UNITED STATES DEPARTMENT OF LABOR
Frances Perkins, Secretary bUREAU OF LABOR STATISTICS Isador Lubin, Commissioner



## EMPLOYMENT

AND PAY ROLLS

Prepared by
DIVISION OF EMPLOYMENT STATISTICS
Lewis E. 'Talbert, Chief
and
DIVISION OF CONSTRUCTION AND
PUBLIC EMPLOYMENT
Herman B. Byer, Chief

## OCTOBER 1939

## 

UNITED STATES GOVERNMENT PRINTING OFFICE • WASHINGTON • 1939
Page
Summary of employment reports for October 1939:
Total nonagricultural employment ..... 1
Industrial and business employment ..... 1
Public employment ..... 5
Detailed tables for October 1939:
Industrial and business employment ..... 8
Public employment ..... 23
Tables
Summary
Table 1.-All manufacturing industries combined and nonmanufacturing. industries-employment, pay rolls, and weekly earnings, October 1939 ..... 5
Table 2.-Federal employment and pay rolls-summary, October 1939 ..... 7
Industrial and Business Employmext
Table 3.-Manufacturing and nonmanufacturing industries-employ- ment, pay rolls, hours, and earnings, October 1939 ..... 9
Table 4.-Manufacturing and nonmanufacturing industries-employ- ment, pay rolls, hours, and earnings, August through Octo- ber 1939 ..... 14
Table 5.-Manufacturing and nonmanufacturing industries-indexes of employment and pay rolls, October 1938 through October 1939 ..... 20
Table 6.-Geographic divisions and States-comparison of employment and pay rolls in identical establishments in September and October 1939 ..... 21
Table 7.--Principal metropolitan areas-comparison of employment and pay rolls in identical establishments in September and Octo- ber 1939 ..... 23
Public Employment
Table 8.-Wxecutive service of the Federal Government-employment and pay rolls in September and October 1939 ..... 24
Table 9.-Construction projects financed by Public Works Administra- tion funds-employment, pay rolls, and man-hours worked, October 1939, by type of project ..... 24
Table 10.-Housing projects of the V.S. Housing Authority-employ- ment, pay rolls, and man-hours worked, October 1939, by geographic division ..... 28
Table 11.-Projects financed and operated by the Work Projects Admin- istration-employment, pay rolls, and man-hours worked, October 1939, by type of project ..... 29(III)
Page
Table 12.-Projects operated by the Work Projects Administration-em- ployment, pay rolls, and man-hours worked, third quarter 1939, by type of project ..... 29
Table 13.-National Youth Administration work projects and Student Aid--employment and pay rolls, September and October 1939 ..... 30
Table 14.-Civilian Conservation Corps-employment and pay rolls, Sep- tember and October 1939 ..... 30
Table 15.-Construction projects financed by the Reconstruction Finance Corporation-employment, pay rolls, and man-hours worked, October 1939, by type of project ..... 31
Table 16.-Construction projects financed from regular Federal appro- priations-employment, pay rolls, and man-hours worked, October 1939, by type of project ..... 32
Table 17.-Construction and maintenance of State roads-employment and pay-roll disburscments, October 1939, September 1939, and October 1938 ..... 32

# Employment and Pay Rolls 

## SUMMARY OF REPORTS FOR OCTOBER 1939

## Total Nonagricultural Employment

BETWEEN September and October nearly 400,000 workers were returned to jobs in nonagricultural occupations. In addition to a greater-than-seasonal gain of nearly 270,000 workers in manufacturing industries, largely in the durable-goods group, there were substantial employment increases in wholesale and retail trade, in mining, and on class I steam railroads.

These figures do not include emergency employment which increased 127,000 in October as follows: 106,000 on projects operated by the Work Projects Administration, 8,000 in the Civilian Conservation Corps, and 13,000 on work projects of the National Youth Administration.

## Industrial and Business Employment

Increases in employment from September to October were reported for 74 of the 90 manufacturing industries surveyed by the Bureau of Labor Statistics, and for 8 of the 16 nonmanufacturing industries coverel. Pay-roll gains were shown by 75 of the manufacturing and 10 of the nonmanufacturing industries.

For all manufacturing industrics combined the gains were 3.4 percent in employment and 8.3 percent in pay rolls. These indicated the addition of nearly 270,000 wage earners to the number employed and $\$ 14,800,000$ to weekly wages. Factory employment and pay rolls have expanded each month since May with the exception of a smaller-than-seasonal pay-roll decline in July. It is notable that the current gains are larger than those reported for October in any of the preceding 20 years. On the average, employment in October has shown but little variation from the September level, while pay rolls have shown an increase of 1.2 percent.

The factory employment index for October, which stood at 103.6 percent of the 1923-25 level, was 12.1 percent above the figure for October 1938, and the pay-roll index, at 101.6 percent of the $1925-25$ arerage, was 20.7 percent above a year ago. Both indexes are at the highest level since the autumn of 1937. The most marked increases from September to October were in the durable-goods group of in-
dustries- 7.1 percent for employment and 13.4 percent for pay rolls. The corresponding increases for the nondurable-goods group were 0.5 percent and 3.3 percent. Employment in the durable-goods group was 20.6 percent higher than a year ago, and pay rolls were 33.6 percent higher. For the nondurable-goods group the gains over the year interval were 5.8 percent and 9.4 percent.

As in the past few months, most of the employment gains were larger than seasonal or have occurred in industries where there is usually a loss of employment, this being especially true of the dura-ble-goods industries. Among the industries showing such increases were steel ( 56,900 workers) ; automobiles ( 35,800 workers); cotton goods ( 21,600 workers); foundries and machine shops ( 21,400 workers); woolen and worsted goods ( 15,700 workers); electrical machinery ( 11,300 workers) ; brass, bronze, and copper products ( 10,300 workers); sawmills ( 10,000 workers); radios and phonographs $(7,800$ workers) ; furniture ( 6,800 workers); paper and pulp ( 5,800 workers); chemicals ( 5,700 workers); paper boxes ( 5,400 workers); rubber goods, other than shoes and tires ( 5,300 workers); dyeing and finishing textiles ( 5,100 workers); cars, electric- and steam-railroad $(4,700$ workers) ; silk and rayon goods (4,400 workers); glass (4,200 workers); and machine tools ( 4,100 workers).

The aircraft industry reported a gain of 6.1 percent, or 2,500 , in the number of wage earners, marking the thirteenth consecutive monthly increase. The employment index for this industry is at an all-time high, with about three times as many people employed as in 1929.

Only 4 of the clurable-goods and 12 of the nondurable-goods industries reported employment declines in October. Important declines, all seasonal, were those in canning and preserving ( 102,800 workers), boots and shoes ( 5,100 workers), beverages ( 4,600 workers), ice cream ( 2,200 workers), men's clothing ( 2,200 workers), and millinery ( 2,000 workers).

Retail establishments increased employment between mid-September and mid-October by 1.3 percent, or 44,000 workers, and weekly pay rolls by 2.5 percent, or $\$ 1,677,000$. The October employment gain, although slightly smaller than the average October increase reported for the last 10 years, followed a greater-than-seasonal increase between August and September. Between October 1938 and October 1939 the gains were 2.9 percent, or 99,300 , in number of employees and 4.7 percent, or $\$ 3,046,000$, in weekly pay rolls. Employment in retail food, general, and drug stores declined 0.7 percent, 1.0 percent, and 1.4 percent, respectively, during the month, while in automobile and automotive-supply firms and cigar stores it showed virtually no change. The remaining groups surveved under
retail trade showed increases as follows: Apparel (3.8 percent), general merchandise ( 3.1 percent), jewelry ( 2.9 percent), furniture ( 2.6 percent), lumber and building materials (1.5 percent), hardware (1.4 percent), coal-wood-ice (1.4 percent), and farmers' supplies (1.1 percent).

Wholesale trade establishments increased the number of their employees by 2.2 percent, or 32,100 workers, a much larger gain than the average October increase ( 0.8 percent) for the last decade. The employment index, 92.5 percent of the 1929 average, stood at the highest point since December 1937. Weekly pay rolls also showed a substantially greater-than-seasonal rise of 3.0 percent, or $\$ 1,300,000$. Increased employment was general among the wholesale lines surveyed with the exception of firms dealing in petroleum products, groceries and food specialties, and other food products which showed employment decreases of 1.1 percent, 0.7 percent, and 0.1 percent, respectively. Assemblers, country buyers, and other dealers in farm products increased their forces seasonally by nearly 30 percent. Among other wholesale lines, the following employment gains were in excess of the October average for recent years: Iron and stcel scrap ( 13.8 percent), metals and minerals ( 4.0 percent), autonotive ( 3.5 percent), lumber and building materials (3.2 percent), furniture and housefurnishings ( 2.2 percent), dry goods and apparel ( 1.8 percent), paper and paper products (1.2 percent), hardware (1.1 percent), electrical ( 0.8 perceut), and machinery, equipment, and supplies ( 0.5 percent).

Anthracite mines took on 5 percent, or 3,600 more workers, than were employed in mid-September, and increased weekly pay rolls by 30.2 percent, or more than $\$ 500,000$. Bituminous-conl mines, which also stepped up production in response to increased demand, expanded their forces by 9.2 percent, or 35,800 workers, and their weekly pay rolls by 21.8 percent, or nemly $\$ 2,000,000$, both greater-than-customary October gains, which have averaged 1.5 percent and 10.3 percent, respectively, for the last 10 years. Metal mines also reported a better-than-seasonal employment pick-up of 3.9 percent, or 2,700 wage earners. Pay rolls rose 15.7 percent, reflecting greater production and the effect of wage increases in a number of localities.

Employment in private building construction showed a slight decrease of 0.6 percent from September to October, according to reports from 14,232 contractors employing 146,853 workers. Corrosponding pay rolls decreased 1.0 percent. In the East North Central States slight employment gains were registered in Ohio and Indiana, but losses in Illinois, Michigan, and Wisconsin resulted in a 1.4 percent decrease for the area. The only substantial gain in the West North Central group was reported in Nebraska, the over-all change being a
net decrease of 0.4 percent. A 3.3 percent decline in the Fast South Central States reflected declines in all the States in the area except Kentucky. Recessions in all of the West South Central States resulted in a 3.9 percent decline for this area. Sizable employment losses in Maryland and the District of Columbia were counteracted by improvement in other sections of the South $\Lambda$ tlantic States, principally Delaware and Florida, to result in virtually unchanged employment for the area ( +0.2 percent). In the Middle Atlantic States a continuation of the downward trend shown in New York in. September offset increases in New Jersey and Pennsylvania and resulted in a 0.6 percent employment decrease for this area. Small employment losses in California and Washington and a substantial gain in Oregon resulted in an increase of 0.3 percent for the Pacific States. Moderate gains were reported from all of the New England States with the exception of Massachusetts, the rise in employment for the area amounting to 0.5 percent. In the Mountain States employment rose 1.7 percent, with Montana, Wyoming, New Mexico, and Nevada registering slight increases. 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 governments.

A preliminary report of the Interstate Commerce Commission showed an employment gain by class I railroads from September to October of 3.5 percent, the total number at work in October being$1,055,164$. Corresponding pay rolls were not available when this report was prepared. For Soptember they were $\$ 160,137,020$, a decrease of 0.1 percent over the August figure of $\$ 160,315,811$.

Hours and earnings.-The average hours worked per week by wage earners in manufacturing industries were 39.1 in October, a gain of 2.9 percent since September. The average hourly earnings of these workers were 64.5 cents, a gain of 1.1 percent as compared with the preceding month. Average weekly carnings of factory workers climbed 4.8 percent to $\$ 25.80$.

Of the 14 nonmanufacturing industries for which man-hours are available, 9 showed increases in average hours worked per week and 12 showed gains in average hourly earnings. Twelve of the sixteen nonmanufacturing industrics surveyed reported higher average weekly earnings.

Employment and pay-roll indexes and average weekly earnings in Oetober 1939 for all manufacturing industries combined, for selected 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, October 1939

| Industry | Finployment |  |  | Pay roll |  |  | A verage weekly earnings |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\left\lvert\, \begin{gathered} \text { Index } \\ \text { October } \\ 1939 \end{gathered}\right.$ | Percentage change from- |  | $\begin{array}{\|c\|} \text { lindex } \\ \text { October } \\ 1939 \end{array}$ | Percentage change from- |  |  | Percentage change from- |  |
|  |  | Sep- tember 1939 | $\left\|\begin{array}{c} \text { October } \\ 1938 \end{array}\right\|$ |  | $\begin{gathered} \text { Sep- } \\ \text { tember } \\ 1939 \end{gathered}$ | $\left.\begin{array}{\|c\|} \text { October } \\ 1938 \end{array} \right\rvert\,$ |  | Sep- termber 1039 | $\begin{array}{\|c} \text { October } \\ 1938 \end{array}$ |
|  | (1923-25 |  |  | (1923-25 |  |  |  |  |  |
| All manufacturing industries | $=100)$ |  |  | $=100)$ |  |  |  |  |  |
|  | 103.6 | +3.4 | +12.1 +8.1 | ${ }^{101.6}$ | +8.3 | +20.7 | \$25.80 | +4.8 | +7.7 |
|  | (1929 |  |  | (1929 |  |  |  |  |  |
| Coal mining: | $=100$ ) |  |  | $=100)$ |  |  |  |  |  |
| Anthracite ${ }^{4}$ | - 51.9 | +5.0 | $-.9$ | 52.2 | +30.2 | +20.3 | 33. 03 | +24.0 | +21.4 |
| Bituminous ${ }^{4}$ | - 93.2 | $+9.2$ | +6.9 | 97.7 | +21.8 | +24.8 | 28.70 | $+11.5$ | $+16.7$ |
| Metalliferous mining... | 65.4 | +3.9 | +12.8 | 63.7 | +15.7 | +29.6 | 30.63 | +11.4 | +14.8 |
| Quarrying and nonmetallic mining. | 47.8 | -. 2 | +7.7 | 45.1 | +5.6 | +15.1 | 23.00 | +5.8 | +6.9 |
| Crude-petroleum producing. | 64.4 | $-.9$ | $-7.3$ | 59.0 | -3.0 | -7.4 | 32.80 | -2.1 | -. 1 |
| Public utitities: |  |  |  |  |  |  |  |  |  |
| Telephone and telegraph -Flectric light and power | 75.4 | +. 2 | $+.9$ | 95.2 | +. 3 | -. 1 | ${ }^{6} 31.25$ | +. 1 | $-1.1$ |
| and manufactured gas.... | 93.5 | -. 2 | +1.1 | 101.0 | $-.1$ | +1.1 | ${ }^{\text {f }} 33.28$ | +. 2 | $-{ }^{(5)}$ |
| Electric-railroad and motorbus operation and |  |  |  |  |  |  |  |  |  |
| maintenance . | 70.0 | +. 2 | +. 2 | 72.3 | +2.7 | +4.9 | ${ }^{1} 33.49$ | +2.5 | +4. 7 |
| rade: Wholesale. | 92.5 | +2.2 | +3. 7 | 80.3 | +3.0 | +6.9 | ${ }^{6} 30.29$ | +.8 | +3.0 |
| Retail. . | 88.4 | +1.3 | +2.9 | 74.1 | +2.5 | +4.7 | ${ }^{6} 21.17$ | +1.2 | +1.7 |
| General merchandising | 103.2 | +3.1 | +3.8 | 91.7 | +3.8 | +3.9 | ${ }^{6} 17.71$ | +. 7 | +. 1 |
| Other than general |  |  |  |  |  |  |  |  |  |
| merchandising | 84.5 | +. 7 | +2.7 | 70.5 | +2.2 | +4.9 | ${ }^{6} 2.1 .16$ | +1.5 | +2.1 |
| Hotels (year-round) ${ }^{\text {a }}$ ? | 92.8 | $+1.6$ | -. 1 | 82.2 | +2.2 | +1.7 | ${ }^{6} 15.97$ | +. 0 | +1.8 |
| Laundries ${ }^{\text {t }}$ | 96.1 | -1.8 | +1.7 | 83.9 | -. 7 | +5.5 | 17.90 | +1.1 | +3. 7 |
| Dyeing and clcaning | 105.1 | $-2$ | $-1.6$ | 77.3 | $-1.3$ | $-9$ | 20. 42 | $-1.2$ | +. 7 |
| Brokerage.. | ${ }^{(3)}$ | -1.0 | +. 8 | ${ }^{(3)}$ | $-1.6$ | +. 2 | ${ }^{5} 36.76$ | $-.6$ | -. 6 |
| Insurance - | ${ }^{(3)}$ | -. 1 | +1.3 | ${ }^{(3)}$ | +. 5 | +2.5 | ${ }^{5} 34.47$ | +. 5 | +1.2 |
| Building construction | ${ }^{(3)}$ | $-6$ | +3.9 | ${ }^{(3)}$ | $-1.0$ | +6.9 | 31. 08 | $-.3$ | +2.8 |

: Revised indexes-Adjusted to 1937 Census of Manufactures.
Treliminary- Source: Interstate Commerce Commission.
3 Not arailable

+ Indexes adjusted to 1935 census. Comparable series back to Jannary 1929 presented in January 1938 issue of this pamphlot.
${ }_{6}$ Less than 1,10 of 1 percent.
${ }^{6}$ Average weekls carnings not strictiy comparable with figures published in issues of this pamphlet dated earlier than January 1938 as they now exelude corporation oflicers, executives, and other employees whose duties are mainly supervisory.
; Cash payments only; the additional value of board, room, and tips cannot be computed.


## Public Employment

Employment on construction projects financed by the Public Works Administration decreased 26,000 during the month ending October 15, leaving 221,000 still at work. The number of men employed on projects financed from N. I. R. A. funds and E. R. A. A. 1935, 1936, and 1937 funds remained at 22,000 while the number working on projects financed from 1938 funds dropped from 225,000 to 199,000 . Total pay-roll disbursements amounted to $\$ 20,827,000$, a decrease of $\$ 2,159,000$ from September.

A substantial increase for the month ending October 15 was reported on low-rent projects financed by the U. S. Housing Authority. The 197145-39-2
number of men engaged on these projects was 27,000 and pay rolls for the month were $\$ 2,942,000$. These figures cover new construction and demolition and pertain only to those projects started under the U. S. Housing Authority; those formerly under the Public Works Administration are shown under the Public Works Administration building construction projects in this report.

On construction projects financed from regular Federal appropriations, seasonal curtailment of employment on public-road projects was offset by increases on ship construction, reclamation, and dredging, dyke, and revetment projects. Minor gains on other types of projects financed from regular Federal appropriations brought the total employment up to 288,000 for the month ending October 15. In spite of the slight gain in employment, the number of man-hours worked was lower in October. As a result, pay-roll disbursements of $\$ 29,306,000$ were $\$ 1,371,000$ less than in September.

Decreased employment was reported on construction projects financed by the Reconstruction Finance Corporation. During the month ending October 15, approximately 2,400 were at work and pay rolls amounted to $\$ 274,000$.

Because of the heavier relicf load coning at this season of the year, more people were employed on work-relief projects operated by the Work Projects Administration. The number at work rose from $1,720,000$ in Scptember to $1,826,000$ in October. Pay rolls incroased from $\$ 89,390,000$ to $\$ 98,543,000$. Employment on Federal agency projects financed by the Work Projects Administration showed an increase of 5,000 in October. Pay-roll disbursements for the month were $\$ 4,220,000$.

A gain of 13,000 was reported on work projects of the National Youth Administration, bringing employment up to 238,000 in October. Expanded activity on school projects resulted in a gain of 296,000 on the Student Aid program. Pay-roll disbursements on the work projects were $\$ 4,432,000$ and on the Student Aid program $\$ 2,360,000$.

Enlistments in the Civilian Conservation Corps increased employment from 312,000 in September to 320,000 in October. Of the 320,000 on the pay roll, 282,100 were enrollees; 900 , reserve officers; 1,600 , educational advisers; 300, nurses; and 35,100 , supervisory and technical employees. Pay rolls for the whole group were $\$ 14,343,000$.

In the regular services of the Federal Government, increases were reported in the judicial and military services; decreases, in the executive and legislative services. Of the 937,000 employees in the executive service, 126,000 were working in the District of Columbia and 811,000 outside the District. Force-account employees (employees
who are on the Federal pay roll and are engaged on construction projects) were 10.3 percent of the total number of employees in the executive service. Increased employment was reported in the War and Navy Departments, the Federal Security Agency, Panama Canal, Tennessec Valley Authority, and the Civil Aeronautics Authority; while decreases were reported in the Department of Agriculture, the Post Office Department, and the Federal Works Agency.

Employment on State-financed road projects was curtailed by 3,000 in the month ending October 15 . Of the 158,000 at work, 29,000 were engaged in the construction of new roads and 129,000 in maintenance. Pay rolls for both types of road work were $\$ 11,339,000$.

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

Table 2.-Summary of Federal Employment and Pay Rolls, October and September 1939s

| [Preliminary figures] |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class | Employment |  |  | Pay rolls |  |  |
|  | October | Septem- ber | Percentage change | October | September | Percentage change |
| Faderal services: |  |  |  |  |  |  |
| Executive? | 937.357 | ${ }^{3} 940,130$ | -0.3 | \$142. 065.3840 | 3\$141, 663. 231 | +0.3 |
| Judicial | 2.354 | 2. 282 | +3.3 | 569.870 | 568, 434 | +.3 |
| Legislative. | 5,418 | 5. 551 | $-2.4$ | 1. 234.990 | 1,24T, 594 | -1.0 |
| Military ---.- | 386.216 | 376,480 | +2.6 | 29.819.814 | 29. 365.321 | $+2.2$ |
| Construction projects: Financed by P. W. A.4. | 220, 612 | 247.422 | -10.8 | 20.826. 535 | 22.985. 513 | -9.4 |
| r. S. II A. low-rent housing --- | 26. 523 | 217,428 | +20.8 | 2. 041.809 | 2. 517,730 | -16.4 +1.8 |
| Financed by R. F. C.s | 2,470 | 2, 646 | -6.7 | 24.070 | 314,061 | $-12.7$ |
| Financed by regular Federal appropriations. | 288,497 | 286,652 | +. 6 | 29.305. 560 | 30, 677.007 | -4. 5 |
| Federal akency projects finineed bs | 86, 108 | 28,652 | +6.0 |  |  |  |
| the Work Projects Adrninistration | 86.168 $1,825.734$ | [ $\begin{array}{r}81,319\end{array}$ | +6.0 +6.9 | 4. 219.650 | 3.921.494 | +7.6 +1.2 |
| Projects operated by W. P'. A ..... | 1,825.734 | 31, 719, 870 | +6.2 | 98. 543,038 | ${ }^{3} 89.3900,255$ | +10.2 |
| Dational Youth deministration: <br> Work projects. . - | 237,788 | 225.477 | +5.5 | 4. 432.127 | 4. 221.759 | +5.0 |
| Sivindent did. ${ }_{\text {Sol }}$ | 358.000 319.636 | 61, 8.4 | +478.9 | 2. 3610.000 | 268.452 | +779.1 +1.4 |
| Civilan Conscrvation Corps... | 319, 636 | 311,910 | +2.5 | 14, 342, \%39 | 14. 145.853 | +1.4 |

[^0]
## DETTAILED TABLES FOR OCTOBER 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 weckly earnings in manufacturing and nonmauufacturing industries in October 1939 are shown in table 3. Percentage changes from September 1939 and October 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 August, September, and October 1939, where available, are presented in table 4. The August and Scptember 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 3 and 4 , 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 varios slightly from month to month. Therefore the average hours per week, average hourly earnings, and average weekly earnings shown may not be strictly comparable from month to month. The sample, however, is belicred 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 inonth, expressed as percentages, are based on identical lists of firms for the 2 months, but the changes from October 1938 are computed from chain indexes based on the month-to-month percentage changes.

## MANUFACTERING:

[Indexes are based on 3 -year average, $1923-25=100$. New serics-adjusted to 1937 Census of Manufactures for all industries excopt automobiles and not comparable to indexes published in the July 1939 and carlier issues of the pamphlet. Comparable series available upon request]

| Industry | Employment |  |  | Pay rolls |  |  | Average weekly earning ${ }^{1}$ |  |  | Average hours worked per week ${ }^{1}$ |  |  | A verage hourly earnings ${ }^{1}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Index October 1939 | Percentage change from- |  | Index October 1939 | Percentage change from- |  | October 1938 | Percentare change from- |  | Octobar 1939 | Percentage change from- |  | October 1939 | Percentage change from- |  |
|  |  | $\begin{gathered} \text { Sep- } \\ \text { tember } \\ 1939 \end{gathered}$ | October 1938 |  | $\begin{gathered} \text { Sep- } \\ \text { tember } \\ 1930 \end{gathered}$ | October 1938 |  | $\begin{gathered} \text { Sep- } \\ \text { tember } \\ 1939 \end{gathered}$ | October 1038 |  | $\begin{gathered} \text { Sep- } \\ \text { tember } \\ 1939 \end{gathered}$ | October 1038 |  | September 1939 | $\begin{aligned} & \text { Octo- } \\ & \text { her } \\ & 1938 \end{aligned}$ |
|  | 103.6 | +-3.4 | $+12.1$ | 101.6 | -18. 3 | +20.7 | 825.80 | +4.8 | +7.7 | 39.1 | +2.0 | +3.8 | $\begin{array}{r} \text { Cents } \\ 64.5 \end{array}$ | +1.1 | +1.7 |
|  | $\begin{array}{r} 96.1 \\ 110.7 \end{array}$ | +7.1 +.5 | +20.8 +5.8 | 99.7 103.8 | +13.4 +3.3 | +33.6 +9.4 | 29.72 22.03 | +5.8 +2.9 | + +10.8 +3.4 | 40.2 38.2 | +5.0 +1.2 | +6.9 +1.2 | 71.2 59.0 | +1.6 +1.0 | +1.7 +.5 |
| Durable joods |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Iron and steel and their products, not including machinery | 106.8 | +10.0 | +23.2 | 112.0 | $+20.7$ | +46.0 | 31. 15 | +9.7 | +18.5 | 40.3 | +8.6 | +15.2 | 76.5 | +. 3 | -1.5 |
| machinery ${ }_{\text {Bhast furnaces, stel works, and rolling mills. }}$ | 115.1 | +13.9 | +29.0 | 123.6 | $+29.7$ | +62.4 | 33.91 | $+13.8$ | +25.9 | 40.0 | +13.6 | +24.8 | 84.8 | +. 2 | +1.1 |
| Bolts. nuts. washers, and rivets | 113.4 | +12.6 +2.7 | +26.4 +8.8 | 137.5 | +23.8 +13.8 | +53.8 | 29. 56 | +9.9 | +21.5 | 42.8 | +9.5 | +23.1 | 68.9 | +.6 | -1.0 |
| Cast-iron pipe <br> Cutlery (not including silver and plated cut- | 76. 6 | +2.7 | +8.8 | 71.4 | $+13.6$ | +24.8 | 22. 60 | $+10.6$ | +14.6 | 38.5 | $+10.2$ | +12.3 | 58.3 | +. 8 | +1.8 |
| lery) and cdge tools | 103.9 | +7.2 | +19.5 | 95.0 | +12.2 | +21.7 | 23.75 | +4.6 | $+1.8$ | 41.5 | $+5.7$ | +4.3 | 58.6 | $-.9$ | -1.4 |
| Forgings. iron and steel ...-.-.-.-.......---.......- | 6 j .2 | +10.7 | +26.0 | 74.7 | +18.6 | +46. 1 | 31. 24 | +7.1 | +15.9 | 40. 4 | $+5.0$ | +11.4 | 77.4 | +2.2 | +4.2 |
| Hardware.-.-.... | 99.7 | +5.8 | +19.1 | 109.6 | -3.8 | +22.8 | ${ }_{27} 27.18$ | -9.1 | +3.2 | 40.2 | -3.0 | +3.6 | 67.6 | -6.3 | -. 5 |
| Plumbers' supplies | 82.1 | +3.4 +4.4 | +10.8 +15.7 | 79.9 169.9 | +11.3 +8.7 | +29.3 +14.4 | ${ }_{25}^{28.18}$ | +7.6 +4.2 | +16.8 | 41.3 | +6.0 +4.6 | +14.1 | 68.3 | +1.6 | +2.5 |
| stamped and enameled ware. Steam and hot-water heating apparatus and | 162.9 | +4.4 | $+15.7$ | 169.9 | +8.7 +16.8 | +14.4 +32.1 | 25.08 | +4.2 | -1.1 | 40.4 | +4.6 | +.9 +15. | 62.1 | -. 5 | -2.2 |
| steam Gttings. | 86.4 | +6.3 | +11.6 +108 | 83.3 | +16.8 +14 | +32.1 | 29.49 | + +8.8 | +18.0 +2.8 | 41.8 | +8.4 | +15.3 | 70.6 | +1.2 +1.5 | +2.3 |
| Stoves.-.- | 97.4 | +5.91 | $+10.8$ | 94. 2 | +14,3 | +13.8 | 27. 77 | +7.9 | +2.8 | 41.2 | +6.4 | +1.6 | 67.5 | +1.5 | +1.7 |
| structural and ornamental metalwork.-.....- | 76.3 | +3.4 | +26.0 | 68.3 | +7.9 | +39.5 | ${ }^{28} 888$ | +4.4 | +10.6 | 39.9 | +3.9 | +9.8 | 72.5 | +.7 | +. ${ }^{\text {k }}$ |
| T'in cans and other tioware 'Tools (not inchuding edse tools, machine tools, | 106.4 | $-.51$ | $+17.5$ | 111.2 | -5. 2 | +22.9 | 23.98 | -4.7 | +4.7 | 39.2 | -4.0 | +3.5 | 61.3 | -1.1 | +. 6 |
| flles, and saws) <br> wires ath <br> dectools, machine toons, | 90.9 165.9 | +6.0 +14.4 | +18.5 +10.8 | ${ }_{181.7}^{91.7}$ | +123 +13.5 | +30.7 +291 | 25. 41 | $\underline{+6.0}$ | +10.5 +7.8 | 410 | +5.7 +2.2 | +7.1 +7.0 | 62.0 68.3 | +3 +3 | +3.0 +.7 |

Table 3.-Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, October 1939-Continued MANUFACTURING-Continued

| Industry | Employment |  |  | Pay rolls |  |  | Average weekly earnings |  |  | Average hours worked per week |  |  | Average hourly carnings |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Index October 1939 | Percentage change from- |  | Index October 1939 | Percentare change from-- |  | $\begin{aligned} & \text { Octo- } \\ & \text { ber } \\ & 1939 \end{aligned}$ | Percentage change from-- |  | October 1939 | Percentage change from- |  | October 1939 | Pcrcentage change from-- |  |
|  |  | $\begin{gathered} \text { Scp- } \\ \text { tember } \\ 1939 \end{gathered}$ | October 1938 |  | $\begin{gathered} \text { Sep- } \\ \text { tember } \\ 1939 \end{gathered}$ | October 1038 |  | $\begin{gathered} \text { Sep- } \\ \text { Lember } \\ 1939 \end{gathered}$ | October 1938 |  | $\begin{gathered} \text { Sep- } \\ \text { tember } \\ 1039 \end{gathered}$ | October 1938 |  | $\begin{gathered} \text { Sep- } \\ \text { tember } \\ 1939 \end{gathered}$ | October 1938 |
| Durable goods-Continued |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Machinery, not including transportation equipment. | 106.6 | +6.3 | +22. 1 | 111.0 | +10.0 | +38.9 | \$29. 20 | +3. 5 | +12.1 | 40.6 | +3.8 | +11.6 | Cents | -0.2 | +0.5 |
| Agricultural implements (including iractors). | 117.8 | +1.5 | +20.3 | 131.3 | $+5.0$ | $+32.7$ | 29.92 | +3.5 | +10.5 | 38.4 | +3.0 | +9.3 | 78.2 | +. 5 | +.8 |
| Cash registers, adding machines, and calculating machines | 126.3 | -. 3 | -5.6 | 12f. 1 | +2.0 | +4.5 | 31.50 | $+2.3$ | +10.7 | 38.4 | $+2.4$ | +9.9 | 82.2 | -. 2 | +. 1 |
| Electrical machinery, apparatus, and supplios | 97.3 | +5.6 | $+19.6$ | 105.7 | $+7.5$ | +30.2 | 29.24 | +1.8 | +8.8 | 40.0 | +2.8 | +9.1 | 73.3 | $-1.0$ | -. 1 |
| Engines, lurhines, water wheels, and windmi!ls. | 105.2 | +6.1 | $+26.9$ | 129.2 | $+11.3$ | +47.0 | 32.48 | +4.9 | +15.9 | 41.1 | +3.7 | +14.4 | 79.4 | +1.2 | +1.4 |
| Fcundry and machine-shop products.. | 91.2 | $+6.3$ | $+21.3$ | 89.5 | $+11.6$ | +38.2 | 29.27 | +5.0 | +14.0 | 40.8 | +4.6 | +13.0 | 71.8 | +. 4 | +1.4 |
| Machine tcols.......... | 170.6 | $+9.2$ | $+39.4$ | 207.6 | +14.2 | +73.8 | 33.80 | +4.5 | +24.6 | 44.9 | +4.2 | +22.2 | 75.4 | +. 4 | +2.2 |
| Radios and phonographs.. | 176.5 | +17.6 | +47.9 | 169.6 | +22. 1 | +57.9 +3 | 23.79 | +3.8 | +6.7 | 41.6 | +4.5 | +6.5 +1.5 | 57.3 | $-.7$ | $+3$ |
| Textile machinery and part | 79.7 124.1 | +3.1 +1.7 | +26.3 -1.7 | 75.7 125.9 | +3.5 +3.0 | +37.8 + | 26.14 24.88 | +.3 +1.2 | +9.0 +1.3 | 40.2 39.2 | +1.2 +1.7 | +10.9 +3.1 | 65.0 83.5 | -. 9 | $-2.0$ |
| Typerriters and parts Transportation equipment. | 124.1 105.0 | +1.7 +8.4 +8.4 | -1.7 +30.9 | 125.9 110.0 | +3.0 +10.7 | + 7.4 | 24.88 33.87 | +1.2 +2.1 | +1.3 +1.2 | 39.2 38.3 | +1.7 +2.8 | +3.1 +1.9 | 63.5 88.9 | -. 5 | -1.7 -.9 |
| Aircraft -......... | 1,556.4 | +6. 1 | +91.8 | 4. 512.1 | +11.1 | +95.4 | 30.30 | +4.7 | +.3 | 41.8 | +4.5 | +3.8 | 74.8 | +1.3 | +. |
| Automobiles. | 107.4 | +0.1 | +24.6 | 114.2 | $+10.4$ | +25.1 | 34. 86 | +1.2 | $+.3$ | 37.9 | $+2.5$ | +.8 | 91.9 | $-1.2$ |  |
| Cars, electric- and steam-railroad | 40.7 | +22. 5 | $+47.9$ | 37.5 | +36.3 | +69.1 | 28.85 | +11.3 | +14.4 | 37.5 | +8.0 | +9.5 | 76.8 | +3.1 | +1.4 |
| Incomolives | 22.5 | $-7.6$ | +64.2 | 24.6 | -3.8 +6.5 | +120.9 +469 | 29.75 | +4.1 +2.9 | +34.4 | 38.5 | +3.1 +2.3 | +32.0 | 77.3 | +1.0 | $+1.8$ |
| Shiphuilding--.---7.-.......... | 133.6 110.4 | +3.5 +10.1 | +40.2 +20.7 | 1.43 .6 113.6 | +6.5 +17.7 | +46.7 +33.0 | 32.26 28.58 20, | +2.8 +7.0 | +4.5 +10.3 | 38.3 41.4 | +2.3 +3.8 | +3.4 +4.4 | 84.2 69.1 | +2.2 +2.8 | +1.2 +4.9 |
| Nonferrous metals and their products A | 110.4 | +10.1 +11.4 | +20.7 +26.5 | 113.8 190.8 | +17.7 +14.4 | +33.0 +32.1 | 28.58 27.70 | +7.0 +2.8 | +10.3 +1.5 | 41.4 41.2 | +3.8 +4.0 | +4.4 +3.2 +1.8 | 69.1 67.0 | +2.8 +1.2 | +4.9 +.9 |
| Krass, bronze, and copper producis | 131.1 | +13.7 | +28.7 | 154.1 | +25.5 | +53.8 | 32.21 | +10.3 | +19.4 | 12.6 | +4.4 | +11.8 | 75.7 | +5.8 | +7.0 |
| Clock s and watches and time recording devices- | 90.0 | +4.6 | +7.6 | 95.6 | +11.7 | +20.2 | 24. 39 | +6. 6 | +11.7 | 41.4 | +5.8 | +7.7 | 59.0 | +.9 | $+3.7$ |
|  | 106.7 | +6.8 | +10.4 | 92.6 | +10.7 | +5.6 | 24.50 | $+3.6$ | $-4.3$ | 41.5 | +1.4 | -7.4 | 58.2 | +. 5 | +2.5 |
| lignting equipment. | 98.4 | +11.4 | $+23.3$ | 82.4 | +10.3 | +27.0 | 27.03 | $-1.0$ | +2.8 | 39.5 | +. 4 | -. 3 | 63.3 | $-1.4$ | +3.4 |
| Silverware and plated ware--.....-...-- | 73.1 83.8 8 | +2.1 +8.3 | +10.4 +17.1 | 70.8 81.3 | +8.0 +14.0 | +15.5 +20.8 | 28.20 27.20 | +5.4 +5.3 +5.3 | +4.5 +3.1 +3 | 43.6 38.5 | +5.3 +4.2 +4. | +4.5 +.4 | 64.8 70.7 | +.2 +1.0 | +3 +2.8 |
| Smelting and refining copper, lead, and zinc.-.......- Lumber and allied products... | 83.8 72.4 | +8.3 +3.4 | +17.1 +11.0 | 81.3 68.9 | +14.0 +8.5 | +20.8 +15.4 | 27.20 20.84 | +5.3 +5.0 +5.0 | +3.1 +3.9 | 38.5 41.0 | +4.2 +4.3 | +.4 -2.3 | 70.7 50.3 | +1.0 +.5 | +2.8 +5.5 |
| Fumber and arc.............. | 94.6 | +8.4 +4.4 | +12.2 | 88.9 | +8.5 +8.6 | +17.6 | 21.72 | +4.1 | +4.9 +4.8 | 41.3 | +4.3 +3.9 | +1.9 | 52.7 | +. 1 | +5.7 +2.7 |
| Lumber: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mawmills. | ${ }_{6}^{63.0}$ | +2.1 +3.4 | +13.0 +10.2 | ${ }_{61.8}^{52.0}$ | +4.5 +9.5 | +15.5 +14.0 | 22.91 19.51 | +2.4 +6.1 | +2.3 +2.5 | 43.0 40.3 | +2.5 $+4 . y$ | +1.4 -5.3 | 53.2 48.4 | -.2 +1.1 | +1.1 +8.2 |


| Stone, clay, and glass products. | 84.8 | +3.8 | +12.0 | 79.8 | $+11.3$ | +20.4 | 25. 98 | +7.2 | +7.4 | 39.2 | +5.5 | +4.8 | 65. 2 | $+.8$ | +2.7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Brick, tile, and terra cottia | 64.8 | +2.4 | +16.0 | 56.6 | +12.4 | +28.5 | 22.51 | +9.7 | +10.9 | 40.5 | +6.4 | +4.3 | 55.1 | +2. 5 | +6.0 |
| Cement......-.-- | 71.6 | +. 3 | $+1.6$ | 71.3 | $+5.2$ | +11.2 | 28.48 | +1.9 | +9.5 | 40.4 | +5.6 | +7.5 | 70.5 | -. 6 | +1.9 |
| Qlass | 106.9 | +5.9 | +14.8 | 121.2 | +15.4 | +24.3 | ${ }^{27.71}$ | +8.9 | +8.3 | .38.0 | +7.9 | +6.0 | 73.0 | $\pm 1.1$ | +2.2 |
| Marble, granite, slate, and other products | 51.5 | $-.2$ | +8.0 | 39.6 | $+2.9$ | $+20.9$ | 26. 54 | +3.1 | +12.2 | 38.9 | +4.4 | +10.7 | 68.3 | -1.1 | +4.2 |
|  | 91.6 | +6.7 | +9.8 | 82.9 | +11.5 | +7.4 | 24.15 | +4.5 | $-2.2$ | 38.8 | $-.4$ | -1.4 | 61.8 | -. 9 | $-2.2$ |
| Nondurable goods |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Textiles and their products. | 108.3 | +3.6 | $\pm 7.3$ | 93.6 | +8.1 | +10.0 | 17. 60 | +4.2 | +2.5 | 36.7 | +3.4 | +3.1 | 48.6 | $+7$ | -. 4 |
| Fabrics ............... | 98.8 | +5.7 | +11.0 | 88.0 | +8.6 | +13.7 | 17.23 | +2.9 | +2.4 | 37.9 | +2.3 | +2.0 | 46.3 | $+.5$ | $+.5$ |
| Cariess and rugs | 83.2 | +6.2 | +16.6 | 74.8 | +9.4 | +27.6 | 25.01 | +3.0 | +9.4 | 37.7 | +2.3 | +4.1 | 66.4 | +. 8 | +5.0 |
| Cotton goods- | 94.3 | $+5.5$ | +12.7 | 84.2 | +6.3 | $+16.1$ | 14.62 | +. 8 | $+3.0$ | 38.0 | +. 7 | +2.3 | 38.4 | +. 1 | $+.5$ |
| Cotton small ware | 92.1 | $+9.3$ | +18.2 | 89.2 | $+9.4$ | +19.6 | 18.93 | +2 | $+1.3$ | 39.6 | $+4$ | $-{ }^{2}$ ) | 48.4 | $-3$ | +2.0 |
| 1) yeing and finishing | 132.9 | +6.3 | +14.5 | 115.5 | $+7.2$ | +14.6 | 21.21 | +. 8 | $-(2)$ | 30.5 | +1.0 | $-{ }^{-6}$ | 53.1 | - 1 | $+.6$ |
| laats, fur-felt | 85.7 | $-4.7$ | -10.4 | 61.4 | -16.4 | $-20.0$ | 19.31 | -12.3 | -10.7 | 27.6 | -11.2 | -10.8 | 69.7 | $+6$ | +3.1 |
| 1 Ioiscry | 153.8 | +2.7 | +1.9 | 173.8 | +11.2 | +1.5 | 20. 40 | +8.2 | -. 4 | 37.5 | $+5.5$ | $+.1$ | 54.9 | +3.1 | +1.5 |
| Knitted outerwo | 81.7 | +4.1 | +5.1 | 69.7 | +12.5 | +11.3 | 18.31 | +8.1 | +5.8 | 39.3 | $+6.9$ | +. 9 | 46.1 | +.9 | +4.9 |
| Knitted underwca | 80.2 | $+3.2$ | +14.7 | 74.1 | +10.4 | +19.8 | 15.60 | +6.9 | +4.3 | 38.4 | +5.7 | +6.5 | 40.7 | +1.3 | -1.0 |
| Knitted cloth. | 152.1 | +6.2 | +9.6 | 132.2 | $+9.4$ | +12.3 | 19.27 | $+3.0$ | +2.8 | 41.0 | $+2.6$ | +2.4 | 45.8 | - ${ }^{(2)}$ | -. 8 |
| Silk and rayon goods | 66.7 | +5.5 | +4.6 | 57.1 | +9. 5 | +8.7 | 16.31 | $+3.8$ | +4.0 | 38.0 | +3.9 | +3.2 | 42.6 | $-{ }^{(2)}$ | +1.0 |
| Woolen and worsted good | 90.9 | +10.8 | +19.4 | 76.6 | +13.3 | +24.0 | 19.46 | +2.3 | +4.0 | 37. 1 | +2.9 | +4.4 | 52.5 | $-8$ | -. 5 |
| Wearing apparel .-. .......-. | 124.7 | -. 1 | +1.1 | 98.6 | +7.1 | +4.1 | 18.68 | +7.2 | +3.0 | 34. 5 | +5.2 | +4.4 | 52.9 | +1.5 | -. 8 |
| Clothing, men's | 109.4 | -1.0 | +2.1 | 82.9 | +4.1 | +7.4 | 19.67 | +5.2 | +5.1 | 33.6 | +5.1 | +4.9 | 57.9 | +. 5 | -2.9 |
| Clothing, women's | 178.2 | -. 3 | +(2) | 133.2 | +12.7 | +. 6 | 20.00 | +13.1 | $+{ }_{+}+6$ | 33.6 | +5. 4 | +3.4 | 54.0 | +5.0 | -3.0 |
| Corsets and allied garments | 117.6 | +1.5 | +12.2 | 126.5 | +5.2 | +12.5 | 17.78 | +3.7 | +1.3 | 38.6 | +2.9 | -1.5 | 45.6 | +. 5 | +. 6 |
| Men's furnishings | 143.7 | +8.4 | -3.2 | 142.9 | +18.4 | +3.8 | 15.33 | +9.3 | +7.5 | 30.0 | +9.2 | +6.0 | 38.4 | +. 1 | +5.0 |
| Millinery | 82.0 | $-7.3$ | $-5.6$ | 61.5 | -21.4 | -11.8 | 21.11 | -18.4 | -6.7 | 34.9 | $-5.5$ | +2.4 | 60.8 | -7.8 | -3.1 |
| Shirts and collars | 126.8 | +2.9 | +3.7 | 114.6 | +12.1 | +18.9 | 15.00 | +8.9 | +14.6 | 37.3 | +7.8 | +6.1 | 40.4 | +1.0 | +8.1 |
| Leather and its manufactures | 96.2 | -1.6 | +.8 | 76.5 | -. 1 | +2.7 | 18.74 | +1.5 | +1.8 | 35.3 | +1.3 | -1.3 | 53.2 | +.2 | +1.0 |
| Boots and shoes | 94.1 | -2.5 | -. 6 | 71.1 | $-1.8$ | +. 1 | 17. 20 | $+8$ | +. 6 | 34.3 | $+.9$ | $-2.5$ | 50.8 | +. 1 | +. 8 |
| Leather-...- | 88.4 | +2.2 | +7.2 | 88.2 | +4. 7 | +11.0 | 24.91 | +2.4 | +3.4 | 39.4 | $+2.2$ | $+2.5$ | 63.3 | $\therefore 1$ | $+.9$ |
| Food and kindred produc | 137.5 | -8.8 | +2.7 | 129.8 | -7.0 | $+3.5$ | 24.35 | +1.9 | $+.7$ | 40.5 | -2.7 | -2.8 | 60.8 | $+3.8$ | $+.5$ |
| Baking...- -. | 148.0 | $-{ }^{(2)}$ | +2.1 | 136.6 | -1.5 | +2.9 | 25.65 | $-1.5$ | $+9$ | 41. 4 | -1.6 | -1.3 | 62.3 | + ${ }^{2}$ ) | +2.3 |
| Beverages | 270.9 | $-5.7$ | +3.1 | 300.0 | $-7.9$ | +5.5 | 33. 29 | $-2.3$ | +2.3 | 38.7 | -2.7 | +. 7 | 87.1 | +. 6 | +1.3 |
| 13utter...- | 95.0 | -4.1 | $-.6$ | 81.6 | $-2.7$ | +1.2 | 22.99 | +1.5 | $+1.8$ | 47.2 | +. 3 | +1.0 | 48.7 | $+.9$ | $+.8$ |
| Canning and preser | 180.7 | -40.5 | +5.2 | 154.1 | $-41.7$ | +9.3 | 16.87 | -2.0 | +3.9 | 38.1 | $-7.3$ | -3.9 | 45.7 | +6.5 | $+3.7$ |
| Confectionery- | 90.6 | +5.7 | -. 8 | 95.8 | +4.7 | $+3.6$ | 19.26 | -. 9 | +4.5 | 40.7 | +. 3 | +2.1 | 48.0 | $-1.3$ | +1.8 |
| Flour. | 82.4 | $-2.3$ | +5.2 | 82.1 | -11.8 | +7.0 | 27.06 | -0.6 | +1.6 | 43.1 | -8.4 | -4.6 | 61.4 | -2.3 | +5.8 |
| Ice cream. | 73.0 | $-11.4$ | +1.3 | 62.2 | $-9.3$ | +4.0 | 29.97 | +2.3 | +2.5 | 46.3 | +. 7 | +1.5 | 63.9 | +.9 | +2.4 |
| Slaughtering and meat packing | 102.7 | +1.3 | +3.7 | 107.7 | $-.2$ | +. 7 | 27.60 | -1.5 | -2.9 | 40. 3 | -1.3 | -3.8 | 68.5 | $-3$ | $+.4$ |
| Sugar, beet................ | 286.5 | +137.2 | $-6.6$ | 244.9 | +110. 1 | -. 4 | 22. 25 | -11.4 | $+5$ | 42.3 | $+5$ | -2.5 | 52.6 | -14.4 | +2.1 |
| Sugar refining, cane | 100.9 | +11.2 | +4.9 | 86.5 | +. 3 | +5.3. | 24. 12 | -9.8 | $+.5$ | 38.1 | $-11.5$ | $-1.0$ | 63.3 | +1.9 | $+1.5$ |
| Tobacco manufantures | 66.7 | $+5$ | $-1.5$ | 63.4 | +. 8 | + +18 | 17. 57 | + 4 | +2.4 | 37.0 | +. 2 | $-1.6$ | 47.5 | -. 2 | +3.8 |
| Chewing and smoking tobaceo and snuff | 62.4 | +2.0 | +5.3 | 71.0 | +5. 6 | +13.2 | 18.47 | +3.5 | +7.4 | 35.2 | +2.6 | +. 7 | 52.4 | $\underline{+1.1}$ | +6.4 +3 |
| Cigars and eigraretes | 67.2 118.5 | +.3 +2.9 | -2.2 +5.3 | 62.4 113.8 | + +4.2 +4.1 | -6.6 +8.3 | 17.36 29.40 | -.2 +1.1 | +1.6 +2.8 +2. | 37.2 <br> 39.7 | -1.1 +1.9 | +1.9 +2.8 | 46.9 77.3 | -. 4 -.2 | +3.4 +8 |
| Paper and printing. Boxes, paper | 118.5 128.3 | +2.9 +8.0 | +5.3 +14.8 | 113.8 | +4.1 +13.1 | +8.3 +19.9 | 29.40 <br> 23.48 <br> 2.4 | +1.1 +4.7 | +2.8 +4.2 | 39.7 43 4 | +1.9 +5.1 | +2.8 +4.1 | 77.3 54.6 | -. 2 | +.8 +.6 |
| Boxes, paper | 188.3 113.6 | +8.0 +4.5 | +14.8 +8.4 | 150.6 125.6 | +13.1 +10.8 | +19.9 +17.8 | 23.48 27.19 | +4.7 +6.0 | +4.2 +8.6 | 43.4 43.2 | +5.1 +4.5 | +4.1 +6.3 | 54.6 62.9 | -.2 +1.3 | +.6 +2.1 |
| Printing and publishing: Boor and job Newspapers and periodicals | $\begin{array}{r} 99.1 \\ 117.2 \end{array}$ | +.9 +.8 | +.6 +2.4 | $\begin{array}{r} 84.4 \\ 110.4 \end{array}$ | $\begin{array}{r} -1.4 \\ +.6 \end{array}$ | $\begin{aligned} & +1.8 \\ & +2.8 \end{aligned}$ | $\begin{aligned} & 29.76 \\ & 37.92 \end{aligned}$ | $\begin{array}{r} -2.2 \\ -.2 \end{array}$ | $\begin{array}{r} +1.3 \\ +.4 \end{array}$ | $\begin{aligned} & 37.8 \\ & 36.2 \end{aligned}$ | $\begin{array}{r} -1.4 \\ -.3 \end{array}$ | $\begin{array}{r} +1.2 \\ -1.4 \end{array}$ | $\begin{array}{r} 80.1 \\ 101.3 \end{array}$ | -.6 +.3 | +.3 +2.8 |

[^1]| Industry | Employment |  |  | Pay rolls |  |  | Average weekly earnings |  |  | Average hours worked per week |  |  | Average hourly earnings |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Index October 1939 | Pcrcentage change from- |  | Index October 1939 | Percentage change from- |  | October 1939 | Percentage change from- |  | October 1939 | Percentage change from- |  | $\begin{aligned} & \text { Octo- } \\ & \text { ber } \\ & 1939 \end{aligned}$ | Percentage change from- |  |
|  |  | Scp- teniber 1939 | October 1938 |  | $\begin{aligned} & \text { Scp- } \\ & \text { tember } \\ & 1939 \end{aligned}$ | October 1938 |  | $\begin{aligned} & \text { Sep- } \\ & \text { tember } \\ & 1939 \end{aligned}$ | $\begin{aligned} & \text { Octo- } \\ & \text { ber } \\ & 1938 \end{aligned}$ |  | $\begin{gathered} \text { Sep- } \\ \text { tember } \\ 1939 \end{gathered}$ | October 1938 |  | $\begin{gathered} \text { Sep- } \\ \text { tember } \\ 1939 \end{gathered}$ | octo ber 1938 |
| Nondurable goods-Continued |  |  |  |  |  |  |  |  |  |  |  |  | Cents |  |  |
| Chemical petroleum, and coal products | 122.0 | +3.7 | +6.2 | 183.1 | +8.9 | +11.6 | \$29. 50 | +3.1 | +5.1 | 39.8 | +3.0 | +2.7 | 74.0 | -0.2 | +1.5 |
| Peiroleum refining.....---...-...- | 122.7 | -. 2 | +1.7 | 140.0 | +3.9 | +5.3 | 35.77 | +4.1 | +3.5 | 36.9 | +3.7 | +3. 1 | 97.4 | +. 4 | -(2) |
| Other than petroleum refining | 121.8 | +4.6 | +7.3 | 131.0 | +8.0 | +13.8 | 26.94 | +3.3 | +6.1 | 40.8 | +2.6 | +2. 5 | 65.9 | +. 2 | +3.2 |
| Chemicals -----.-.-. | 133.6 | +8.1 | +14.3 | 157.9 | +13.0 | +21.0 | 32.51 | +4.6 | +5.8 | 41.2 | +3.5 | +3.6 | 78.9 | +1.0 | +2.2 |
| Cottonseed-oil, cake, and meal | 130.8 | +15.5 | -6.8 | 113.0 | +20.3 | -2.0 | 14. 21 | +4.2 | +5.3 | 48.5 | +4.3 | -8.2 | 28.6 | $-1.3$ | +14.4 |
| Druggists' preparations. | 116. 7 | +2.4 | +4.5 | 133.0 | +7.4 | +7.6 | 25.82 | +4.8 | +2.9 | 41.5 | +5.5 | +2.9 | 59.5 | -. 3 | +1.4 |
| Explosives.-.-....-- | 104.2 | +4.3 | +18.7 | 125.2 | +9.5 | +23.8 | 33.07 | +4.9 | +4.3 | 39.9 | +2.1 | +1.3 | 83.0 | +2.8 | +2.9 |
| F'ertilizers | 98.5 | +. 1 | +10.5 | 79.8 | $-7.5$ | +13.5 | 14.91 | -8. 1 | +1.2 | 35.5 | -3.5 | +1.3 | 42.0 | -4.8 | +1.5 |
| Paints and varnishes | 125.1 | $+2.5$ | +6.4 | 134.6 | +5.6 | +13.6 | 29.46 | +3.1 | +5.8 | 41.4 | +1.4 | +3.7 | 71.2 | +1.5 | +2.0 |
| rayon and allied products | 310.8 | +3.6 | +3.1 | 303.4 | +5.9 | +9.5 | 25.00 | +2.3 | +6.2 | 38.7 | +2.4 | +4.9 | 64.5 | -. 1 | +1.2 |
| Soap...- | 90.4 | +2.1 | +8.9 +19.1 | 109.0 | +1.7 | +10.5 | 27.87 | $-1.6$ | - 1.1 | 40.0 | $-7$ | $+.9$ | 60.6 | -1.0 | $-1.0$ |
| Rubber products. | 92.4 | $+7.4$ | +19.1 +7 | 101.9 | +12.0 | +31.1 | 30.11 | +4.3 | +-10. 2 | 39.2 | +4.2 | +6.8 | 76.9 | +. 1 | +2. 1 |
| Rubber boots and shoes. lubber tires and inner tubes | 62.2 73.6 | +4.1 +5.2 | +7.1 +16.9 | 63.5 90.6 | +2.1 +9.6 | +7.0 +34.6 | 23.45 35.91 | -1.8 | +15. ${ }^{-1}$ | 38.4 37.5 | -1.1 +3.8 | -.9 +13.4 | 61.1 96.1 | -.7 +.2 | -.8 +2.1 |
| Hubber goods, other-.-.---- | 157.5 | +11.2 | +25.9 +29 | 161.2 | +19.5 | +34.1 + | 25.01 | +7.2 +7.4 | +6.5 | 41.3 | +6.1 | +2.7 | 61.2 | +1.4 | +2.1 $+\mathbf{4} .1$ |

NONMANUFACTURING
[Indexes are based on 12 -month averade, $1024=\mathrm{J}(0)$ ]

| 曷 Coal mining: |  |  |  |  |  |  |  |  |  |  |  |  | Cents |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\%^{\prime}$ Anthracite ${ }^{3}$ | 51.9 | $+5.0$ | -11.9 | 52.2 | $+30.2$ | +20.3 | \$33. 03 | $+21.0$ | $+21.4$ | 35.6 | +25.6 | $+22.4$ | 83.0 | +1. 1 | $+0.4$ |
| ${ }_{\sim}^{4}$ Bituminous ${ }^{3}$ | 93.2 | +1.2 | +6.69 | 97.7 | +21.8 | +24.8 | 28.70 | +11.5 | $+16.7$ | 32.7 |  |  | 88.7 | -1. 1 | -8 |
| ¢ Metalliferous mining | 65.4 | $+3.9$ | +12.8 | 63.7 | $+15.7$ | +2.6.6 | 30. 63 | +11.4 | $+14.8$ | 42.4 | +6. 7 | +7.1 | 72.7 | +4.4 | $+7.4$ |
| Quarrying and nonumetallic mining | 47.8 | $-.2$ | +7.7 | 45.1 | +5.6 | +15. 1 | 23. 101 | - +5.8 | +6.9 | 12.5 | +4.7 | +2.2 | 53.6 | +1.2 | $+5.6$ |
| w Crude-petroleum producins | 64.1 | . 9 | -7.3 | 59.0 | $-3.0$ | +7.4 | 32.80 | -2.1 | -. 1 | 37.7 | -2.5 | $-5.0$ | 87.7 | +. 4 | +4.4 |
| Public ntilities: ${ }^{\text {Telephone and telegraph }}$ - | 75.4 | +. 2 | $+.9$ | 95.2 | +. 3 | -. 1 | 31.25 | +. 1 | -1.1 | 39.1 | -. 9 | -1.0 | 30.5 | +1.1 | $+.8$ |
| Electric light and power and manufactured gas ${ }^{4}$ | 93.5 | $-2$ | +1. | 101.0 | - 1 | -1. | 33.28 | $+2$ | -(2) | 39.5 | - 6 | -1.1 | 83.4 |  | $+1.3$ |
| Flectric-railroad and motor-bus operation and |  |  |  |  |  |  |  | +. 2 |  |  |  | $-1.1$ |  |  | +1.3 |
| maintenance ${ }^{4}$. | 70.0 | +. 2 | +. 2 | 79.3 | +2. 7 | $+4.9$ | 33.49 | +2.5 | +4. 7 | A. 5 | +2.4 | +4.3 | 70.5 | +. 1 | - 4 |
| Wholesale ${ }^{\text {a }}$ | 92.5 | +2.2 | +3. 7 | 80.3 | +3.0) | +6.9 | 30.29 | $+.8$ | +3.0 | 42.1 | +. 0 | -. 4 | 71.8 | $+2$ | -risi |
| Retail ${ }^{4}$. | 88.4 | +1.3 | $+2.9$ | 7.1 | +2.6 | $+4.7$ | 21.17 | +1.2 | +-1. 7 | 12.7 | $+.4$ | - ${ }^{(9)}$ | 55. 1 | +. 0 | +1.8 |
| General merchandisiog ${ }^{4}$ | 103.2 | +3.1 | +3.8 | 91.7 | +3.8 | $+3.9$ | 17.71 | $+1.7$ | + 1 | 39.0 | +. 1 | $-.3$ | 18.4 | +1.0 | +1.0 |
| Other than general merchandising | 84.5 | - +8 | + 2.8 | 70.5 | +2.2 | +4.9 | 24.62 | +1.4 | +2. | 43.7 | - 6 | $+1$ | 5.2 | $+6$ | $+2.2$ |
| 1 foruls (year-round) ${ }^{346}$ | 92.8 | +1.6 | -1. 1 | 82.2 | +2.2 | $+1.7$ | 15. 27 | $+6$ | +1.8 | 46. 6 | $-1$ | $+2$ | 32.3 | +. 9 | $+1.0$ |
| Taundries ${ }^{3}$.... | 96.1 | -1.8 | +1.7 | 83.9 | $-.7$ | +5.5 | 17.90 | +1.1 | +3.7 | 42.7 | +. 5 | +1.5 | 42.0 | +. ${ }^{\text {i }}$ | $+1.7$ |
| $1)$ yeing and cleaning 3 . | 105. 1 | -. 2 | -1.6 | 73.3 | $-1.3$ | $-.9$ | 20. 42 | -1.2 | +. 7 | 42.3 | -. 7 | -1.0 | 19.3 | +(2) | +2. ${ }^{\text {i }}$ |
| Brokerage ${ }^{4}$ | (6) | -10 | +.8 | (9) | $-1.6$ | +. 2 | 36.76 | $-.6$ | $-.6$ | (0) | (0) | (i) |  | (i) |  |
| Insurance ${ }^{\text {a }}$ | (8) | -. 1 | +1.3 | (6) | +.5 | +2.5 | 34, 47 | $+.5$ | +1.2 | (0) |  | ( ${ }^{\text {d }}$ | (ii) |  |  |
| Building construction. | (*) | -. 6 | +3.9 | (0) | $-1.0$ | +6.9 | 31.08 | $-.3$ | +2.8 | 34.0 | +.6 | $-.4$ | ! 1.6 | -1.0 | +3.0 |

Revised series for "all manufacturing," for various groups under manufacturing
sawmills, fertilizers, soap, and telephone and telegraph. Wimeographed sheots for sawmills, fertilizers, soap, and telephone and telegraph. Wimeographed sheots
civing averages for these, as well as for the remaining industrics covered, by years, 1932 to 1938 , inclusive, and by months, January 1938 to Seplember 1939, inclusive, available on request. A verage weekly earnings are computed from figures furnished by all reporting establishments. Average hours and average hourly carnings are computed from data supplied by a sinaller number of establishments, as not all reporting flrms furnish
inan-hours. The figures are not strictly comparable from month to month because of changes in the size and composition of the reporting sample.

2 Less than 30 of I percent.
in January 1938 isede to 1935 census. Comparable series back to Janaary 1929 presented $\pm$ Average weekly earnings, hourly earnings, and hours not strictly comparable with figures published in pamphlets prior to January la38 as they now oxclude corporation oflicers, executives, and other employces whose duties are mainly supervisory. ${ }^{5}$ Cash payments only; the additional value of board, room, and tips cannot be com${ }_{5}$ Not a vailable.
[Indexes are hased on 3 -year aysrage, $1923 \cdot 25=100$, and are adjusted to 1937 Census of M [anufactures for all industries except automobiles. Not comparable to indexes published

| Industry | Employment index |  |  | Pay-roll index |  |  | A verage weckly earnings ${ }^{1}$ |  |  | Average hours worked per week ${ }^{1}$ |  |  | A rerage hourly carnings : |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\left\|\begin{array}{c} \text { October } \\ 1939 \end{array}\right\|$ | $\begin{gathered} \text { Sep- } \\ \text { tember } \\ 1939 \end{gathered}$ | August | $\begin{gathered} \text { October } \\ 1939 \end{gathered}$ | $\begin{aligned} & \text { Sep- } \\ & \text { tember } \\ & 1939 \end{aligned}$ | ${ }_{1939}$ | $\begin{array}{\|c} \text { October } \\ 1939 \end{array}$ | $\begin{gathered} \text { Sep- } \\ \text { tember } \\ 1939 \end{gathered}$ | ${ }_{1939}^{\text {August }}$ | $\left\|\begin{array}{c} \text { October } \\ 1939 \end{array}\right\|$ | $\begin{gathered} \text { Sep- } \\ \text { tember } \\ 1939 \end{gathered}$ | August | $\begin{gathered} \text { October } \\ 1939 \end{gathered}$ | $\begin{gathered} \text { Sep- } \\ \text { tember } \\ 1939 \end{gathered}$ | $\underset{1939}{\text { August }}$ |
| All manufacturing. | 103.6 | 100.2 | 96.3 | 101.6 | 93.8 | 89.7 | \$25. 80 | 824.72 | 824. 52 | 39.1 | 38.0 | 38.0 | $\begin{array}{r} \text { Cents } \\ 64.5 \end{array}$ | $\begin{gathered} \text { Cents } \\ 63.5 \end{gathered}$ | $\begin{gathered} \text { Cents. } \\ 63.4 \end{gathered}$ |
| Durable goods. | 93.1 | 89.7 | 83.9 | 99.7 | 87.9 | 81.5 | 29.72 | 29.18 | 27.92 | 40.2 | 38.2 | 38.4 | 71.2 | 70.3 | 69.9 |
| Nondurable goods | 110.7 | 110.2 | 108.1 | 103.8 | 100.5 | 89.0 | $22.0{ }^{8}$ | 21.54 | 21.58 | 38.2 | 37.8 | 37.8 | 59.0 | 58.3 | 58. 3 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Iron and steel and their products, not including |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| machinery....-...................---.............. | 106. 8 | 97. 1 | 92.8 | 112.0 | 92.8 | 89.0 | 31. 15 | 28.25 | 28. 17 | 40.3 | 37.0 | 37.0 | 76.5 | 76.1 | 75.7 |
| Blast furnaces, stocl works, and rolling inills... | 115.1 | 101. 1 | 97.0 | 123.6 | 95.3 | 92.7 | 33. 91 | 29.77 | 30. 13 | 40. 0 | 35. 2 | 35.7 | 84.8 | 84.5 | 84.3 |
| Bolts, nuts, washers, and rivets. - .-..- | 113.4 | 100.7 | 96.9 | 137.5 | 111.1 | 104.0 | 29. 56 | 26.90 | 26.17 | 42.8 | 38.2 | 38.0 | 68.9 | 68.7 | 68.9 |
| Cast-iron pipe <br> Cutlery (not including silver and plated eut- | 76.6 | 74.6 | 75.3 | 71.4 | 62.9 | 67.9 | 22.60 | 20.48 | 21.81 | 38.5 | 34.9 | 37.4 | 58.3 | 57.9 | [8. 10 |
|  | 103. 9 | 96.9 | 82.1 | 95.0 | 81.7 | 79.5 | 23.75 | 22.72 | 22.34 | 41.5 | 38.3 | 38.1 | 58.6 | 59.0 | 54.8 |
| Forgings, iron and steel | 65.2 | 58.9 | ${ }^{35} 56$ | 74.7 | 63.0 | 59.1 | 31.24 | 29.15 | 29.10 | 40.4 | 38.4 | 38.3 | 77.4 | 75.8 | 76.0 |
| Ifardware. | 99.7 | 94.2 | 75.6 | 109.6 | 113.9 | 80.1 | 27. 13 | 29. 85 | 20.10 | 40.2 | 41.4 | 39.0 | 67.6 | 72.2 | 66. 9 |
| Plumbers' supplics. | 82.1 | 79.5 | 77.8 | 79.9 | 71.8 | 71.1 | 23. 18 | 26. 13 | 26. 43 | 41.3 | 38.8 | 38.9 | 68.3 | 67.4 | 63.0 |
| Stampod and enameled ware. | 162.9 | 156.0 | 152.5 | 169.9 | 150.3 | 156.4 | 25. 08 | 23. 77 | 24.37 | 40.4 | 38.4 | 38.8 | 62.1 | 61.9 | 62.5 |
| Steam and hot-water hoating apparatus and | 86.4 | 81.2 | 78.4 | 83.3 | 71.3 | 67.9 | 29.49 | 26.84 | 26.47 | 41.8 | 38.6 | 37.9 | 70.6 | 69.7 | 69.9 |
| Stoves..--... | 97.4 | 92.0 | 90.2 | 91.2 | 82.5 | 77.7 | 27. 77 | 25.60 | 24. 78 | 41.2 | 38. 9 | 37.7 | 67.5 | 66. 0 | 66.0 |
| Structural and ornamental metalwork | 76. 3 | 73.8 | 71.5 | 63.3 | 63.3 | 63.9 | 28.87 | 27.62 | 28.74 | 39.9 | 38. 3 | 39.7 | 72.5 | 72.1 | 72.6 |
|  | 106.1 | 107.0 | 107.4 | 111.2 | 117.4 | 114.9 | 23.88 | 24.86 | 24. 20 | 39.2 | 40.5 | 39.9 | 61.3 | 61.5 | 60.8 |
| Tools (not including edge tools, machine tools, files, and saws) | 90.9 | 85.8 | 83.5 | 91.7 | 81.6 | 79.4 | 25.41 | 24.02 | 23.97 | 41.1 | 38.9 | 38.6 | 62.0 | 61.9 | 62.3 |
| Wirework .-...-....... | 165.9 | 144.9 | 116.1 | 183.3 | 161.4 | 115.5 | 27.47 | 27.70 | 24.70 | 40.3 | 39.4 | 36.8 | 68.2 | 70.4 | 67.4 |
| machinery, notincluding tranrspotation equipment. | 105. 6 | 100.3 | 96.8 | 111.0 | 100.9 | 99.9 | 23.20 | 28. 23 | 28.07 | 40.6 | 38.1 | 39.0 | 72.1 | 72.2 | 72.1 |
| Agricultural implements (incliding tractors) | 117.3 | 116. 1 | 114.4 | 131.3 | 125.0 | 124.0 | 29.92 | 28.91 | 29.11 | 38.4 | 37.3 | 37.4 | 78.2 | 73.8 | 78.1 |
| Cash registers, adding machines, and calculating machines. | 126.3 | 126.7 | 124. 6 | 126.1 | 123.6 | 119.4 | 31.50 | 30.80 | 30. 23 | 38.4 | 37.5 | $37.1)$ | 82.2 | 82.5 | 82.2 |
| Electrical machinery, apparatus, and supplies. | 97.3 | 92.2 | 87.8 | 105.7 | 98.4 | 93.4 | 29.24 | 28.71 | 28.50 | 40.0 | 38.9 | 38.8 | 73.3 | 74.0 | 73.7 |
| Engines, turbines, wator wheols, and windmills. | 105.2 | 99.2 | 93.8 | 129.2 | 116.2 | 113.5 | 32.48 | 30.97 | 31.01 | 41.1 | 39.6 | 40.1 | 79.4 | 78.7 | 77.8 |
| Foundry and ma | 91.2 | 85.8 | 84.1 | 89.5 | 80.2 | 78.4 | 29.27 | 27.86 | 27.78 | 40.8 | 38.9 | 33.8 | 71.8 | 71.5 | 71.4 |
|  | 170.6 | 166.2 | 140.3 | 207.6 । | 181.3 | 180.9 | 33.80 | 32. 19 | 31.72 | 44.9 | 43.0 | 42.6 | 75.4 | 75.0 | 74. 6 |


176.5
79.7
124.1
105.0
$1,556.4$
107.4
40.7
25.5
133.6
110.4
168.1
131.1
90.0
106.7
98.4
73.1
83.8
72.4
94.6
63.6
65.5
84.8
64.8
71.6
106.9
51.5
91.6

108.3
98.8
83.2
94.3


|  $\rightarrow$ |  <br>  |  <br>  |
| :---: | :---: | :---: |


|  |  | 요유이겅우웅 |  |
| :---: | :---: | :---: | :---: |
| －crucrisosoun－ | －©ivesocoso | －000ciso | －iocosorniosovo |





|  |  |  |  |
| :---: | :---: | :---: | :---: |
| ชิ＊＊ |  |  |  |


|  | ¢ |  |  |
| :---: | :---: | :---: | :---: |
|  |  | ลู9 |  |

出

|  eosocinooscorocrocion | \％\％\％ mectitivwe | 中や soorourts |  ONAWOTODONNO |
| :---: | :---: | :---: | :---: |



|  | W0utwiy | \％ | G\％ememe |
| :---: | :---: | :---: | :---: |
| －－1owowonowenoosurr | －0000N－TOU | $\checkmark$ | －ronoinvoncoic |


|  | P\％ |  |  |
| :---: | :---: | :---: | :---: |
|  | cowocrin io is | जevocioso | $\rightarrow$－ |

## ～onnw

## 

 ゼ'Table 4.-Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmarufacturing Industries-Continued
MANUFACIURING-Continued


NONMANLFACTURING
[Indexes are based on 12 -month a verage, $1924=100$ ]

| Coal mining: |  |  |  |  |  |  |  |  |  |  |  |  | Cents | Cents | Cents |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Anthracite ${ }^{\text {a }}$ | 51.9 | 49.4 | 48.5 | 52.2 | 40.1 | 33.8 | \$33.03 | \$26.64 | \$23. 13 | 35. 6 | 28.4 | 24.2 | 93.0 | 92.0 | 92. |
| Bituminous: | 93.2 | 85.4 | 81.4 | 97.7 | 80.2 | 74.0 | 28.70 | 25. 51 | 24.61 | 32.7 | 28.5 | 27.4 | 88.7 | 89.6 | 89. |
| Metalliferous mining | 65.4 | 62.9 | 60.4 | 63.7 | 55.1 | 53.0 | 30.63 | 27.60 | 27.47 | 42.4 | 39.6 | 39.5 | 72.7 | 70.1 | 70. |
| Quarrying and nonmetallic mining | 47.8 | 47.9 | 48.1 | 45.1 | 42.7 | 42.9 | 23.00 | 22.25 | 22.17 | 42.5 | 40.4 | 40.5 | 53.6 | 54.9 | 54. |
| Crude-petroletım producing | 64.4 | 65.0 | 66.7 | 59.0 | 60.8 | 62.0 | 32.80 | 34.33 | 34. 18 | 37.7 | 38.3 | 38.8 | 87.7 | 87.8 | 86. |
| Publicutilities: <br> Telephone and telegraph ${ }^{3}$ <br> Electric likht and power and manufactured | 75.4 | 75.3 | 75.5 | 95.2 | 94.9 | 94.3 | 31.25 | 31.22 | 30.92 | 39.1 | 39,5 | 39.1 | 80.5 | 79.6 |  |
| gas ${ }^{3}$.-- - .-. .-.................. | 93.5 | 93.7 | 93.8 | 101.0 | 101.0 | 101.1 | 33.28 | 33.73 | 33.59 | 39.5 | 39.5 | 40.0 | 83.4 | 85.2 |  |
| Electric-railroad and motor-bus operation and maintenance ${ }^{3}$ | 70.0 | 69.8 | 69.8 | 72.3 | 70.4 | 71.0 | 33. 49 | 32.91 | 33.17 | 46.5 | 45.4 | 46.0 | 70.8 | 71.5 |  |
| Trade: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wholesale ${ }^{3}$. | 92.5 | 90.5 | 89.0 | 80.3 | 78.0 | 76.2 | 30.29 | 29.99 | 29.82 | 42.1 | 41.6 | 41.9 | 71.8 | 71.6 | 71. |
| Retail ${ }^{\text {3 }}$..... . |  | 87.3 | 82.5 | 74.1 | 72.3 | \%9.4 | 21.17 |  | 21.39 | 42.7 | 42.5 | 42.8 | 55.1 | 54.7 | 55. |
| General merchandising ${ }^{3}$--- | 103.2 | 100. 1 | 89.8 | 91.7 | 88.3 | $81 . \mathrm{J}$ | 17.71 | 17. 62 | 18.07 | 39.0 | 38.9 | 38.5 | 48.4 | 48.0 | 50.1 |
| Other than general merchandising ${ }^{3}$ | 84.5 | 83.9 | 80.6 | 70.5 | 69.0 | 67.0 | 24.16 | 23.77 | 23.99 | 43.9 | 43.6 | 44.0 | 57.2 | 56.8 | 55.8 |
| Hotels (year-round) ${ }^{23}$ | 92.8 | 91.3 | 89.8 | 82.2 | 80.4 | 79.2 | 15. 27 | 15. 25 | 15. 20 | 46.6 | 46.5 | 47.1 | 32.5 | 32.6 | 32. |
| taundrics ${ }^{2}$ | 96.1 | 97.8 | 99.1 | 83.9 | 84.5 | 85.9 | 17.90 | 17.59 | 17.58 | 42.7 | 42.5 | 42.9 | 42.0 | 41.4 | 41.0 |
| $1)$ yeing and cleaning 2 | 105.1 | 105. 2 | 102. 7 | 77.3 | 78.3 +10.6 | 73.0 | 20.42 | 20.48 | 19.42 | 42.3 | 42.7 | 41.6 | 49.3 | 49.3 | 48 |
| Brokerage 35. | -1.0 | +8.1 | +. 1 | $-1.6$ | $+10.6$ | $-1.4$ | 36.76 | 36.31 | 35. 32 | ${ }^{6}$ (6) | ${ }^{(8)}$ | (b) | ${ }^{(6)}$ | ${ }^{(6)}$ | ${ }^{(6)}$ |
| Insurance ${ }^{35}$ - ${ }^{\text {a }}$ | -. 1 | $-{ }^{-1}$ | $+.1$ | $+.5$ | -1.4 | $-.9$ | 34.47 | 35.94 | 35.77 | ${ }^{(6)}$ | ${ }^{(6)}$ | (b) | ${ }^{(6)}$ | (\%) | ${ }^{(6)}$ |
| 13uilding construction ${ }^{\text {s }}$ | -. 6 | +. 6 | $+.8$ | $-1.0$ | +1.5 | +1.2 | 31.08 | 31.05 | 30.91 | 34.0 | 33.9 | 33.5 | 91.6 | 91.8 | 92. |

1 Revised seriss for "'all manufacturing," for various groups under manufacturing, for sawnills, fertilizers, soap, and telephone and telegraph. Mimeographed shects giviag averages for these, as well as for the romaining industries covered, by years. 1932 to 1938 A verage weekly carninss are computed from ficures furnished by ail reporting establishments. Average hours and average hourly oarnines are compited from data supplied by a sinaller number of establishments, as not all reporting firms furnish man-hours The figures are not strictly comparable from month to month because of changes in the size and composition of the reporting sample.
parable serics back to January 1999 presented in January 1938 issue of this publication.

3 A verare weekly earnings, hourly earnings, and hours not strictly conuparable with figures published in pamphlets prior to January 1938 as they now exclude corporation officers, executives, and other emplo vees whose duties are mainly super visory. computed. preceding month sunstituted.

## INDEXES OF EMPLOYMENT AND PAY ROLLS

Indexes of employment and pay rolls are given in table 5 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 October 1938 to October 1939, inclusive. The accompanying chart indicates the trend of factory employment and pay rolls from January 1919 to October 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 earners 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 Bureau 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 earners 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 dyeing 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 5.-Indexes of Employment and Pay Rolls in Selected Manufacturing ${ }^{1}$ and Nonmanufacturing ${ }^{2}$ Industries, October 1938 to October 1939, Inclusive


[^2]
## TREND OF INDUSTRIAL AND BUSINESS EMPLOYMENT, BY STATES

A comparison of employment and pay rolls, by States and geographic divisions, in September and October 1939 is shown in table 6 for all groups combined and for all manufacturing industries combined based on data supplied by reporting establishments. The percentage changes shown, unless otherwise noted, are unweighted-that is, the industrios included in the manufacturing group and in the grand total 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 3. The totals for all groups combined include all manufacturing industries, each of the nonmanufacturing industries presented in table 3 (except building construction) and seasonal 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 producing, public utilities, wholesale trade, retail trade, hotels, laundries, dyeing and cleaning, and brokerage and insurance.

> Table 6.-Comparison of Employment and Pay Rolls in Identical Establishments in October 1939, by Geographic Divisions and by States
\{Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]


Sureotnotes at order table.
$14 \overline{7} 145-39-\cdots-4$

Table 6.-Comparison of Employment and Pay Rolls in Identical Establishments in
October 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 organization's $]$

| Geographic division and State | Total-all groups |  |  |  | Manufacturing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Num. ber of estah-lishments | Number on pay roll, October 1939 |  |  | Num. ber of estab-lishments | $\left\|\begin{array}{c} \text { Number } \\ \text { on pay } \\ \text { roll, } \\ \text { October } \\ 1939 \end{array}\right\|$ | Perage change from September 1939 | $\begin{array}{\|c} \text { Amount } \\ \text { of pay } \\ \text { roll } \\ (1 \text { week }), \\ \text { October } \\ 1939 \end{array}$ | Per- cent- <br> age <br> change from tember 1839 |
|  |  |  | Dollars |  |  |  |  | Dollars |  |
| West North Central. | 11, 101 | 434.823 | +1.310.946, 043 | $+4.7$ | 2,447 | 222, 356; | +2.4 | 5. 558, 708 | +6.1 |
| Minnescta. | -2,839 | 134, $80{ }^{7}{ }^{5}$ | -. 8 3, 738,851 | +4.2 | 656 | 54, 192 | - 8 | 1, $3^{7} 71,926$ | $+5.0$ |
| Iowa. | 1,570 | 59, 228 | +.8 1, 476.838 | +6.2 | 363 | 36, 803 : | +. 6 | 946.476 | +6.9 |
| Missouri | 2,500 | 146, 982 | +2,8 3, 490,301 | $+5.0$ | 783. | 91, 706 | +4.7 | 2, 148, 525 | +8.6 |
| North Dakota. | 374 | 3, 571: | -.3 89, 284 | +1.9 | 27 | 418: | $-14.3$ | 10.759 | $-16.1$ |
| South Dakota | 383 | 5, 660: | $+2.0{ }^{\circ} 127,284$ | +.8 | 30 | 2, 747. | +6.4 | 64, 688 | $+.5$ |
| Nebraska. | 1,006 | 27.540 | +5.4, 614.264: | ${ }^{+}+4.3$ | 136 | 10,681 | +11.8 | 248,318 | +6.1 |
| Kansas | ¢ 2, 429 | 57, 035: | ${ }^{6}+2.31,850,221$ | ${ }^{3}+2.8$ | 459 | 25, 809 | +(10) | 668,016 | +. 9 |
| South Atlantic. | 9, 084 | 873,531 | +4. $217.846 .503{ }^{\text {j }}$ | +7.6 | 2,933 | 633, 967 | +4. 0 | 12, 025, 298 | +7.7 |
| Delaware | 224 | 15, 810 | -. 2 , 393.750 | +5.7 | 81 | 11,699 | -1.3 | 281, 235 | +6.2 |
| Maryland..--- | 1, 668 | 149,413 | +3.7'3.831,814 | +6.7 | 642 | 108, 368 | ${ }^{3}+3.8$ | 2, 805, 975 | ${ }^{3}+8.0$ |
| District of $\mathrm{Co}-$ lumbia | 943 | 34,009 |  | +3.6 | 41 | 3,442 | $\rightarrow$ - | 119.776 | -. 1 |
| Virginia | 1,580 | 118.252 | +1.9 2, 313, 625 | +3.8 | 454 | 86, 7461 | +2.5 | 1, 655, 956 | +4.2 |
| West Virginia | 959 | 131. 755 | +8. 1: 3, 602, 977 | +15.9 | 199 | 53. 522 | +8.3 | 1, 454, 358 | +18.6 |
| North Carolina. | 1,370 | 176, 630 | +2.3. 2, 814, 352 | +4.3 | 0.3 | 162, 413 | $+2.9$ | 2, 594, 997 | +4.9 |
| South Carolina | 661 | 93, 720 | +3.6. 1, 375, 204 | +5.0 | 282 | 88, 277 | +3.7 | 1,281, 659 | +5.2 |
| Georgia.-.-.- | 1,009 | 115,880 | +5.4 1,832.775 | $+7.8$ | 378 | 97, 809 | +6.2 | 1, 459,919 | +9.2 |
| Florida | 770 | 38, 065 | +10.0 (884.779 | +8.7 | 183 | 21,691 | +3.4 | 371,423 | +5.6 |
| East Sonth Central. | 3,460 | 288.923. | +4.1. 5.544, 295 | +8.5 | 1,036 | 201, 018 | +4.2 | 3,675, 203 | +8.8 |
| Kentucky- | 1. 071 | 78, 523 : | +4.3 1, 849.664 | +9.0 | 281 | 34,752 | $+3.5$ | 786. 212 | $+7.9$ |
| 'Tennessee | ${ }^{997}$ | 99, 774 | +2.5 1, 790, 487 | +6.3 | 364 | 79.536 | +2.7 | 1, 441, 014 | +6.9 |
| Alabama | 1,028 | 89,620 21.006 | $\begin{array}{rl}+5.2 & 1,599,605 \\ +5.8 & 304,539\end{array}$ | +10.3 | 292 | 70.385 | +5.4 +7.8 | 1, 222.163 | +9.6 +11.6 |
|  |  |  |  |  |  |  |  |  |  |
| West South Central | 5.035 | $217.303 .$ | +2.114,861.515 | +3.4 | 1. 267 | 113.639 | +2.6 | 2, 490. 538 | +5.0 |
| Arkansas. | ${ }^{11} 88.7$ | 29,098 51.009 | +5.4 473.858 <br> +2.2 1.003 .529 | +4.2 +4.3 |  | 19,5.58 | +5.4 <br> +2.8 | 314.417 585.591 | +5.1 +5.2 |
| Oklahoma | 1. 202 | 35, 081 | +.5 889,343 | +1.1 | 134 | 10, 434 | $-1.1$ | 273, 178 | +. 6 |
| Tevas. | 2.281 | 102, 115 | +1.8 2. ${ }^{4} 97,780^{\circ}$ | +8.8 | $6{ }^{\sim} 1$ | 52, $60 n$ | ${ }^{3}+2.7$ | 1,317, 359 | ${ }^{3}+5.1$ |
| Mountain. | 3, 468! | 125,009: | +7.6 3, 266, 363 | +13.2 | 553 | 47, 014 | +17.4 | 1,145, 290 | $+21.0$ |
| Montana | 497 : | 16.390: | +12.8. 464,519 | +20.4 | 7 | 6, 129 | +19.4 | 173.401 | +31.6 |
| Idaho. | 390 | 11, 133 | +10.2. 291.459 | +14.5 | 61. | 4.995: | +25. | 131,075 | +32.0 |
| Wyoming | 296 | 8.153 | +5.6. 250.042 | +12.9 | 39. | 1,841 | +28.7 | 55, 631 | +27.5 |
| Colorado. | 1,0.57 | 42.391 | +11.4. 1, 063,446 | +13.8 | 103 | 20, 419 | +22.8 | 494, 000 | +21.3 |
| New Mexico | 246 | 5,175 | +.8. 113,838 | +10.4 | $28 ;$ | 833 ! | +1.8 | 17, 467 | +8.5 |
| Arizona | 365 | 15,475 | +2.5! 445,350 | +10.0 | 39 | 2, 839 | +.6 | 72,712 | +16. 1 |
| Ttah | 500 | 24, 082 | +3.3 568.260 | $+10.0$ | $101^{\text {. }}$ | 0.621 | +8.5 | 188, 863 | +8.1 |
| Nevada | 117 | 2, 208 | +.6 69.440: | +8.4 | 15 | 337 | -5.6 | 11.541 | +8.2 |
| Pacific. | 9,790. | 494, 296 | -2.7114, 514.732 | +2.0 | 2, 702 | 276, 777 | -3.9 | 7.948. 828 | +2.0 |
| Washington | 2,229 | 89,909 | -1.6 $2,507,348$ | +4.8 | 5332 | 58, 732 | $-2.7$ | 1, 656. 648 | +6.0 |
| Oregon. | 889 | 43, 733 | -9.7, 1, 170.323 | -2.4 | 289 | 30, 158 | $-12.9$ | 812,039 | -4.2 |
| California | ${ }^{12} 6.672$ | 360, 567 | -2.0:10, 837.061 | +1.9 | 1,881 | 187, $88{ }^{7}$ | -2.7 | 5,480,141 | +1.9 |

[^3]
## INDUSTRIAL AND BUSINESS EMPLOYMENT IN PRINCIPAL METROPOLITAN AREAS

A comparison of employment and pay rolls in Scptember and October 1939 is made in table 7 for 13 metropolitan areas, each of which had a population of 500,000 or orer 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 3 , with the exception of building construction, and include also miscellaneous industries.

Revisions made in the figures after they have gone to press, chiefly because of late reports by cooperating firms, are incorporated in the supplementary tabulation mentioned abore. This supplementary tabulation covers these 13 metropolitan areas as well as other metropolitan areas and cities having a population of 100,000 or more, according to the 1930 Census of Population.

Table 7.-Comparison of Employment and Pay Rolls in Identical Establishments in September and October 1939, by Principal Metropolitan Areas

| Metropolitan area | Number of establishments October 1939 | $\begin{gathered} \text { Number } \\ \text { on pay roll } \\ \text { October } \\ 1939 \end{gathered}$ | Porcentage change from Scptermber 1939 | Amount of pay roll (I week) October 1939 | $\begin{aligned} & \text { Percentage } \\ & \text { chance } \\ & \text { from } \\ & \text { September } \\ & 1939 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| N'en York ${ }^{1}$ | 13, 912 | 634, 210 | +4.4 | \$17,348, 336 | +6.3 |
| Chicago ${ }^{2}$ | 4,341 | 437, 906 | +4.6 | 12, 364.321 | +6.9 |
| Philadclphia ${ }^{3}$ | 2, 215 | 219, 159 | $+4.3$ | 6, 100, 326 | +6.3 |
| Detroit.- | 1,449 | 324, 244 | +3.0 | 10,989, 786 | +1.0 |
| Los Angeles | 2, 774 | 156, 149 | +1.3 | 4,630, 828 | +3.8 |
| Oleveland | 1,510 | 121, 135 | +4.5 | 3, 685, 575 | +12.8 |
| St. Louis. | 1,295 | 114,053 | +3.2 | 2.902,661 | +7.2 |
| Baltimore | 1, 132 | 114, 457 | +3.0 | 2, 947, 085 | $+6.3$ |
| Boston ${ }^{\text {3 }}$ | 2,573 | 181, 523 | $+2.5$ | 4,481, 643 | $+1.9$ |
| Pittsburgh | 1,147 | 102, 244 | +9.8 | 5,968,037 | +22.6 |
| San Francisco ${ }^{\text {6 }}$ | 1,547 | 81, 887 | +2.0 | 2,535, 165 | +5.1 |
| Buffalo. | 762 | 72, 177 | +8.6 | 2,040, 093 | +12.8 |
| Milwauke | 959 | 98, 444 | -1.5 | 2,796, 597 | +2.8 |

: Does not include Elizabeth, Jcrsey City, Newark, or Paterson, N. J., nor Yonkers, N. Y.
${ }^{2}$ Does not include Gary, Ind.
a Does not include Camden, N. J.
4 Does not include Long Beach, Calif.
3 Does not include Cambridge, Lynn, or Somerville, Mass.
© Does not include Oakland, Calif.

## Public Employment

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

## EXECCTIVE SERVICE OF THE FEDERAL GOVERNMENT'

Statistics of employment and pay rolls for the executive service of the Federal Government in October and September 1939 are given in table 8.

Table 8.-Employment and Pay Rolls for the Executive Service of the L. S. Government, October and September $1939{ }^{1}$
[Subject to revision]

| Class | Employment |  |  | Pay rolls |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | October | September ${ }^{2}$ | Percentage change | October | September 2 | Porcentage change |
| Entire service: Total... | 937.357 | 940.130 | -0.3 | \$142, 065, 340 | \$141, 663, 231 | +0.3 |
| Regular appropriation | 782, 850 | 786, 200 | -. 4 | 123, 232, 512 | 122,968, 728 | +. 2 |
| Emergency appropriation. | 58,041 | 57,409 | +1.1 | 7, 420,969 | 7, 404, 056 | +. 2 |
| Force-account (regular and emergency) | 96,466 | 96; 521 | -. 1 | 11, 411, 859 | 11. 290, 447 | +1.1 |
| Inside the District of Columbia: Total. | 12¢, 471 | 125, 902 | $+.5$ | 22, 552, 372 | 22,206, 991 | +1.6 |
| Regular appropriation...............- | 111, 254 | 110,947 | +. 3 | 20, 161, 427 | 19,920, 806 | +1.2 |
| Emergency appropriation.......---- | 8.755 | 8,797 | -. 5 | 1,353, 658 | I, 361,574 | $-.6$ |
| Force-account (regular and emergency). | 6,462 | 6, 158 | +4.9 | 1,037, 287 | 924, 611 | +12.2 |
| Outside the District of Columbia: Total. | 810. 886 | 814, 228 | -. 4 | 119, 512, 968 | 119, 456, 240 | +(3) |
| Regular appropriation-------------- | 671, 596 | 675, 253 | -. 5 | 103, 071, 085 | 103, 047, 922 | + ${ }^{(3)}$ |
| Fmergency appropriation .........-- | 49, 286 | 48, 612 | $\dagger-1.4$ | 6,067, 311 | 6, 042, 482 | +. 4 |
| Force-uccount (regular and emergency) | 90,004 | 90,363 | -. 4 | 10, 374, 572 | 10,365,836 | +. 1 |

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

## CONSTRUCTION PROJECTS FINANCED BY TIE PUBLIC WORKS ADMINISTRATION

Details conceming employment, pay rolls, and man-hours worked during October on construction projects financed by Public Works Administration funds are given in table 9, by type of project.

Table 9.-Employment and Pay Rolls on Projects Financed From Public Works Administration Funds, October $1939{ }^{1}$
[Subject 10 revision]

| Type of project | Wage carners |  | Monthly pay-roli disbursements | Number ofman-hoursworkedduringmonth | A verage carninos per hour | Value of material orters placed during monih |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Naximton number employed : | Weekly average |  |  |  |  |
|  | Federal projects financed from National Thdustrial lecovery Act funds |  |  |  |  |  |
| All project | ${ }^{3} 1.197$ | 1,325 | \$114, 536 | 187, 015 | \$0.612 | $\$ 201.660$ |
| Building construction | 103 | 82 | 11,915 | 9, 283 | 1. 223 | 12,558 |
| Naval vessels. | (5) 11 ! | 11 632 | 1,367 1,63 53,647 | 1,728 1,705 81,102 | 1.984 .964 .062 | 12,587 $10-300$ |
|  | ${ }^{(5)} 275$ | 632 203 |  | 81,102 35,569 | . 61682 | 107,300 51,895 |
| liver, harbor, and flood control. | 214 | 151 ! | $\begin{array}{r}9,852 \\ \hline 7.85\end{array}$ | 16,814 | . 188 | 17,455 |
| Water and sewerage...........-- | $2+2$ | $226{ }^{\text {i }}$ | 7,073 | 30, 104 | . 180 | 7,006 |
| Discellaneous. | 20 | 20 | 2.516 | 2. 968 | . 858 | 4,809 |

See footnotes at end of table.

# Tabie 9.-Employment and Pay Rolls on Projects Financed From Public Works .Administration Funds, October 1939-Continued 

[Subject to revision]


Non-Hederal projecta financed from Dublic Works Administration Appropriation Act 1938 funds

All projects

| 173, 967 | 145, 075 | \$16, 122, 988 | 17, 663, 703 | \$0.913 | \$29, 832. 355 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 94, 097 | 7, 264 | 8, 502, 416 | 8. 658.235 | . 982 | 15, 118, 332 |
| 1,874 | 1,483 | 130. 226 | 171.238 | 747 | 522, 052 |
| 18, 265 | 15,516 | 2, 350.600 | 2, 04, 4.81 | 1. 150 | 3.728,152 |
| 841 | 696 | 73.998 | 98, 251 | . 753 | 141, 267 |
| 160 | 139 | 14. 792 | 14. 5.53 | 1. 066 | 64, 285 |
| 32, 021 | 27,063 | 2, 473, 71.4 | 3,408,960 | . 707 | 4,398, 302 |
| 26, 470 | 22, 728 | 2, 560. 514 | 3, 155, 028 | . 812 | 5, 272, 578 |
| 239 | 189 | 16, 728 | 19.351 | . 864 | 584, 087 |

[^4]Construction projects financed by the Public Works Administration are those projects authorized by title II of the National Industrial Recovery Act of June 16, 1933. This program of public works was extended to June 30, 1937, by the Emergency Relief Appropriation Act of 1935 and title II of the First Deficiency Appropriation Act of 1936. The First Deficiency Appropriation Act of 1936, cited as the Emergency Relicf Appropriation Act of 1936, reappropriated unobligated funds originally made available under the Emergency Relief Appropriation Act of 1935 and authorized the use of $\$ 300,000,000$ from funds on hand or received from the sale of securities. The Public Works Administration was continued until July 1, 1939, by the Public Works Administration Extension Act of 1937 and the Public Works Administration Appropriation Act of 1938 further continued the program to June 30, 1941. On July 1, 1939, pursuant to the provisions of Reorganization Plan No. 1, the Public Works Administration was transferred to the Federal Works Agency.

Federal construction projects for which data are included in table 9 are financed by allotments made by the Public Works Administration to the various agencies and departments of the Federal Government from funds provided under the National Industrial Recovery Act.

The major portion of the low-rent housing program of the Public Works Administration, however, was financed by funds provided under the Emergency Relief $\Lambda$ ppropriation Act of 1935. Federal construction projects are also financed by allotments from funds provided under the Public Works Administration Appropriation Act of 1938. The work is performed either by commercinl firms which have been awarded contracts, or by day labor hired directly by the Federal agencies.

Non-Federal projects are financed by allotments made by the Public Works Administration from funds available under either the National Industrial Recovery Act, the Emergency Relief Appropriation Act of 1935, the First Deficiency Appropriation Act of 1936, the Public Works Administration Extension Act of 1937, or the Public Works Administration Appropriation Act of 1938. Most of the allotments have been made to the States and their political subdivisions, but occasionally allotments have been made to commercial firms. In financing projects for the States or their political subdivisions from funds appropriated under the National Industrial Recovery Act, the Public Works Administration makes a direct grant of not more than 30 percent of the total labor and material cost. When funds provided under the Emergency Relief Appropriation Act of 1935, the First Deficiency Appropriation Act of 1936, the Public Works Administration Extension Act of 1937, or the Public Works Administration Appropriation Act of 1938 are used to finance a non-Federal project, as much as 45 percent of the total cost may
be furnished in the form of a grant. The remaining 55 percent or more of the cost is financed by the recipient. When circumstances justify such action, the Public Works Administration may provide the grantee with the additional funds by means of a loan. Allotments to commercial enterprises are made only as loans. All loans made by the Public Works Administration carry interest charges and have a definite date of maturity. Collateral posted with the Public Works Administration to secure loans may be offered for sale to the public. In this way a revolving fund is prorided which enlarges the scope of the activities of the Public Works Administration.

Commercial loans have been made, for the most part, to railroads. Railroad work financed by loans made by the Public Works Administration falls under three houdings: First, construction work in the form of electrification, the laying of rails and ties, repairs to buildings, bridges, etc.; second, the building and repairing of locomotives and passenger and freight cars in shops operated by the railroads; and third, locomotive and passenger- and freight-car building in commercial shops.

## UNITED STATES HOUSING AUTHORITY

The United States IIousing Luthority was created by Public No 412, Serenty-fifth Congress, approved September 1, 1937, as a corporate body of the I Department of the Interior for the purpose of assisting the States and their political subdivisions in remedying the unsafe and insanitary housing conditions and the acute shortage of decent, safe, and sanitary dwellings for families of low income, and in alleviating present and recurring unemployment.

Executive Order No. 7732, dated October 27,1937 , transterred to the Authority all the housing and slum-clearance projects of the Federal Emergency Administration of Public Works and all assets, contracts, records, applications, libraries, research materials, and other property held in connection with such projects or with the housing or shmm-clearance activities of the Public Works Administration, together with the unexpended balance of funds allocated to the Public Works Administration for the construction of any housing or slum-clearance projects. This executive order was modified by Executive Order No. 7839, dated March 12, 1938, under which the two Puerto Rico projects were transferted to the Puerto Rico Reconstruction Administration. The President's Reorganization Plan No. 1, effective July 1, 1939, transferred the U. S. Housing Authority from the Department of the Interior to the Federal Works Agency.

Table 10 shows data for October 1939 on projects of the U. S. Housing Authority. These figures pertain only to new projects under the U. S. Housing Iuthority and not to those formerly under the Public Works Administration.

Table 10.-Employment and Pay Rolls on Lot-Rent Housing Projects Operatrd by the L:S. Housing . Tuthority, October 1939
[Subject to revision]

| Geographie division | Employment |  | Monthly pay-roll disbursements | Number of manhours worked during month | A verage earnings per hour | Value of material orders placed durine month |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Maximum number employed ${ }^{1}$ | Weekly averace |  |  |  |  |
| Nine divisions. | 26, 523 | 22,533 | \$2, 941, 809 | 2,914,690 | \$1. 009 | \$4, 80,0,030 |
| New Fengland. | 502 | 358 | 43,200 | 47,575 | 909 | ${ }^{0}$ |
| Midide Atlantic | 10,328 | 8, 872 | 1,374, 330 | 1,087. 136 | 1. 264 | 2. 020,033 |
| Fast North Central | 3, 654 | 3, 148 | 517,327 | 452,638 | 1. 143 | 763, 753 |
| West North Central | 697 | 641 | 82.014 | 90. 359 | . 908 | 144,350 |
| South Atlantic | 4,303 | 3, 629 | 335.445 | 453.710 | . 739 | 856,010 |
| East South Central | 4, 174 | 3,475 | 373.644 | 177,547 | . 782 | 689.35 .1 |
| West South Ceitral | 2. 375 | 2,005 | 173, 981 | 255, 233 | . 682 | 305, 718 |
| Pacific | 301 | 260 | 27,335 | 27.816 | . 983 | 34, 571 |
| Outside continental United States. | 189 | 145 | 14,273 | 22, 676 | . 629 | 56, 241 |

1 Maximum employed during any 1 week of the month.

## WORK PROJECTS ADMINISTRATION PROGRAM

By authority of Public Resolution No. 11, Seventy-fourth Congress, approved April 8, 1935, the President established the Works Progress Administration and charged it with the responsibility of coordinating the execution of the work-relief program as a whole. The Works Progress Administration was continued by subscquent relief appropriations but the scope of its activities was narrowed considerably. A number of activities included in the original program were continued without important change in scope or objective but were financed under other appropriations. In accordance with the provisions of Reorganization Plan No. 1, effective July 1, 1939, the name of the agency was changed to Work Projects Administration and it became a part of the Federal Works Agency. The Emergency Relief Appropriation Act of 1939 extended the Work Projects Administration until June 30,1940 , and authorized it to carry out the functions that had been vested in the Works Progress Administration. Employment. on the Work Projects Administration program includes employment on Federal agency projects and employment on projects operated by the Work Projects Administration. Federal agency projects are those conducted by Federal agencies which have received allotments from the Work Projects Administration. Projects operated by the Work Projects Administration are those projects conducted under the supervision of that agency with the cooperation of States, cities, or counties.

A record of employment, pay rolls, and man-hours worked on projects financed and operated by the Work Projects Administration in October is shown in table 11, by type of project.

Table 11.---Vimployment and Pay Rolls on Projects Financed and Operated by the Wrork Projects Administration, October 1939
[Subject to revision]


Projects operated by Work l'rojects Administation' ${ }^{4}$
 $\square$
${ }^{1}$ Naximum number employed during any 1 week of the month by each contractor and Government agency doing force-account work.
*These data are for projects under the jurishietion of the Public Roads Administration.
. These data are for projects under construction in Puerto Rico.

+ Wata are for caiendar month. Not available by type of project.
$\therefore$ Reprosents number of names on pay roll os of Oct. 25, 1939.
- Data on a monihly basis are not available.

Table 12 shows employment, pay rolls, and man-hours worked for the third quarter of 1939 on projects financed and operated by the Work Projects Arministration.

Tibie 12.-Wmployment and Pay Rolls on Projects Fïnanced and Operated by the Work Projects Administration ly Type of Project for the Third Quarter of 1939
[subject to revision]

| Type of project | $\begin{aligned} & \text { Number } \\ & \text { ploved } \\ & \text { plose } \end{aligned}$ | Pay-roll disbursoments | Number of man-hours worked | 1 verage carminks yer hour |
| :---: | :---: | :---: | :---: | :---: |
| All projects.- | 1.719,870 | \$317, 175. 293 | 713.372.159 | \$0.45 |
| Conservation. | 58.722 | 11, $5 \times 2.051$ | 26, 206, 735 | 440 |
| Highway, road, and street. | 767.511 | 120, 183, 619 | 301, 204. 610 | 399 |
| Professional, technical, and clerical. | 20.4, 933 | -2, 282. 968 | 100, 731,219 | . 539 |
| lublic baildings ${ }^{2}$. | 151.832 | 31, 248,810 | 61. 100.738 | 488 |
| publicly owned or operated utilities | 151,995 | 29.722.319 | (i3. 2922,651 | . 470 |
| Recreational facilitios ${ }^{3}$ - | 114.165 | 23. 502.727 | 48.289.092 | 487 |
| Sanitation and health - | 32.047 | 5.387. 709 | 14. 175.991 | 380 |
| Stwing, canning. and gardening, ete | 156.143 | 26. 1222,159 | 66, 356, 303 | 392 |
| Transportation | 30.609 : | 6. 355.563 | 12. 208.858 | . 537 |
| Not elsewhere elassified. | 48,880 | 8. 709,346 | 16.810.922 | . 518 |

[^5]
## NATIONAL YOUTH ADMINISTRATION

Employment and pay rolls on the National Youth Administration projects for September and October 1939 are shown in table 13.

Table 13.-Employment and Pay Rolls on National Youth Administration Projects, September and October 1939
[Subject to revision]

| Type of project | Number of employres |  | Amount of pay rolls |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Oetober | September | October | September |
| Total. | 595, 788 | 287.321 | \$6, 792, 127 | \$4,490, 211 |
| Student Aid. | 358, 000 | 61. 844 | 2, 360, 000 | 268, 452 |
| Work projects. | 237, 788 | 225, 477 | 4, 432, 127 | 4,221, 759 |

## CIVILIAN CONSERVATION CORPS

The Civilian Conservation Corps was created by an act of Congress approved June 28, 1937, and succeeded the Emergency Conscrvation Work which had been set up in April 1933. On July•1, 1939, the Civilian Conservation Corps lost its status as an independent agency and was transferred to the Federal Security Agency.

Employment and pay-roll data for the Civilian Conservation Corps are collected by the Burean of Labor Statistics from the War Department, the Department of Agriculture, and the Department of the Interior. The monthly pay of the enrolled personnel is $\$ 30$ per month. Assistant leaders not to exceed 10 percent of the total number of enrollees, may receive up to $\$ 36$ per month, and leaders, not to excced 6 percent, may receive up to $\$ 45$ per month.

Employment and pay rolls in the Civilian Conservation Corps in September and October 1939 are presented in table 14.

Table 14.-Employment and Pay Rolls in the Civilian Conservation Corps, September and October $1939{ }^{1}$
[Subject to revision]

| Gro:ap | Number of employees |  | Amount of pay rolls |  |
| :---: | :---: | :---: | :---: | :---: |
|  | October | September | October | September |
| All groups. | 319.636 | 311,910 | \$14, 342, 739 | \$14, 145, 853 |
| Fnrolled personnel ${ }^{2}$ | 281.817 | 274, [12 | 8,766,359 | 8, 505.475 |
| Reserve officers | 864 | 1,024 | 351.071 | 677,322 |
| Nurses ${ }^{3}$ - .-. | ? 202 | ${ }^{310}$ | 40,423 | 41, 087 |
| Educational adviscrs ${ }^{3}$ - | ${ }^{1.597}$ | 1.393 34.271 | 267,160 $4,917,296$ | + 286,213 |
| Supervisory and technical | 35,056 | 34.271 | 4,917,726 | 4, 635, 756 |

[^6]
## 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 October are presented in table 15, by type of project.

Table 15.-Employment and Pay Rolls on Projects Financed by the Reconstruction Finance Corporation, by Type of Project, October $1939{ }^{1}$

| [Subject to revision] |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Type of project | $\begin{gathered} \text { Waximum } \\ \text { lumber of } \\ \text { wage } \\ \text { carners? } \end{gathered}$ | Monthly pay-roil distursements | Number of man-hours worked during month | Average earnings per hour | Value of material orders placed dur. ing month |
| All projects. | 2,470 | \$274, 070 | 332, 213 | \$0.825 | 8242, 714 |
| Building construction ${ }^{3}$ | 2.021 | 189,048 | 240,048 | . 788 | 202,039 |
| Water and sewerage... | 449 | 85, 022 | 92, 165 | . 922 | 40, 675 |

Data are for the month ending on the 15th.
Naximum number employed during any 1 week of the month by each contractor.
${ }^{3}$ Includes 559 employees; pay-roll disbursements of $\$ 48,380 ; 61,602$ man-hours worked; and material orders placed of $\$ 32,181$ on projects financed by the R FC Mortgage Co.

## CONSTRUCTION PROJECTS FINANCED FROM REGULAR FEDERAL APPROPRIATIONS

When a construction contract is awarded or force-account work is started by a department or agency of the Federal Government, the Bureau of Labor Statistics is immediately notified, on forms supplied by the Bureau, of the name and address of the contractor, the amount of the contract, and the type of work to be performed. Blanks are then mailed by the Bureau to the contractor or Government agency doing the work. These reports are returned to the Bureau and show the number of men on pay rolls, the amounts disbursed for pay, the number of man-hours worked on the project, and the value of the different types of materials for which orders were placed during the month.

Data concerning employment, pay rolls, and man-hours worked on construction projects financed from regular Federal appropriations during October are given in table 16, by type of project.
'I'ABle 16.-İmployment and Pay Rolls on Construction Projects Financed From Regular Federal Appropriations, by Type of Project, October $1939{ }^{1}$


1 Data are for the month ending on the 15th.
$\underline{2}$ Naximum number employed during any' 1 week of the month by each contractor, and Government aqency doing force-aceount work.
$\because$ Includes weekly average for public-road proiects.
4 Financed by dural flectrification Adminisiration loans.
5 Ender the jurisdiction of the Burean of Public Joads.
${ }^{6}$ Not available, weekly average included in the total for all projeets.

## STATE-ROADS PROJECTS

A record of employment arid pay-roll disbursements in the construction and maintenance of roads financed wholly from State or local funds in October 1939, compared with Septomber 1939, and October 1938, is presented in table 17.
Table 17.-Eimployment and Pay Rolls on Construction and Maintenance of State Roads, October 1939, September 1939, and October $1938^{1}$
[Subject to revision]

| 1tem | Number of employees: |  |  | lay-roll disbursements |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { October } \\ 1039 \end{gathered}$ | Soptember 1939 | $\begin{aligned} & \text { October } \\ & 19388 \end{aligned}$ | $\begin{gathered} \text { October } \\ 1939 \end{gathered}$ | $\text { September }_{1939}$ | $\begin{aligned} & \text { October } \\ & 1938 \end{aligned}$ |
| 'Total | 158.108 | 160.615 | 220,820 | \$11,338, 800 | \$11, 620, 870 | \$14, 496, 340 |
| New roads Maintenance | 29, 252 : | 25.780 | 35. 426 | 1,898, 360 | 1,563, 140 | 2, 204, 290 |
|  | 128, 856 | 134.835 | 185.394 | 9,440,440 | 10, 057, 730 | 12,292, 050 |

[^7]
[^0]:    : Inclules data on projects financed wholly or partially from Federal funds.
    2 Includes force-acoount and supervisory and technical employees shown ander other elassifications to the extent of 133.421 employees and pay-roll disbirsements of $\$ 16,633,168$ for October 1939 and 132,695 employees and piy-roll disbursements of $\$ 16,253.503$ for September 1939.

    3 hevised.
    4 Data covering P. W. A. projects finaneed from National Industrial Recovery Aet [unds, Emergency Relicf Appropriation Acts of 1935, 1936, and 1937 funds, and Public Works Administration Appropriation Act of 1038 finds are included. These data are not shown under projects finnneed by the Work Projects: Administration. Includes 13,347 wage earners and $\$ 1,266,959$ pay roll for October 1939: 15.213 ware earners and $\$ 1,451,935$ pay roll for Soptember 1939, covering Public Works Administration projeets financed from Emergener Relief Appropriation Acts of 1935, 1936, and 1937 funds. Includes 198,951 wage carders and $\$ 18,589,415$ pzy roll for October 1039; 225,560 Fage earners and $\$ 20,688,881$ pay roll for September 1939 covering Public Works Administration projects financed from funds provided by the Public Works Adininistration Appropriation Act of 1938.
    ${ }^{5}$ Includes 558 emplovees and pay-roll disbursements of $\$ 48,380$ for October 1939: 603 employees and lay roll disbursements of $\$ 56,200$ for September 1939 on projects financed by the RFC Morteage Co.

[^1]:    Digitized for FRASER
    http://fraser.stlouisfed.org/

[^2]:    13-year average, 1923-25=100-adjusted to 1937 Census of Manufactures.
    ${ }^{2} 12$-month arerage for $1929=100$. Comparable indexes are in Xovember 1934 and subseotuent issues of Employment and Pay Rolls, or in February 1935 and subsequent iseues of Monthly Tabor Review, exeept for anthracite and bituminous-eoal mining, year-round hotels, laundries, and dyeing and cleaning. Indexes for these industries from January 1929 forward have heen adjusted to the 1935 census and are presented in the January 1938 and subsequent issues of Employment and Pay Rolls.
    ${ }^{3}$ Ineludes: Iron and stecl, machinery, transportation cquipment, nonferrous metals, lumber and allied products, and stone, clay, and glass products.
    ${ }_{4}$ Includes: Textiles and their products, leather and its manufactures, food and kindred products, tobaceo manufactures. paper and printing, chemicals and allied products, proxlucts of petroleum and enal, rubber produets, and a number of miscellancous industries not included in other groups.

[^3]:    ${ }^{1}$ Includes banks and trust companies; construction, municipal, aqricultural, and office employment; amusement and recreation; professional services; and trucking and handling.
    ${ }^{2}$ Includos latundering and cleaning; and water, light, and power.
    3 Weighted percentage change.

    - Includes automobile and miscellaneous services, restaurants, and building and contracting.
    - Includes coustruction but not public works.
    - Does not include logging.
    'Includes banks; real estate; pipe-line transportation; motor transportation (other than operation and maintenance); water transportation: hospitals and clinics; and personal, business, mechanical repair, and miscellaneous services.
    Includes financial institutions, miscellaneous services, and restaurants.
    - Weighted percentage change including hired farm labor.
    ${ }^{10}$ Less than 1,10 of 1 percent.
    ${ }^{1 i}$ Includes automobile dealers and garages: and sand, gravel, and buibding stone.
    ${ }^{12}$ Includes banks, insurance, and office employment.

[^4]:    ${ }^{1}$ Data are for the month ending on the 15 th .
    2 Maximum number cmployed during any 1 week of the month by each contractor and Government sgency doing force-account work.
    3 Includes weekly a verage for public ronds.
    4 Under the juristiction of the Public Roads Administration.
    s Not available: weekly averape included in total for all projects.
    6 Includes data for workers engaged in consiruction of underground tunnel who, because of the additional risk involved, were paid at rates higher than those usually yaid for building construction.

[^5]:    : Data are for the weck ending Sept. 27, 1939.
    2 Scparate data for housing projects are not available.
    ${ }^{2}$ Exclustve of buildings.

[^6]:    ${ }^{1}$ Data on number of employees refer to employment on last day of month. Amount of pay rolls are for he entire month.
    ${ }^{2}$ Oct ober data include 4,265 enrollees and pay roll of $\$ 95,779$ outside eontinental United States; in Septem. ber the corresponding figures were 4,421 enrollees and pay roll of $992, i 62$.
    ${ }^{3}$ Included in executive service, table 8.

[^7]:    ${ }^{1}$ Data are for the month ending on the 15 th and are for projects financed wholly from State or local funds.
    2 Average number working during month.

