^{\prime \prime}$ | 301, 655 | . 423 | 470,947 |

Non-Federal projects finaneed from Emergency Helief Appropriation Aet 1935, 1936. and 1937 funds

All projects
Building construction.
Electrification
Feavy enfincering.
Reclamation.

Strects and roads...........
Water and sewerago.......
Miscellaneous

| 12,093 | 10, 555 | \$1, 172, 452 | 1,494, 102 | \$0.785 | \$11, 448, 116 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1,451 | 1.262 | 138,815 | 142, 230 | . 976 | 315, 204 |
| 876 | 731 | 59, 2 -6 | 88,921 | . 619 | 12t, 805 |
| 7,031 | 6,281 | 684,958 | 921, 572 | . 743 | 745,798 |
| 1,004 | 789 | 110,936 | 148, 562 | . 747 | 46,374 |
| 50 | 29 | 2,206 | 3, 240 | . 681 | 5, 873 |
| 1,667 | 1,457 | 165, 999 | 189, 096 | . 981 | 212,834 |
| 14 | 8 | 262 | 481 | . 545 | 228 |

Non-Federal projects linanced from Publie Works Adminisiration Appropriation Aet 1938 funds

| 130,609 | 108, 881 | \$12, 279, 758 | 12, 931,538 | \$0.950 | \$26, 747, 769 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 69, 387 | 56,959 | 6, 333, 304 | 6, 207,614 | 1. 020 | 11,770, 369 |
| 1,764 | 1,414 | 120, 270 | 154, 128 | . 780 | 524,798 |
| 16, 847 | 14, 569 | 2, 119.606 | 1, 886, 058 | 1. 121 | 4,960, 222 |
| 957 | 814 | 87,086 | 113, 223 | . 777 | 156, 215 |
| 346 | 298 | 30, 139 | 39,534 | . 762 | 64,468 |
| 19,805 | 16, 244 | 1,525, 598 | 2. 057,856 | .741 | 2,520,925 |
| 21, 315 | 18, 433 | 2, 053,361 | 2,461, 816 | . 884 | 3, 328,807 |
| 188 | 146 | 9,494 | 11,309 | . 840 | 3, 421, 965 |

[^5]
## UNITED STATES HOUSING AUTHORITY

Table 11 shows data for December 1939 on projects of the United States Housing Authority. These figures pertain only to new projects under the United States Housing Authority and not to those formerly under the Public Works Administration.

Table 11.-Employment and Pay Rolls on Low-Rent Housing Projects Operated by the United States Housing Authority, December 1939
[Subject to revision]

| Geographic division | Employment |  | Monthly pay-roll disbursements | Number of manhours worked during month | A verage earnings per hour | Value of material orders placed during month |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Maximum number employed ${ }^{1}$ | Weekly Average |  |  |  |  |
| Nine divisions. | 33, 170 | 28,269 | \$3, 547, 123 | 3,607,494 | \$0.983 | \$6,821, 787 |
| New England | 1.072 | 776 | 96,092 | 99, 093 | . 979 | 51,795 |
| Middle Átlantic | 10,812 | 8,976 | 1, 388, 165 | 1, 079, 771 | 1. 286 | 2,062, 001 |
| East North Central | 3,539 | 3,092 | 471, 147 | 406, 108 | 1. 160 | 603, 180 |
| West North Central | 756 | 677 | 80, 244 | 89,195 | . 900 | 162,415 |
| South Atlantic. | 7,748 | 6,648 | 643, 893 | 853, 110 | . 761 | 1,992, 037 |
| East South Central | 5,357 | 4,702 | 515, 961 | 635, 854 | . 811 | 1,195,981 |
| West South Central. | 3,156 | 2, 784 | 279,587 | 362, 043 | . 770 | 618,831 |
| Pacific | $\stackrel{455}{ }$ | 379 | 50, 337 | 48, 520 | 1. 037 | 79, 724 |
| Outside Continental U.S | 275 | 235 | 20, 797 | 32,900 | . 632 | 55,823 |

: Maximum employed during any 1 week of the month.

## WORK PROJECTS ADMINISTRATION PROGRAM

A record of employment, pay rolls, and man-hours, worked on projects financed and operated by the Work Projects Administration in December is shown in table 12, by type of project.

Table 12.-LEmployment and Pay Rolls on Projects Financed and on Projects Linanced and Operated by the Work Projects Administration, December 1939
[Subject to revision]

| 'lype of project | Wage carners |  | Monthly pay-roll disbursements | Number of man-hours worked during month | $\begin{gathered} \text { A verage } \\ \text { earnings } \\ \text { per } \\ \text { hour } \end{gathered}$ | Value of material orders placed during month |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Maximum number employed | Weekly average |  |  |  |  |
|  | Federal agency projects |  |  |  |  |  |
| All projects. | 198,109 | 93, 910 | \$4, 744.815 | '11, 818,040 | \$0.401 | \$643, 286 |
| Airport construction (exclusive of buildings) | 1,374 | 1,370 | 78,804 | 198, 304 | . 397 | 2,682 |
| Building construction......-.-.-. | 41,567 | 38,780 | 2, 041,218 | 4,7.81, 478 | . 427 | 193, 800 |
| Electrification.-.-.- | 130 | 125 | 5, 748 | 15,085 | . 374 | 9, 107 |
| Forestry - | 8,258 | 8,242 | 410,274 | 1,007, 148 | . 407 | 53, 899 |
| Grade-crossing elimination ${ }^{2}$ | ${ }^{626}$ | 504 | 32,755 | 62, 722 | . 522 | 34, 917 |
|  | 1,013 | 976 | 42, 112 | 169,918 | . 248 | 44,580 |
| Plant, crop, and livestock conservation. | 7,240 | 7,149 | 391, 080 | 881, 173 | . 444 | 53,115 |
| Professional, technical, and clerical. | 5,217 | 5, 118 | 364, 729 | 632, 449 | . 577 | 29,429 |
| Public roads ${ }^{2}$ | 517 | 410 | 32, 414 | 49,339 | . 657 | 10,875 |
| Reclamation.- | 18,681 | 18,404 | 903, 546 | 2, 391, 050 | . 378 | 75, 836 |
| River, harbor, and flood control..... | 939 | 834 | 62, 105 | 98,280 | . 632 | 16. 074 |
| Streets and roads..........--.-........ | 3, 412 | 3,225 | 121, 188 | 410, 168 | . 295 | 43.683 |
| Water and sewerage | ¢ 607 | 8. 527 | 18,898 | 68,335 | . 277 | 12, 030 |
| Miscellancous. | 8.52x | 8,255 | 240.044 | 1,052,591 | . 228 | 63,259 |

Projects operated ly Work l'rojects Administration ${ }^{4}$

All projects $\qquad$ 52,076,039 | $\$ 107,8 \overline{55,673}$ | $246,450,06 \mathrm{I}$ | $\$ 0.438$ | (6) |
| :--- | :--- | :--- | :--- |

[^6]A record of employment, pay rolls, and man-hours worked on projects operated by the Work Projects Administration in November is shown in table 13, by type of project.

Table 13.-Employment and Pay Rolls on Projects Opcrated by the Work Projects Administration by Type of Project for Month of November $1939{ }^{1}$
[Subject to revision]

| Type of project | Number | Pay-roll disbursements | Number of man-hours worked | Average carnings per hour |
| :---: | :---: | :---: | :---: | :---: |
| All projects | 1,939,586 | \$101, 532, 368 | 229, 450, 073 | \$0.443 |
| Conservation. | 56,703 | 3,014, 488 | 6, 950, 637 | . 434 |
| Highway, road, and stree | 843,901 | 40, 220, 777 | 98, 055,073 | . 406 |
| Professional, tcehnical, and clerical | 310, 011 | 18, 917, 016 | 37, 483, 419 | . 505 |
| Public buildings. | 158,334 | 9, 109, 284 | 18, 620, 721 | . 489 |
| Publicly owned or operated utilitios. | 189, 103 | 9,794, 590 | 21, 516, 737 | . 455 |
| Recreational facilities | 119,399 | 6,699, 813 | 14, 172,496 | . 473 |
| Sanitation and health | 32, 693 | 1, 629,951 | 4, 024, 760 | . 405 |
| Sewing, canning, and gardening, ete | 157,323 | 7, 109,052 | 18, 397, 607 | . 386 |
| Transportation.-. | 23, 185 | 1,731, 207 | 3, 216, 355 | . 538 |
| Not clsewhere classified | 48,934 | 3, 306, 190 | 6,112, 268 | . 541 |

${ }^{2}$ Data are as of Nov. 29, 1939.

## NATIONAL YOUTH ADMINISTRATION

Employment and pay rolls on the National Youth Administration projects for November and December 1939 are shown in table 14.

Table 14.-Rimployment and Pay Rolls on National Youth Administration Projects, November and December 1939
[Subject to revision]

| Type of project | Number of employees |  | A mount of pay rolls |  |
| :---: | :---: | :---: | :---: | :---: |
|  | December | Norember | December | November |
| Total. | 729, 645 | 684, 303 | \$8, 395, 484 | \$7, 809, 173 |
| Student Aid.. | 434, 350 | 423, 122 | 2, 967, 327 | 2,958, 862 |
| Work projects.... | 295, 295 | 261, 181 | 5, 428, 157 | 4,850,311 |

## CIVILIAN CONSERVATION CORPS

Employment and pay rolls in the Civilian Conservation Corps in November and December 1939 are presented in table 15.

Table 15.-Employment and Pay Rolls in the Civilian Conservation Corps, November and December 19391
[Subject to revision]

| Group |  | Number of employees | A mount of pay rolls |
| :--- | ---: | ---: | ---: | ---: |

[^7]3 Included in exccutive service, table 9.

## CONSTRUCTION PROJECTS FINANCED BY RECONSTRUCTION FINANCE CORPORATION

Statistics of employment, pay rolls, and man-hours worked on construction projects financed by the Reconstruction Finance Corporation in December are presented in table 16, by type of project.

Table 16.-Employment and Pay Rolls on Projects Financed by the Reconstruction Finance Corporation, by Type of Project, December $1939^{1}$
[Subject to revision]

| Type of project | Maximum number of wage earners ${ }^{2}$ | Monthly pay-roll (lisbursements | Number of nian-hours worked during month | Average earnings per hour | Value of material orders placed during month |
| :---: | :---: | :---: | :---: | :---: | :---: |
| All projects. | 2,322 | \$2:0, 882 | 282,349 | \$0.889 | \$680, 922 |
| Building construction 3 | 2,145 | 224, 079 | 253, 205 | . 885 | $6 \mathrm{BT}, 48 \mathrm{C}$ |
| Water and sewerage. | 17 | 26, 803 | 29, 144 | . 920 | 23, 435 |

${ }^{1}$ Data are for the month ending on the 15th.
${ }^{2}$ Maximum number emploged during any 1 weck of the month by each eontractor.
${ }^{3}$ Includes 032 omployces, pay-roll disbursentents of $\$ 93,259,99,314$ man-hours worked, and material orders placed of $\$ 352,686$, on proieets finaneed ty the RFC Mortgage Co.

## CONSTRUCTION PROJECTS FINANCED FROM REGULAR FEDERAR APPROPRIATIONS

Data concerning employment, pay rolls, and man-hours worked on construction projects financed from regular Federal appropriations during December are given in table 17, by type of project.

Table: 17.-Einployment and Pay Rolls on Construction Projects F'inanced From Regular
Federal Appropriations, by Type of Project, December $1939^{1}$
[Subjeel to revision]

| Type of project | Number of wate earners |  | Monthly pay-roll disburseinents | Number of man-hours worked during month | Average carnings per hour | Value of material orders placed during month |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Maximum number employed ${ }^{2}$ | Weckly average |  |  |  |  |
| All projects | ${ }^{3} 255,106$ | 238,512 | \$27, 293, 719 | 36,060, 130 | 80.757 | \$51, 394, 837 |
| Building construetion | 21,532 | 17, 757 | 2, 038, 584 | 2, 159, 033 | . 944 | 3,004.666 |
| Electrifleation: <br> Rural Electrification Admin- <br> istration projects 4 . | 13, 633 | 10,953 | 767, 696 | 1,492,06.4 | . 515 | 3,960,761 |
| Other than R. F. A, projects. | 198 | 124 | 10,914 | 15,604 | . 699 | 2, 810 |
| Forestry. | 7 | 7 | 545 | 1,263 | . 432 | 38 |
| Heavy engineering | 89 | 84 | 10.485 | 8.503 | 1. 224 | 285 |
| Public roads ${ }^{3}$..... | ${ }^{(6)}$ | 67, 253 | 5,914.929 | 0, 293, 228 | . 636 | 9.858. 215 |
| Reclamation --- | 24,978 | 23, 247 | 3,342,417 | 3.714,300 | .900 | 7,010,913 |
| River, harbor, and flood control: Dredging, dikes, revetments, |  |  |  |  |  |  |
|  | 36,847 | 32, 70 | 3. 266,826 | 5. 099,675 | . 611 | 3. 221,347 |
| Locks and dams | 10,071 | 9, 481 | 1,240, 750 | 1,607, 195 | . 72 | 1,804.907 |
| Ship construction: <br> Naval vessels | 61,830 | 60, 554 | 8,062,096 | 9, 195, 894 | . 8 - | 10, 099.335 |
| Other than naval vessels | 19, 265 | 17,67t | 1,993, 447 | 2,405, 147 | .889 | 9, 462, 398 |
| Streets and roads.....- | 3,821 | 3,342 | 250, 977 | 413, 282 | . 607 | 458,319 |
| Water and sewerago. - | 380 | 315 | 30,925 | 42,416 | . 789 | 49, 372 |
| Miscellancous. | 5, 202 | 4.981 | 363, 128 | 612,461 | . 593 | 1,861,471 |

[^8]
## STATE-ROADS PROJECTS

A record of employment and pay-roll disbursements in the construction and maintenance of roads financed wholly from state or local funds in December 1939, compared with November 1939 and December 1938, is presented in table 18.

Table 18.-Employment and Pay Rolls on Construction and Maintenance of State Roads, December 1939, November 1939, and December $1938{ }^{1}$
[Subject to revision]

| Item | Number of employees ${ }^{\text {2 }}$ |  |  | Pay-roll disbursements |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | December 1939 | November 1939 | December 1938 | $\begin{aligned} & \text { December } \\ & 1939 \end{aligned}$ | $\begin{gathered} \text { November } \\ 1939 \end{gathered}$ | $\begin{aligned} & \text { December } \\ & 1938 \end{aligned}$ |
| Total. | 122,882 | 138, 005 | 184, 361 | \$9,030, 150 | \$10, 409, 450 | \$11, 438, 613 |
| Now roads.. | 19,066 | 23,588 | 21, 223 | 1,246, 390 | 1.632, 630 | 1,398,900 |
| Maintenance | 103, 816 | 114, 417 | 163,138 | 7,783, 760 | 8,776,820 | 10, 039, 623 |

${ }^{1}$ Data are for the month ending on the 15th and are for projects financed wholly from State or local funds.
2 A verage number working during month.

## PURCHASES FROM PUBLIC FUNDS ${ }^{1}$

The value of material orders placed on construction projects financed by Federal funds in the fourth quarter of 1939 is presented in table 19.

In the fourth quarter of 1939, on the Public Works Administration program, orders were placed for materials valued at approximately $\$ 110,913,000$. Of this amount $\$ 36,292,000$ was expended for iron and steel products, $\$ 17,698,000$ for forcst products, $\$ 17,603,000$ for machinery, and $\$ 10,525,000$ for cement and concrete products.

Previous sections of this report have shown the number of workers employed at the site of construction projects financed from Federal funds. The direct employment, however, is only a partial picture, as the manufacture of the materials used on the projects also creates a large amount of employment.

Estimates have been made of the man-months of labor created in fabricating the materials used on the various programs (see table 3). The estimates include only the labor required in the fabrication of material in the form in which it is to be used. No estimate is made of the labor required in producing the raw materials or in transporting them to the point of manufacture. In manufacturing structural steel, for example, the only labor included is that occurring in the fabricating mills; no estimate is made for the labor created in mining, smelting, and transporting the ore, nor for the labor in blast furnaces, the open-hearth furnaces, and the blooming mills.

The information concerning man-months of labor created in fabricating materials is obtained by sending a questionnaire to each firm receiving an award for materials to be financed from Federal or State

[^9]funds. The manufacturer is requested to make an estimate of the number of man-hours created in his plant in manufacturing the materials specified in the contract. For materials purchased directly by contractors the Bureau estimates the man-months of labor created. This estimate is based upon the findings of the Census of Manufactures, 1937.
Table 19.-Value of Material Orders Placed on Construction Projects Financed by Federal Funds for the Fourth Quarter of 1939
[Subject to revision]

| Tyic of material | Public Works Ad-ministration ${ }^{1}$ | $\begin{gathered} \text { U.S. F. A. } \\ \text { low-rent } \\ \text { housing } \end{gathered}$ | Reconstruction Finance Corporation ${ }^{3}$ | Regular Federal | Federal agency projects financed from W. P. A. funds ${ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| All materials | \$110, 913, 497 | \$16, 891, 497 | \$1, 289, 226 | \$134, 126, 867 | \$2, 108, 895 |
| Textiles and their products | 522, 500 | 42,451 | 102 | 135, 634 | 10,325 |
| Awnings, tents, canvas, etc.-.----.-........-- | 4,363 49,499 | 481 | 13 | 11, 732 | 655 |
| Cordage and twin | 14,576 | 446 | 50 | 29,48 | 1,330 |
| Cotton products. | 3,534 |  |  | 373 | 31 |
| Felt products | 6,297 | 721 | 39 | 847 | 240 |
| Juto products | 3, 155 | 1,061 |  | 1,154 | 81 |
| Linoleum and asphalted-felt-base floor covering | 253, 522 | 37,411 |  | 22, 577 | 4,902 |
| Sacks and bags, other than paper | 615 |  |  | 172 | 110 |
| Upholstering, filling, batting, padding, and wadding. | 1,367 |  |  |  |  |
| Waste and related products .-......-. -- | 666 | 209 |  | 2, 565 | 203 |
| Textiles and their products, n. e. c..........- | 184, 906 | 2,122 |  | 66, 728 | 2,767 |
| Forest products | 17,697, 575 | 1,827,747 | 69,403 | 6,316, 463 | 227, 615 |
| Cork products | 83, 651 | 468 | 160 | 8, 126 | 647 |
| Furniture and related products | 12.320, 284 | 98, 197 | 3,368 | 514, 52.5 | 6,886 |
| Lumber and timber products, n. e. | 2, 609,080 | 1,013,341 | 48, 455 | 4, 506, 670 | 186, 275 |
| Planing-mill products .-----...----------- | 2, 561,972 | 703,037 | 17, 419 | 1, 178, 334 | 33, 647 |
| Window and door screens and weatherstrip | 120, 762 | 12, 670 |  | 7,792 | 39 |
| Forest products, in. e. c. | 1,826 | 34 |  | 41,016 | 121 |
| Chemicals and allied products | 2, 759, 137 | 150, 299 | 6, 601 | 1,060, 681 | 77, 522 |
| Compressed and liquefied gases | 40,147 | 1,215 | 1,288 | 28, 918 | 2,190 |
| Fxplosives | 451, 535 | 4, 641 | 931 | 651, 002 | 14,334 |
| Paints, piginents, and varnishes | 655,510 | 132,314 | 4,376 | 355, 109 | 41, 438 |
| Chemicals and allicd products, n | 1,611,945 | 12, 129 | 6 | 25, 652 | 19,560 |
| Stone, clay, and glass products. | 26, 356, 502 | 5. 220,107 | 138, 369 | 28, 670, 975 | 520, 202 |
| Asbestos products, n. e. c | 48,467 | 15, 370 |  | 11, 103 | 32 |
| Brick, hollow tile, and other clay products, n. e. c | 4, 422, 426 | 1,414,920 | 26,942 | 445,573 | 21, 209 |
| Cement | 4, 709,184 | , 484, 062 | 57, 423 | 11, 826, 65.3 | 205, 779 |
| Concrete products | -). 816. 105 | 2, 024,330 | 17,425 | 1, 131, 881 | 29,045 |
| Crushed ston | 1, 334, 374 | 58, 090 | 579 | 4,643, 769 | 133, 262 |
| Olass. | 577, 762 | 73, 991 | 3,790 | 143,486 | 6,884 |
| Lime | 39, 297 | 49,20' | 88 | 2,040 | 1,882 |
| Marble, granite, slate, and other stone, cut and shaped | 3, 150, 871 | 143, 724 | 1,292 | 1,324, 424 | 2,521 |
| Minerals and earths, ground or othervise treated | 2,528 | 1,516 |  | 157 | 2,521 |
| Sand and gravel. | 2, 803, 480 | 237, 339 | 16,350 | 8, 229, 146 | 55,979 |
| Steam and other packing, pipe and boiler covering, and caskets | 399, 796 | 183. 555 | ${ }^{156}$ | 259,982 | 2,954 |
| 'Tiling, floor and wall, and terrazzo.-. .-... | I, 248, 001 | 100, 264 | 627 | 215, 845 | 46,349 |
| Wall plaster, wallboard, and building insulation | 1,405, 166 | 380, 218 | 13, 500 | 400, 209 | 10,038 |
| Stone, clay, and glass products, n. c. | 399, 045 | 51, 521 | 203 | 36,707 | 14,268 |

1 Include material orders placed on Public Works AAministration projects financed by the Emergency Relief Appropriation Acts of 1985, 1936, and 1937, and P. W. A. A. 1938 funds. Data on low-rent housing projects financed from N. I. IR. A. and F. R. A. A. 1935 funds are also included.
${ }^{2}$ Includes projects financed by IRFC Mirtgage Co.
${ }^{3}$ Includes projects financed by transfer of W.P. A. finds to other Federal agencies under sec. 3, E. R. A. A. 1938, and sec. 11-A, E. H. A. A. 1939.

Table 19.-Value of Material Orders Placed on Construction Projects Financed by Federal Funds for the Fourth Quarter of 1939-Continued

[Subject to revision]


1 Includes material orders placed on Public Works A dministration projects financed by the Emergency Relict Appropriation Acts of 1935, 1930, and 1937, and P. W. A. A. 1938 funds. Data on low-rent housing projects financed from N. I. R. A. and E. R. A. A. 1935 funds are also included.
${ }_{2}$ Ineludes projects financed by RFC Mortgage Co.
3 Includes projects financed by transfer of $W$. P. A. funds to other Federal agencies under sec. 3, E. R. A. A. 1938, and sec. 11-A, E. R. A. A. 1939.
4 Does not include National Youth Administration projects.

Table 20.-Value of Material Orders Placed on Construction Projects Financed by Federal Funds for the Third Quarter of 1939—Continued

| Type of material | Total | Projects |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Public Works Administration | $\begin{gathered} \text { U. S. II. A. } \\ \substack{\text { iow-rent } \\ \text { housing }} \end{gathered}$ | Reconstruction Finance Corporation | Regular Federal | Fedoral agency projects financed from W.P.A.funds | Operated by W.P.A. |
| Nonferrous metals and their products. | \$3, 927, 971 | \$2, 332, 381 | \$251, 765 | \$8, 787 | \$866, 030 | \$24, 145 | \$444, 863 |
| Machinery, not including transportation equipment. | 85, 231, 031 | 21, 510, 818 | 1,058, 002 | 359, 906 | 57, 599, 557 | 219,709 | 4,483, 039 |
| Electrical machinery, apparatus, and supplies Engines, turbines, tractors, and water wheels. Other machinery.. | $\begin{aligned} & 20,910,376 \\ & 18,655,848 \\ & 45,664,807 \end{aligned}$ | $\begin{array}{r} 5,075,964 \\ 3,555,118 \\ 12,879,736 \end{array}$ | 65,905 992,097 | $\begin{array}{r} 20,476 \\ 3,667 \\ 336,763 \end{array}$ | $\begin{aligned} & 13,797,405 \\ & 15,063,718 \\ & 28,738,431 \end{aligned}$ | $\begin{array}{r} 38,679 \\ 13,204 \\ 167,826 \end{array}$ | $\begin{array}{r} 1,911,947 \\ 21,141 \\ 2,549,951 \end{array}$ |
| Transportation equipment-air, land, and water. | 1,702, 078 | 277, 597 | 723 | 72,460 | 896, 229 | 53, 379 | 401, 680 |
| Motor vehicles, trucks Other trausportation equipment | $\begin{aligned} & \mathbf{9 2 1 , 0 4 3} \\ & \mathbf{7 8 1}, 035 \end{aligned}$ | $\begin{array}{r} 228,934 \\ 48,663 \end{array}$ | 723 | 72,460 | $\begin{aligned} & 268,178 \\ & 628,051 \end{aligned}$ | $\begin{aligned} & 22,241 \\ & 31,138 \end{aligned}$ | 401, 690 |
| Miscellanoous. | 39, 485, 622 | 8,531,628 | 1, 547, 272 | 56,739 | 12, 112, 633 | 516, 293 | 16,721, 052 |
| Coal and coke | 530,804 $12,439,909$ | 131,755 $1,921,630$ | 1,397 4,334 | 1,390 2,702 | 297,444 $1,950,510$ | 1, 489 | 97,329 $8,508,459$ |
| Petroleum products........... | 9,764, 151 | 2, 118, 822 | 57,351 | 7,734 | 5, 199,961 | 87, 405 | 2, 292, 878 |
| Rubber goods . | 529, 341 | 187,080 | ${ }^{6713}$ | 1, 429 | 121, 371 | 5,375 | 213, 373 |
| Other materials. | 16, 221,417 | 4, 172, 341 | 1,433,477 | 43, 394 | 4, 543, 347 | 369,845 | 5, 609, 013 |

Table 20 shows the value of material orders placed on construction projects financed by Federal funds during the third quarter of 1939, by type of project.

Table 21 shows the estimated value of materials, supplies, and equipment purchased for National Youth Administration work projects during the last half of 1939.

Table 21.-Estimated Value of Materials, Supplies, ind Equipment Purchased for National Youth Administration Work Projects July Through December, 1939
[Subject to revision]

| Type of matcrial | Value | Type of material | Value |
| :---: | :---: | :---: | :---: |
| All materials | \$2.107, 100 | Iron and steel and their products, notincluding machinery-Continued. <br> Pipe and fittings, cast-iron $\qquad$ <br> Plumbing supplies, n. e. c. $\qquad$ <br> Structural and reinforcing steel. <br> Tools, other than machine tools. <br> Other products of iron and steel. $\qquad$ $\qquad$ <br> Nonferrous metals and their products. $\qquad$ | $\begin{array}{r} \$ 15,600 \\ 26,600 \\ 2 \tau, 000 \\ 211,300 \end{array}$ |
| Textiles and their prod | 150, 000 |  |  |
| Forest product | 249, 060 |  |  |
| Forst product |  |  |  |
| Furniture and related products. | $\begin{array}{r} 8,660 \\ 240,400 \end{array}$ |  | 129,900 |
| Lumber and timber products, n.e.c |  |  | 22,200 |
| m | 71,900 | Nonferrous metals and their products. . <br> Machinery, not including transportation equipment |  |
| Paints, pigments, and varnishes | 38,600 33,300 |  | 501,185 |
| Stone, clay, and g | 160,900 | Electrical machincry, apparatus, and supplies. | 96,600 |
| Brick, hollow tile, and other clay products $\qquad$ | 17,600 | Ongines, turbines, tracto | 7,185 397,400 |
| Cement. | 85, 100 | Transportation equipment, motortrucks. | 136,515 |
| Concrete produc | 3,900 |  |  |
| Sand and gravel | 8, 500 |  | 384, 540 |
| Other stone, clay, and glass products | 43,700 | Cor |  |
| Iron and steel and their products, not including machinery | 430, 800 | Coal and coke | 23,900 |
|  |  | Peaving materials and mixtures | 24,300 69,400 |
|  |  | Petroleum product | 69.400 19,900 |
| Heating and ventilating equipment. | 26, 400 | Other material | 247,040 |

Rentals and services on projects operated by the Work Projects Administration for the third quarter of 1939, the second quarter of 1939 , and the third quarter of 1938 are shown in table 22, by type of rental and service.

Table 22.-Rentals and Services on Projects Operated by Work Projects Administration
[Subject to revision]

| Type of rental and service | Third quarter of 1939 : | $\begin{aligned} & \text { Sccond } \\ & \text { quarter of } \\ & 1939^{2} \end{aligned}$ | $\begin{aligned} & \text { Third } \\ & \text { quarter of } \\ & 19388 \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| All rentals and services... | \$58, 344, 111 | \$62, 487, 081 | \$57, 609, 296 |
| Motor vehicles | 23, 608,607 | 27, 796, 725 | 27, 685, 828 |
| Teams and rragons | 472. 824 | 572, 982 | 826, 577 |
| Paving, road building, and construction equipment | 20,667,329 | 19, 396, 612 | 19,681, 253 |
| Other equipment (including oflice equipment) ..... | 1, 581, 404 | 1, 604, 535 | 1,337, 084 |
| Space rentals and services. | 4, 821,590 | 5, 573,346 | 3, 800, 856 |
| Other services (including utilities) | 7, 192,351 | 7, 542, 881 | 4, 276,798 |

${ }^{1}$ Quarterly period ending September 30, 1939.
Quarterly period euding June 30, 1939. Ruvised
${ }^{3}$ Quarterly period ending Septeniber 30, 1938. Ieviscel.

Table 23 shows rentals and services on work projects of the National Youth Administration for the second half of 1939.

Tabie 23.-Estimated Value of Rentals and Services Supplied to National Youth Alministration Work Projects, July Through December 1939
[Subject to revision]

| Type of rental or servies | Value | Type of rental or service | Value |
| :---: | :---: | :---: | :---: |
| Total.. | \$618, 100 | Other equipment, including office equip- |  |
| Motor vohicles...... . . . .... | 139, 500 | Space rentals and services | $\begin{aligned} & \$ 19,800 \\ & 81,000 \end{aligned}$ |
| Teams and wagons. .-................ | 1300 | Other services, including utilities . . . . .-... | 367, 100 |
| Paving, road building, and other construction equipment. | 10,400 |  |  |

In connection with the administration of the Public Contracts Act the Bureau of Labor Statistics has been collecting data on supply contracts awarded by Federal agencies of the United States for the manufacture or furnishing of materials, supplies, articles, and equipment in any amount exceeding $\$ 10,000$. The first public contracts were awarded under the act in September 1936.

Table 24 shows the value of public contracts awarded under the act for supplies during the fourth quarter of 1939 , the third quarter of 1939, and the fourth quarter of 1938.

Table 24.-Value of Supply Contracts Auarded by the Federal Government, Which Contain Agreements to Comply With the Public Contracts Act, by Type of Material
[Subject to revision]

\begin{tabular}{|c|c|c|c|}
\hline \multirow[b]{2}{*}{Type of materials} \& \multicolumn{3}{|c|}{Value of contracts awarded} \\
\hline \& Fourth quarter of 1939 \& Third quarter of \(1939{ }^{1}\) \& Fourth quarter of \(1938{ }^{1}\) \\
\hline All materials. \& \$105, 646, 359 \& \$173, 207, 809 \& \$239, 694, 173 \\
\hline Food and kindred products \& 2,670, 177 \& 2, 375, 334 \& 2,118,058 \\
\hline Canned fruits and vegetables. \& 884, 219 \& 951, 968 \& 379,518 \\
\hline Canned sea foods... \& 66,686 \& 59, 52I \& \({ }_{16,378}\) \\
\hline Cereal preparations \& 421, 755 \& 143,615 \& - \(\begin{array}{r}10,373 \\ 243 \\ \hline 278\end{array}\) \\
\hline Condensed and evaporated milk \& 266, 889 \& 118,971 \& 37,083 \\
\hline Feeds, prepared, for animals and fowls. \& 155,458 \& 211, 42.4 \& 125, 602 \\
\hline Flour and other grain-mill products.. \& 124, 399 \& 102, 494 \& \begin{tabular}{l}
139,799 \\
392 \\
\hline 188
\end{tabular} \\
\hline Meat-packing products. \({ }_{\text {Shortening and vegetable cooking oil.. }}\) \& 14), 395 \& 170,792 \& 392,238
123,851 \\
\hline Sugar ........... \& 315.784 \& 231.719 \& 283,411 \\
\hline Misellaneous subsistenee stores and supp \& 288, 492 \& 384, 830 \& 314, 527 \\
\hline Textiles and their products \& 14,593, 241 \& 8, 684, 124 \& 4. 750,819 \\
\hline \({ }^{\text {Aunnings, tents, sails, and canvas covers. }}\) \& 509, 848 \& \({ }^{216.074}\) \& 12.330 \\
\hline Clothing (overeoats, suits, trousers, ete.).- \& 1,5017,801 \& 214, 155 \& 45,591
85,220 \\
\hline Cordage and twine, including thread. \& 170,542 \& 147, 994 \& 85,220
37,360 \\
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
Cotton goods (drills, prints, sheeting, etc.) \\
Cotton shirts
\end{tabular}} \& 3, 187, 638 \& 3, 664, 375 \& 1, 747, 143 \\
\hline \& \& 18.403 \& \\
\hline \multirow[t]{3}{*}{\begin{tabular}{l}
Furnishing goods, men's, n. c. e. \\
Housefurnishing goods (pilloweases, sheets, cte.) \\
Knit goods (hosiery, underwear, etc.)
\end{tabular}} \& \(\begin{array}{r}1,293,186 \\ 504,035 \\ \hline 1\end{array}\) \& \(1,435,269\)

727,227 \& 76,110
128,428 <br>
\hline \& 402, 158 \& 363, 689 \& 60,778 <br>
\hline \& 72.934 \& \& 75, 258 <br>
\hline  \& 4, 644, 332 \& 6650,022 \& 1,900, 727 <br>
\hline \multirow[t]{2}{*}{Work clothing .-.ise produets...........} \& 472,277
$1.828,490$ \& 509, 673 \& 165,076 <br>
\hline \& 1,828,490 \& 722, 243 \& 326, 798 <br>
\hline
\end{tabular}

[^10]'Tanne 24.—Value of Supply Contracts Auarded ly the Federal Government, Which Contain Agreoments to Comply With the Public Contracts Act, by Type of Material-Con.


Table 24.-Value of Supply Contracts Auarded by the Federal Government, Which Contain Agreements to Comply With the Public Contracts Act, by Type of Material-Con.

| Type of materials | Value of contracts awarded |  |  |
| :---: | :---: | :---: | :---: |
|  | Fourth quarter of 1939 | Third quarter of 1939 | Fourth quarter of 1938 |
| Nonferrous metals and their alloys. | \$3, 148,758 | \$4, 433, 937 | \$2,989,930 |
| Aluminum manufactures | 305, 359 | 540, 470 | 251,356 |
| Brass products. | 612,579 | 1,316,384 | 351,559 |
| Bronze products | 310, 273 | 449, 874 | 30, 250 |
| Copper products.----7- | 315, 497 | 346, 045 |  |
| Fixtures, gas and electric | 619,163 123,159 | $\begin{array}{r} 64,275 \\ 140,345 \end{array}$ | $\begin{array}{r} 1,790,703 \\ 23,276 \end{array}$ |
| Magnesium. | 30,207 |  | 15,385 |
| Nickel-- | 331, 080 | 192, 028 | 131, 200 |
| Plated ware-- | 67,305 |  | 35,911 |
| Tin... | 43, 822 | 16,597 | 92,877 |
| Zinc |  | 33, 000 | 11,350 |
| Miscellancous nonferrous metals and alloys | 362, 164 | 1,334,019 | 194, 941 |
| Machinery, not including transportation equipment and electrical equipment. | 7,160,861 | 11,751, 680 | 11.675,918 |
| Air-conditioning equipment | 168, 766 | 62, 852 | 64, 141 |
| Business machines......... | 75,396 | 104,703 | 19,778 |
| Engines, turbines, tractors, and parts. | 1, 219,920 | 2, 164, 810 | 270,450 |
| Filter and purification equipment |  | 91, 312 | 41, 720 |
| Laundry machinery and equipment | 21, 450 | 78,591 | 117,825 |
| Machine tools. | 3, 199, 392 | 3, 289, 972 | 1, 448.328 |
| Phonographs and accessories | 241460 |  | 17,000 |
| Printing and publishing machinery | 29, 193 | 567, 072 | 122, 390 |
| Pumps and pumping equipment. | 472, 872 | 1,366, 357 | 1, 118, 882 |
| Refrigerators and refrigerating and ice-making machinery. | 36,586 | 235, 562 | 62,684 |
| Road machinery - ${ }^{\text {a }}$, | 18,501 79 | - 54,151 | 103,121 25,450 |
| Miscellaneous machinery and parts | 1,597,832 | 3, 399, 232 | 5, 161, 309 |
| Electrical machinery, apparatus, and supplies. | 6. 0966,307 | 11,066, 960 | 4, 174, 228 |
| Batteries | 11,709 | 58, 747 | 104, 140 |
| Circuit breakers and | ${ }^{235,553}$ | 1,255, 834 | 424,268 |
| Eleetric cable, wire, and other conductors | 1,625,441 | 1, 297,083 | 181,396 |
| Generators and spare parts | 252, 753 | 1,463, 257 | 040, 969 |
| Heaters and ranges. | 165,716 | 52,337 | 33,000 |
| Motors | 87, 879 | 12,586 | 53, |
| Radio equipment and supplies. | 1, 699.750 | 5, 288,856 | 794. 584 |
| Spark plugs | 117,449 | 37, 250 | 145,954 |
| Starters --ards, relay and control equipment | 19,778 |  |  |
| Switchboards, relay and control equipment | $\begin{array}{r}61.031 \\ 619,915 \\ \hline\end{array}$ | 249,908 <br> 314,568 | 327,167 103,608 |
| Transformers. | 572, 281 | 316, 961 | 408, 893 |
| Welding equipment.--...... | 35,366 | 26, 840 | 28,290 |
| Miscellaneous electrical machinery, apparatus, and supplies | 591, 686 | 692, 735 | 528,401 |
| Transportation equipment..........................---........-- | 41,793, 522 | 77, 301, 145 | 183, 325, 955 |
| Aircraft | 16,062,757 | 66,982, 735 | 3, 258, 576 |
| Aircraft parts and equipmen | 2,594, 451 | 3, 817, 618 | 3, 280,005 |
| Boats aud boat equipment. | 475, 465 | 141, 148 |  |
| Motor vehicles, passenger | 387,057 | 1,717,792 | 82,261 |
| Motor vehicles, trucks | 13, 205,224 | 1,465, 88.5 | 1, 228,074 |
| Naval vessels ${ }_{\text {Miscellaneous }}$ transportation equipmen | $1,122,400$ $7,946,168$ | $\begin{array}{r}\text { 3, } \\ \text { 173, } \\ 17378 \\ \hline\end{array}$ | $\begin{aligned} & 175,{ }^{2} 455,000 \\ & 132,039 \end{aligned}$ |
|  | 4, 006, 762 | 5, 022, 264 | 7,416,839 |
| Brooms, brushes, bristl | 132,487 | 18,455 |  |
| Dental goods and equipment | 198,622 |  | 34, 176 |
| Instruments, professional and scientific | 1, 515,045 | 2, 496, 135 | 572, 244 |
| Office equipment and supplies, n. e. c | 78.430 | 109, 460 | 927, 257 |
| Paper and allied products. | 124, 299 | 685, 213 | 3, 009, 302 |
| Photographic apparatus and materials. | 265, 151 | 259,544 | ${ }^{133,870}$ |
| Printing, publishing, and subseriptions | 25,190 | 105, 740 | 20, 815 |
| Rubber products. | 427, 158 | 157, 897 | 245,947 |
| Slag. | 69,370 | 45,450 | 178,301 |
| Steam and other packing, pipe and boiler covering | 141, 324 | 19,089 | 7,815 |
| Surgical and orthopedic supplies and appliances. | 231, 950 | 210, 911 | 195, 868 |
| Tobaceo manufactures. Other materials | 12,563 540,470 | 16,375 723,762 |  |
| Rentals, services, etc. (equipment rental, repairs, aerial surveys, etc.) | 244,705 | 174,233 | 295,805 |

The value of public contracts awarded for supplies by Federal agencies totaled $\$ 105,646,000$ during the fourth quarter of 1939. Of the contracts awarded in the fourth quarter of $1939 \$ 41,794,000$ was for transportation equipment; $\$ 14,593,000$ for textiles and their products; $\$ 8,863,000$ for iron and stecl and their products; and $\$ 7,819,000$ for products of asphalt, coal and petroleum.


[^0]:    Includes data on projects financed wholly or partially from Federal funds.
    ${ }^{2}$ Includes force-account and supervisory and technical employees shown under other classifications to the extent of 129,938 employees and pay-roll disbursements of $\$ 15,987,842$ for December 1935, and 129,095 employees and pay-roll disbursements of $\$ 16,415,643$ for November 1930.
    ${ }_{3}$ Revised.
    ${ }^{1}$ Data covering P. W. A. projects financed from National Industrial Recovery Act funds, Emergency Relier Appropriation Acts of 1935, 1936, and 1037 funds, and Public Works Administration Appropriation Act of 1938 funds are included. These data are not shown under projects financed by the Work Projects Administration. Includes $\mathbf{1 2 , 0 8 3}$ wage earners and $\$ 1,172,452$ pay roll for December $1939 ; 12,439$ wage earners and $\$ 1,213,687$ pay roll for November 1939, covering P'ublic Works Administration projects financed from Emergeney Relief Appropriation Acts of 1935, 1936, and 1937 funds. Includes 147,856 waye earners and $\$ 14,038,620$ pay roll for Decenber 1939; 183,630 wage earners and $\$ 17,180,040$ pay roll for November 1939 , sovering Public Works Administration projects finaneed from funds provided by the l'ublie Works Administration A ppropriation Act of 1938.

    - Includes 932 employees and pay-roll dishursements of $\$ 93,259$ for December 1939; 973 employecs and pay-roll disbursements of $\$ 101,831$ for November 1939 on projects financed by the RFC Iortgage Co.

[^1]:    1 Jata covering projects financed from E. R. A. A. 1935, 1936, 1037, and P. W. A. A. 1938 funds are included. These data are not shown under projects finanecd from W. P. A. funds. Includes low-rent housing projects finaneed from funds of N. I. R. A. and E. R. A. A. 1985.
    2 Includes $\ddagger$ RFO Mortgage Co.
    ${ }^{3}$ Includes projects financed by transicr of W. P. A. funds to other Federal agencies under sec. 3, E. R. A. A. 1038, and sec. 11-A, E. R. A. A. 1939.

    - Data not available.

[^2]:    1 Revised series for "all manufacturing," for varions proups under manufacturing, for sawmills, fertilizers. soap, and telephone and telegraph. Mimeosraphed shects to 1938 , inclusive, and by months, January 1038 to september 1939, inclusive, available on request. A verage weekly earnings are computed from fignres surnished by all reporting estabishments. A verage bours and average hourly carnings are computed from man-hours. The figures are not strictly comparable from month to month beeause of changes in the size and composition of the reporting sample.

[^3]:    13 -vear average 1923-25 $=100$-adjusted to 1937 Census of Manufactures.
    ${ }^{2} 32$-month average for $1920=100$. Comparable indexes are in November 1934 and subscquent issues of Employment and Pay Rolls, or in February 1935 and subsequent issues of Monthly Labor Review, except for anthracite and bituminous-coal mining, ycar-round hotels, laundries, and dyeing and cleaning. Indexes for these industrics from January 1929 forward have been adjusted to the 1935 census and are presented in the January 1938 and subsequent issues of Employment and Pay Rolls.
    ${ }^{3}$ Includes: Iron and steel, machinery, transportation equipment, nonferrous metals, lumber and allied products, and stonc, clay, and glass products.
    4 Includes: Textiles and their products, leather and its manufactures, food and kindred products, tobacco manufactures, paper and printing, chemicals and allied products, products of petroleum and coal, rubber products, and a number of miscellancous industries not ineluded in other groups.

[^4]:    ${ }_{1}^{1}$ Does not include Flizabeth, Jersey City, Newark, nor Paterson, N. J., nor Yonkers, N. Y.
    ${ }^{2}$ Does not include Gary, Ind.
    ${ }^{3}$ Does not include Camden, N. J
    ${ }^{4}$ Does not include Long Beach, Cailif.
    6 Does not include Canibridge, Lynn, or Somerville, Mass.
    ${ }^{6}$ Does not include Oakland, Calif.

[^5]:    1 Data are for the month ending on the 15th.
    2 Maximum number employed during any 1 week of the month by each contractor and Government ageney doing foree-account work.
    ${ }^{3}$ Includes weekly average for public roads.
    4 Under the jurisdiction of the Public Roads Administration.
    5 Not available: Weekly average included in total for all projects.
    ${ }^{8}$ Includes data for workers engaged in construction of underground tunnel who, because of the additional risk involved, were paid at rates highor than those usually paid for building construetion.

[^6]:    1 Maximum number employed during any 1 week of the month by each contractor and Governmen agency doine force-account work.
    ${ }_{2}$ These data are for projects under the jurisdiction of the Public Roads Administration.
    ${ }^{3}$ These data are for projects under construction in Puerto Rico.
    4 Data are for the calendar month. Not available by type of project.
    ${ }^{5}$ Represents number of names on pay roll as of Dec. 27, 1039.
    ${ }^{6}$ Data on a monthly basis are not available.

[^7]:    ${ }^{1}$ Data on number of employees refer to employment on last day of month. Amount of pay rolls are for the entire month.
    ${ }^{3}$ December data include 4,672 enrollees and pay roll of $\$ 102,425$ outside continental United States; in Novernber the corresponding figures were 4,577 enrollees and pay roll of $\$ 100,200$.

[^8]:    1 Data are for the month ending on the 15 th.
    2 Maximum number employed durivg any 1 week of the month by each contractor, and Government agency doing force-account work.

    3 Includes werkly average for public-road projects.
    4 Financod by liural Electrincation Adininistration loans.
    s Under the jurisdiction of the Public Roads Administration.
    Not a vailable, weekly a verage included in the total for all projects.

[^9]:    1 Unless otherwise specifed, data presented in this section are as of the 15 th of the month.

[^10]:    ${ }^{1}$ Revised,
    2 Labor only. Materials furnished by United States Government.

