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# EMPLOYMENT AND PAY ROLLS

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# CONTENTS

	Page
Summary of employment reports for January 1940:	
Total nonagricultural employment_	1
Industrial and business employment_	2
Public employment_.....	5
Detailed tables for January 1940:	
Industrial and business employment_	7
Public employment_	24

## Tables

### SUMMARY

TABLE 1.—All manufacturing industries combined and nonmanufacturing industries—employment, pay rolls, and weekly earnings, January 1940_	4
TABLE 2.—Federal employment and pay rolls—summary, January 1940_	6

### INDUSTRIAL AND BUSINESS EMPLOYMENT

TABLE 3.—Manufacturing and nonmanufacturing industries—employment, pay rolls, hours, and earnings, January 1940_	10
TABLE 4.—Manufacturing and nonmanufacturing industries—employment, pay rolls, hours, and earnings, November 1939 through January 1940_	15
TABLE 5.—Manufacturing and nonmanufacturing industries—indexes of employment and pay rolls, January 1939 through January 1940_	20
TABLE 6.—Geographic divisions and States—comparison of employment and pay rolls in identical establishments in December 1939 and January 1940_	21
TABLE 7.—Principal metropolitan areas—comparison of employment and pay rolls in identical establishments in December 1939 and January 1940_	23

### PUBLIC EMPLOYMENT

TABLE 8.—Executive service of the Federal Government—Employment and pay rolls in December 1939 and January 1940_	24
TABLE 9.—Construction projects financed by Public Works Administration funds—employment, pay rolls, and man-hours worked, January 1940, by type of project_	25
TABLE 10.—Housing projects of the United States Housing Authority—employment, pay rolls, and man-hours worked, January 1940, by geographic division_	26

(III)

# IV

	Page
TABLE 11.—Projects financed by the Work Projects Administration—employment, pay rolls, and man-hours worked, on Federal agency projects, January 1940, by type of project and employment, pay rolls, and man-hours worked on projects operated by the Work Projects Administration, January 1940.	27
TABLE 12.—Projects operated by the Work Projects Administration—employment, pay rolls, and man-hours worked, December 1939, by type of project.	27
TABLE 13.—National Youth Administration student work program and out-of-school work program, employment and pay rolls, December 1939 and January 1940.	28
TABLE 14.—Civilian Conservation Corps—employment and pay rolls, December 1939 and January 1940.	28
TABLE 15.—Construction projects financed by the Reconstruction Finance Corporation—employment, pay rolls, and man-hours worked, January 1940, by type of project.	29
TABLE 16.—Construction projects financed from regular Federal appropriations—employment, pay rolls, and man-hours worked, January 1940, by type of project.	29
TABLE 17.—Construction and maintenance of State roads—employment and pay-roll disbursements, January 1940, December 1939, and January 1939.	30

# *Employment and Pay Rolls*

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## **SUMMARY OF REPORTS FOR JANUARY 1940**

### *Total Nonagricultural Employment*

SEASONAL factors contributed largely to the decline of approximately 1,160,000 workers in nonagricultural employment in January. This decline was about 100,000 greater than that which took place in January of last year. There were, however, 1,100,000 more workers engaged in nonagricultural occupations in January 1940 than in January 1939. Substantial seasonal employment declines from December to January were reported in retail trade, manufacturing, construction, and transportation. In retail trade there was an employment reduction of 15.3 percent, or 600,000 workers, following the greater-than-seasonal expansion in December to handle holiday trade. This decline was of about the same proportions as the decreases from December to January in the past 2 years. Factory employment declined by 2.5 percent (207,000 workers) from the mid-December level, the first recession since May of last year. Class I steam railroads reported a seasonal decrease of 20,000 workers, while private building construction employment was reduced more than seasonally, partly because of the unusually severe weather in January. In anthracite mining, in which a small employment gain was reported, pay rolls were nearly double the very low level prevailing in mid-December.

These figures do not include emergency employment, which increased 177,000 as follows: 122,000 on projects operated by the Work Projects Administration, 27,000 on the out-of-school work program of the National Youth Administration, and 28,000 in the Civilian Conservation Corps.

### **REVISED INDEXES OF EMPLOYMENT AND PAY ROLLS FOR RETAIL TRADE AND PUBLIC UTILITIES**

The Bureau of Labor Statistics has revised its indexes of employment and pay rolls for retail trade and the three public utilities regularly surveyed. In accordance with an established policy, the Bureau's indexes, which are based on reports supplied by cooperating establishments and which do not cover all employees in a given industry, are

revised periodically to conform to levels or trends as indicated by Bureau of the Census summaries.

The retail-trade series have been adjusted to conform in general with employment and pay-roll data shown in the censuses of retail distribution for 1929, 1933, and 1935, and the utility indexes have likewise been adjusted to data shown in the censuses of electrical industries for 1932 and 1937. These new series supersede those formerly published.

The revised indexes for all retail trade combined, which were previously roughly weighted by two broad groups, have now been weighted by the various lines of trade, following the same general procedure used in compiling the weighted indexes of factory employment and pay rolls. For the utilities, in addition to the adjustment to census data, the composition of the power and light and the electric-railroad and motorbus operation industries has been changed. The indexes for the electric light and power industry now exclude manufactured gas, which had previously been included, and the indexes for street railways and busses (formerly entitled electric-railroad and motorbus operation) include data for electric-railroad repair shops, which until September 1938 constituted a separate industry in the Bureau's manufacturing series. Mimeographed sheets showing the revised indexes, together with more complete text relative to the revisions, are available upon request.

### *Industrial and Business Employment*

Declines in employment and pay rolls were quite general with 74 of the 90 manufacturing industries surveyed by the Bureau of Labor Statistics showing reduced employment in January and 80 reporting decreased pay rolls. Of the 16 nonmanufacturing industries covered, 11 showed employment declines and 12 showed pay-roll reductions.

For all manufacturing industries combined there were larger than seasonal declines of 2.5 percent (or 207,000 workers) in employment and 5.2 percent (or nearly \$10,300,000) in weekly wages between December and January. The expected seasonal declines for this month are 1.8 percent in employment and 4 percent in pay rolls, declines being customary in January because of shut-downs for repairs and inventory taking. Compared with January of last year, there were gains of 10.1 percent in employment and 17.4 percent in pay rolls. Among the more important December-January declines in manufacturing employment were: Sawmills (18,200 workers); beet sugar (10,100); steel (9,800); cigars and cigarettes (9,700); automobiles (9,300); canning and preserving (8,700); woolen and worsted goods (8,500); confectionery (8,200); furniture (7,800); radios and phonographs (7,700); newspapers and periodicals (6,100); brick, tile, and terra cotta (5,700); baking (5,600); stoves (5,300); and paper boxes (5,000).

Employment in the aircraft industry showed a gain of 7.6 percent, or 4,000 workers, this being the sixteenth consecutive monthly advance. Other industries showing employment gains were: Boots and shoes (10,700 workers); millinery (4,000); agricultural implements (1,900); engines, turbines, water wheels, and windmills (1,800); and machine tools (1,300).

Employment in retail trade was reduced by 15.3 percent and pay rolls by 12 percent, reflecting the release of temporary employees hired to handle the holiday trade. Losses were general among the various lines of retail trade, the only pronounced employment gain being one of 13.8 percent reported by dealers in fuel. Department stores reduced their forces by 34 percent, variety stores by 50 percent, jewelers by 22 percent, and confectionery dealers by 19 percent. Compared with January of last year, retail trade as a whole showed an employment gain of 3.4 percent and a pay-roll increase of 4.1 percent.

Wholesale firms reported seasonal declines of 1.8 percent in employment and 2.3 percent in pay rolls between December and January. From January 1939 to January 1940 there were gains of 2.5 percent in both employment and pay rolls. Among the more important lines showing employment decreases over the month interval were: Farm products; lumber and building materials; food products; hardware; electrical appliances; machinery, equipment, and supplies; and dry goods and apparel.

Employment in anthracite mines increased slightly between December and January, while pay rolls were nearly doubled, due to greatly increased production from the low levels of mid-December. In bituminous-coal mines an employment decline of 0.9 percent was accompanied by a pay-roll increase of 3.2 percent. Metal mines curtailed employment slightly, reflecting the slowing down of operations during cold weather. Winter weather also affected operations in quarries which showed an employment drop of 14.8 percent.

Employment in private building construction dropped 16.7 percent from December to January according to reports from 13,781 contractors employing 111,535 workers. This decline was larger than the 12 percent average reduction shown in January in the past 8 years, largely because of unusually severe weather conditions in most sections of the country.

A preliminary report of the Interstate Commerce Commission showed an employment decline by class I railroads from December to January of 2.1 percent, the total number employed in the current month being 988,870. Corresponding pay rolls were not available when this report was prepared. For December they were \$159,828,397, a decline of 24.8 percent from November.

*Hours and earnings.*—The average hours worked per week by wage earners in manufacturing industries were 37.4 in January, a decrease of 3.0 percent since December. The average hourly earnings of these workers were 66.3 cents, an increase of 0.2 percent over the preceding month. Average weekly earnings of factory workers were \$25.51, a decrease of 3 percent since December.

Of the 14 nonmanufacturing industries for which man-hours are available 5 showed increases in average hours worked per week and 10 reported gains in average hourly earnings. Six of the sixteen non-manufacturing industries surveyed reported higher average weekly earnings.

Employment and pay-roll indexes and average weekly earnings in January 1940 for all manufacturing industries combined, for selected nonmanufacturing industries, and for class I railroads with percentage changes over the month and year intervals are given in table 1.

TABLE 1.—*Employment, Pay Rolls, and Earnings in All Manufacturing Industries Combined and in Nonmanufacturing Industries, January 1940*

Industry	Employment			Pay rolls			Average weekly earnings		
	Index January 1940	Percentage change from—		Index January 1940	Percentage change from—		Average in January 1940	Percentage change from—	
		De- cem- ber 1939	Janu- ary 1939		De- cem- ber 1939	Janu- ary 1939		De- cem- ber 1939	Janu- ary 1939
All manufacturing industries com- bined <sup>1</sup> .....	(1923-25 =100) 101.5	-2.5	+10.1	(1923-25 =100) 98.3	-5.2	+17.4	\$25.51	-2.8	+6.6
Class I steam railroads <sup>2</sup> .....	55.4 (1929= 100)	-2.1	+6.1	( <sup>3</sup> ) (1929= 100)	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Coal mining:									
Anthracite <sup>4</sup> .....	51.5	+1.0	+3.0	52.5	+97.0	+38.1	33.46	+95.0	+34.1
Bituminous <sup>4</sup> .....	91.8	-.9	+3.4	87.0	+3.2	+11.2	25.71	+4.1	+7.5
Metalliferous mining.....	66.6	-1.0	+6.3	63.1	-2.9	+14.1	29.68	-1.9	+7.3
Quarrying and nonmetallic mining.....	37.5	-14.8	-2.2	29.8	-23.8	-1.3	19.66	-10.6	+9.9
Crude-petroleum production.....	63.1	-1.0	-5.7	58.4	-1.4	-4.1	33.99	-.4	+1.7
Public utilities:									
Telephone and telegraph <sup>5</sup> .....	76.2	+7	+1.5	98.6	+1.2	+4.9	<sup>6</sup> 31.79	+5	+3.4
Electric light and power <sup>5</sup> .....	89.0	-1.3	+1.8	101.1	-1.3	+4.0	<sup>6</sup> 34.63	-( <sup>7</sup> )	+2.1
Street railways and busses <sup>5</sup> .....	68.5	-7	-( <sup>7</sup> )	69.3	-5	-1.1	<sup>6</sup> 33.26	+2	-1.0
Trade:									
Wholesale.....	90.5	-1.8	+2.5	77.3	-2.3	+2.5	<sup>6</sup> 29.65	-.5	-.1
Retail <sup>5</sup> .....	88.3	-15.3	+2.4	80.8	-12.0	+4.1	<sup>6</sup> 21.43	+3.9	+7.7
Hotels (year-round) <sup>4</sup> .....	91.4	+7	-.4	81.0	-.1	+1.0	<sup>6</sup> 15.39	-.7	+1.4
Laundries <sup>4</sup> .....	95.8	+3	+2.7	83.3	-.4	+4.6	17.76	-.7	+1.9
Dyeing and cleaning <sup>4</sup> .....	93.9	-3.6	-.3	65.8	-5.8	+( <sup>7</sup> )	19.41	-2.3	+3
Brokerage.....	( <sup>3</sup> )	-.9	-2.6	( <sup>3</sup> )	-1.7	-2.6	<sup>6</sup> 37.15	-.8	+( <sup>7</sup> )
Insurance.....	( <sup>3</sup> )	+6	+1.5	( <sup>3</sup> )	+2.6	+2.9	<sup>6</sup> 37.06	+2.0	+1.3
Building construction.....	( <sup>3</sup> )	-16.7	-1.5	( <sup>3</sup> )	-20.1	+3.9	29.74	-4.0	+5.3

<sup>1</sup> Revised indexes—Adjusted to 1937 Census of Manufactures.

<sup>2</sup> Preliminary—Source: Interstate Commerce Commission.

<sup>3</sup> Not available.

<sup>4</sup> Indexes adjusted to 1935 census. Comparable series back to January 1929 presented in January 1938 issue of this pamphlet.

<sup>5</sup> Retail trade indexes adjusted to 1935 census and public utility indexes to 1937 census. Comparable series for earlier months available upon request.

<sup>6</sup> Average weekly earnings not strictly comparable with figures published in issues of this pamphlet dated earlier than January 1938 as they now exclude corporation officers, executives, and other employees whose duties are mainly supervisory.

<sup>7</sup> Less than 1/10 of 1 percent.

<sup>8</sup> Covers street railways and trolley and motorbus operations of subsidiary, affiliated, and successor companies. Formerly "electric railroad and motorbus operation and maintenance."

<sup>9</sup> Cash payments only; the additional value of board, room, and tips cannot be computed.

## *Public Employment*

Many construction projects under the Public Works Administration program are nearing completion and as a result employment on this program declined 34,000 in the month ending January 15, leaving 133,000 building-trades workers still employed. Wage payments of \$12,328,000 to workers on these projects were \$3,585,000 less than in December.

Because of extremely cold weather, employment on low-rent projects of the United States Housing Authority fell from 33,000 in December to 32,000 in the month ending January 15. Pay-roll disbursements of \$2,987,000 were \$560,000 less than in December. These figures cover new construction and demolition.

Seasonal influences, particularly on Federal-aid roads and dredging projects, were responsible for diminished employment on construction projects financed from regular Federal appropriations. Increases were reported on the construction of naval vessels, forestry, and miscellaneous projects while all other types of projects showed decreases. The number of workers employed on all projects during the month ending January 15 was 207,000, a decrease of 48,000 from December. Pay rolls for the month amounted to \$22,259,000.

Employment on construction projects financed by the Reconstruction Finance Corporation remained at approximately 2,300 during the month ending January 15. Pay rolls for the month totaled \$228,000.

Employment on work-relief projects of the Work Projects Administration rose again in January with an increase of 122,000 over December. The number at work in January was 2,192,000 as compared with 2,070,000 in the preceding month. Because of inclement weather and a consequent stoppage of work on many projects, pay rolls of \$106,142,000 in January, in spite of increased employment, were \$1,516,000 less than in December. A decrease of 1,000 was reported in employment on Federal agency projects financed by the Work Projects Administration. Employment for the month was 97,000 and wage payments amounted to \$4,411,000.

The number of young people employed on the out-of-school work program of the National Youth Administration increased 27,000 in January, and 3,000 more students were given employment on the student work program.

The beginning of an enlistment period resulted in a gain of 28,000 in the number of persons employed in camps of the Civilian Conservation Corps in January. Of the 337,000 on the pay roll, 300,300 were enrollees; 1,700, educational advisors; 300, nurses; and 34,700, supervisory and technical employees. Pay-roll disbursements for all employees amounted to \$14,666,000.



In the regular services of the Federal Government, increases were reported in the judicial, legislative, and military services, and a decrease in the executive service. Of the 936,000 employees in the executive service 127,000 were working in the District of Columbia and 809,000 outside the District. Force-account employees (employees on the pay roll of the United States Government who are engaged on construction projects and whose period of employment terminates as the project is completed) were 9.1 percent of the total number of employees in the executive service. Increased employment was reported in the Department of Commerce, Navy Department, Federal Security Agency, and Veterans' Bureau, while decreases were reported in the Post Office Department, Department of Agriculture, War Department, and Tennessee Valley Authority.

Employment on State-financed road projects decreased 4,000 in the month ending January 31. Of the 119,000 at work 16,000 were engaged in the construction of new roads and 103,100 on maintenance. Pay rolls for both types of road work were \$9,018,000.

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

TABLE 2.—*Summary of Federal Employment and Pay Rolls, January 1940 and December 1939*<sup>1</sup>

[Preliminary figures]

Class	Employment			Pay rolls		
	January 1940	December 1939	Percentage change	January 1940	December 1939	Percentage change
Federal services:						
Executive <sup>2</sup> .....	936,689	<sup>3</sup> 986,742	-5.1	\$143,963,368	<sup>3</sup> \$152,256,658	-5.4
Judicial.....	2,360	2,268	+4.1	598,399	550,008	+8.8
Legislative.....	5,889	5,535	+6.4	1,297,362	1,252,503	+3.6
Military.....	434,061	421,245	+3.0	28,842,203	29,705,737	-2.9
Construction projects:						
Financed by P. W. A. <sup>4</sup> .....	132,538	166,657	-20.5	12,327,754	15,912,909	-22.5
U. S. H. A. low-rent housing.....	32,313	33,170	-2.6	2,987,099	3,547,123	-15.8
Financed by R. F. C. <sup>5</sup> .....	2,260	2,322	-2.7	227,685	250,882	-9.2
Financed by regular Federal appropriations.....	206,945	255,106	-18.9	22,259,156	27,293,719	-18.4
Federal agency projects financed by Work Projects Administration.....	96,663	98,109	-1.5	4,411,390	4,744,815	-7.0
Projects operated by W. P. A. ....	2,191,741	<sup>3</sup> 2,069,754	+5.9	106,141,564	<sup>3</sup> 107,658,148	-1.4
National Youth Administration:						
Out-of-school work program.....	322,367	295,295	+9.2	5,815,229	5,428,157	+7.1
Student work program.....	437,457	434,350	+7	2,858,839	2,967,327	-3.7
Civilian Conservation Corps.....	336,725	308,569	+9.1	14,666,446	13,775,996	+6.5

<sup>1</sup> Includes data on projects financed wholly or partially from Federal funds.

<sup>2</sup> Includes force-account and supervisory and technical employees shown under other classifications to the extent of 122,327 employees and pay-roll disbursements of \$16,222,483 for January 1940, and 130,011 employees and pay-roll disbursements of \$16,030,425 for December 1939.

<sup>3</sup> Revised.

<sup>4</sup> Data covering P. W. A. projects financed from National Industrial Recovery Act funds, Emergency Relief Appropriation Acts of 1935, 1936, and 1937 funds, and Public Works Administration Appropriation Act of 1938 funds are included. These data are not shown under projects financed by the Work Projects Administration. Includes 9,466 wage earners and \$862,605 pay roll for January 1940; 12,093 wage earners and \$1,172,452 pay roll for December 1939, covering Public Works Administration projects financed from Emergency Relief Appropriation Acts of 1935, 1936, and 1937 funds. Includes 117,799 wage earners and \$10,854,124 pay roll for January 1940; 147,856 wage earners and \$14,038,629 pay roll for December 1939, covering Public Works Administration projects financed from funds provided by the Public Works Administration Appropriation Act of 1938.

<sup>5</sup> Includes 803 employees and pay-roll disbursements of \$75,852 for January 1940; 932 employees and pay-roll disbursements of \$83,259 for December 1939 on projects financed by the RFC Mortgage Co.

## DETAILED TABLES FOR JANUARY 1940

*Industrial and Business Employment*

## SCOPE AND METHOD

MONTHLY reports on employment and pay rolls are available for the following groups: ninety manufacturing industries; 16 nonmanufacturing industries, including private building construction; and class I steam railroads. The reports for the first two of these groups—manufacturing 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.

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.

The indexes for retail trade have been adjusted back to 1929 to conform in general with the 1929, 1933, and 1935 censuses of retail distribution and to allow for weighting by lines of trade. The indexes for the public utilities have been adjusted to the 1932 and 1937 censuses of electrical industries.

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 15th of the month.

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 vary 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 believed to be sufficiently adequate in virtually all instances to indicate the general movements of earnings and hours over the period shown. The changes from the preceding month, expressed as percentages, are based on identical lists of firms for the 2 months, but the changes from January 1939 are computed from chain indexes based on the month-to-month percentage changes.

#### **EMPLOYMENT AND PAY-ROLL INDEXES, AVERAGE HOURS, AND AVERAGE EARNINGS**

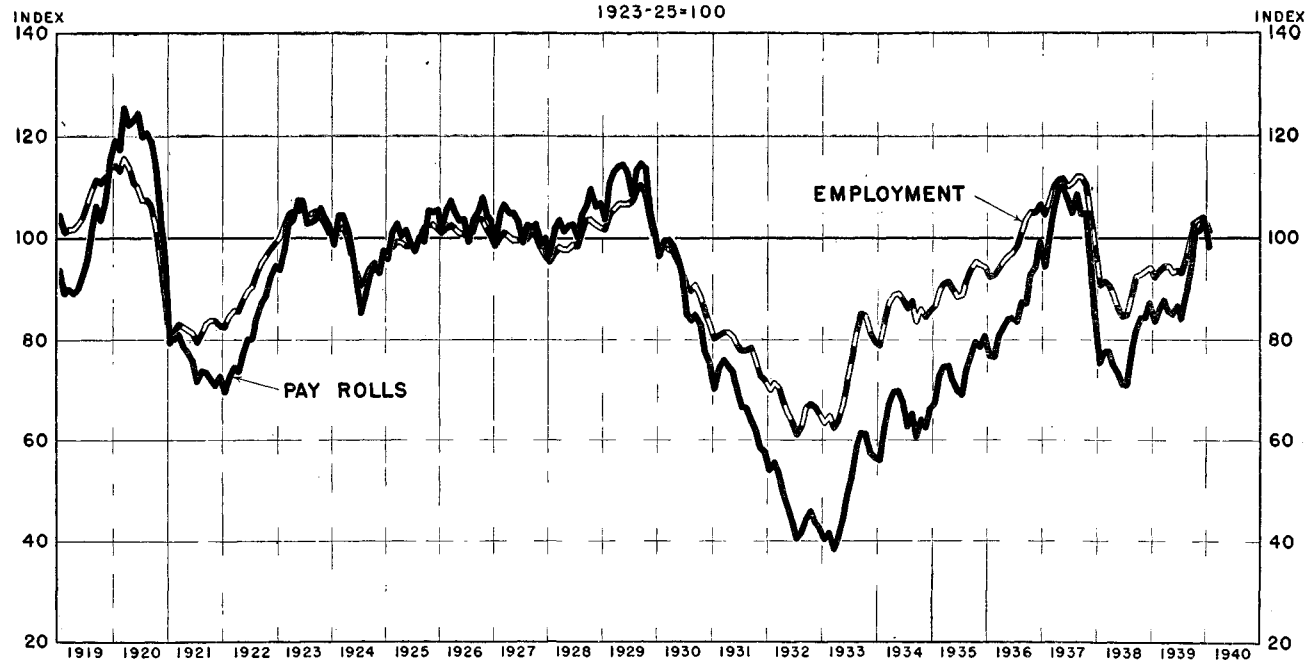
The indexes of employment and pay rolls as well as average hours worked per week, average hourly earnings, and average weekly earnings in manufacturing and nonmanufacturing industries in January 1940 are shown in table 3. Percentage changes from December 1939 and January 1939 are also given.

The employment and pay-roll indexes, as well as average hours worked per week, average hourly earnings, and average weekly earnings for November and December 1939 and January 1940, where available, are presented in table 4. The November and December figures, where given, may differ in some instances from those previously published because of revisions necessitated primarily by the inclusion of late reports.

In table 5, indexes of employment and pay rolls are given for all manufacturing industries combined, for the durable- and nondurable-goods groups of manufacturing industries, and for each of 13 nonmanufacturing industries, by months, from January 1939 to January 1940, inclusive. The accompanying chart indicates the trend of factory employment and pay rolls from January 1919 to January 1940.

# EMPLOYMENT AND PAY ROLLS ALL MANUFACTURING INDUSTRIES

1923-25=100



UNITED STATES BUREAU OF LABOR STATISTICS

ADJUSTED TO 1937 CENSUS

TABLE 3.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, January 1940*

## MANUFACTURING

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

Industry	Employment			Pay rolls			Average weekly earnings <sup>1</sup>			Average hours worked per week <sup>1</sup>			Average hourly earnings <sup>1</sup>		
	Index January 1940	Percentage change from—		Index January 1940	Percentage change from—		January 1940	Percentage change from—		January 1940	Percentage change from—		January 1940	Percentage change from—	
		December 1939	January 1939		December 1939	January 1939		December 1939	January 1939		December 1939	January 1939		December 1939	January 1939
All manufacturing..	101.5	-2.5	+10.1	98.3	-5.2	+17.4	\$25.51	-2.9	+6.6	37.4	-3.0	+2.2	Cents 66.3	+0.2	+3.1
Durable goods.....	97.4	-2.6	+18.3	98.2	-6.1	+29.2	28.96	-3.6	+9.2	38.1	-3.7	+5.7	72.7	- (?)	+2.4
Nondurable goods..	105.3	-2.5	+3.5	98.5	-4.2	+6.6	21.87	-1.8	+2.9	36.9	-2.3	- .7	60.7	+ .4	+2.6
<i>Durable goods</i>															
Iron and steel and their products, not including machinery.....	108.3	-2.8	+22.0	106.3	-7.9	+33.7	29.07	-5.1	+9.7	37.6	-4.7	+7.3	76.6	- .7	+1.6
Blast furnaces, steel works, and rolling mills.....	120.9	-2.0	+28.3	119.3	-7.6	+41.2	31.25	-5.8	+10.1	37.1	-4.8	+9.6	84.1	-1.1	+ .5
Bolts, nuts, washers, and rivets.....	117.2	-2.2	+22.1	124.4	-13.3	+26.1	25.87	-11.4	+3.1	37.9	-11.4	+5.0	68.4	+ (?)	-1.5
Cast-iron pipe.....	74.4	-4.0	+5.0	64.8	-9.6	+15.3	21.14	-5.8	+9.6	35.1	-7.4	+7.3	59.8	+1.6	+2.3
Cutlery (not including silver and plated cutlery) and edge tools.....	104.6	-3.8	+18.6	93.3	-8.4	+19.1	23.28	-4.8	+ .3	39.0	-5.6	+1.5	60.8	+1.0	- .5
Forgings, iron and steel.....	72.3	- .3	+32.1	85.8	-2.7	+54.2	32.27	-2.4	+16.6	41.3	-1.9	+13.9	78.2	- .5	+2.6
Hardware.....	103.5	-2.0	+16.0	103.9	-7.0	+28.7	26.01	-5.1	+11.1	38.8	-3.6	+9.5	67.0	-1.5	+1.4
Plumbers' supplies.....	82.2	-2.9	+12.7	70.8	-8.9	+17.0	25.02	-7.0	+4.1	36.8	-6.6	+2.2	68.0	- .5	+1.9
Stamped and enameled ware.....	158.0	-4.6	+11.6	160.2	-7.8	+13.5	24.05	-3.3	+1.8	37.9	-4.1	+2.0	63.8	+ .6	- .2
Steam and hot-water heating apparatus and steam fittings.....	83.2	-3.5	+16.5	73.9	-7.6	+28.5	27.20	-4.3	+9.9	38.7	-4.0	+9.1	70.4	- .2	+1.1
Stoves.....	78.0	-12.6	+13.1	64.6	-17.7	+18.3	23.75	-5.8	+4.6	35.7	-5.6	+2.9	66.7	- .5	+1.4
Structural and ornamental metalwork.....	73.4	-2.7	+20.1	62.6	-6.8	+24.7	27.65	-4.2	+3.7	37.9	-3.7	+3.1	72.7	- .6	+ .3
Tin cans and other tinware.....	93.6	-1.9	+7.6	96.9	-3.5	+10.3	23.46	-1.7	+2.4	37.9	-1.8	+ .7	61.9	+ (?)	+1.2
Tools (not including edge tools, machine tools, files, and saws).....	96.1	- .8	+15.7	97.5	-4.4	+24.7	25.71	-3.7	+7.9	41.3	-4.2	+3.6	62.6	+ .7	+4.3
Wirework.....	171.9	-2.5	+11.8	188.8	-7.7	+23.3	27.31	-5.2	+14.8	39.3	-4.1	+10.1	69.5	-1.2	+4.2

<b>Machinery, not including transportation equipment.</b>	112.4	- .6	+22.8	119.1	-2.5	+37.7	29.74	-1.9	+12.2	40.4	-2.3	+10.2	73.5	+ .4	+1.5
Agricultural implements (including tractors)...	135.2	+3.3	+16.1	155.8	+2.8	+29.1	30.91	- .4	+11.3	38.9	- .9	+10.7	79.6	+ .4	+ .4
Cash registers, adding machines, and calculating machines	126.4	-1.3	-3.6	128.6	-2.3	+8.6	32.11	-1.0	+12.6	39.1	- .7	+11.7	82.5	- .2	+ .3
Electrical machinery, apparatus, and supplies	101.7	- .9	+22.8	112.4	-1.6	+34.5	29.67	- .7	+9.4	39.7	-1.5	+8.8	74.9	+ .9	+ .7
Engines, turbines, water wheels, and wind-mills	125.3	+4.6	+44.8	161.4	+3.1	+68.7	34.10	-1.5	+16.6	42.6	-1.3	+14.0	80.4	- .2	+2.3
Foundry and machine-shop products...	97.2	-(?)	+22.5	95.2	-3.4	+36.4	29.27	-3.4	+11.4	40.4	-3.2	+9.9	72.6	- .3	+1.5
Machine tools	196.8	+2.4	+53.8	258.5	+ .9	+99.3	36.41	-1.5	+29.4	47.4	-1.4	+24.7	76.9	- .1	+4.0
Radios and phonographs	136.2	-16.1	+13.7	122.2	-17.9	+15.0	22.22	-2.1	+1.1	37.0	-4.0	-1.9	59.8	+1.5	+2.1
Textile machinery and parts	86.2	+ .5	+24.0	83.5	-2.6	+32.9	26.65	-3.1	+7.0	40.6	-2.1	+7.0	65.8	- .9	+ .1
Typewriters and parts	122.6	-3.7	-3.3	111.3	-8.4	-4.8	22.27	-4.9	-1.5	34.9	-4.5	-1.4	63.7	- .5	- .1
<b>Transportation equipment.</b>	115.5	- .9	+19.6	118.3	-4.7	+26.9	33.23	-3.8	+6.1	37.4	-2.8	+7.4	89.4	- .8	- .3
Aircraft	2,029.7	+7.6	+127.8	1,900.6	+6.9	+111.2	29.21	- .6	-7.2	41.5	-1.9	- .7	74.1	+ .9	-3.0
Automobiles	115.8	-2.0	+9.1	119.9	-6.2	+18.4	34.28	-4.3	+8.5	36.7	-3.6	+7.1	93.4	- .7	+1.2
Cars, electric- and steam-railroad	52.8	+1.3	+65.1	47.3	+ .9	+84.6	28.06	- .3	+12.0	38.5	- .2	+12.4	72.9	- .1	- .4
Locomotives	28.3	+1.1	+58.2	27.2	-1.0	+76.6	29.49	-2.1	+11.8	37.7	-2.2	+11.1	78.2	+ .1	+ .6
Shipbuilding	137.5	-1.4	+31.7	148.0	-3.1	+34.8	32.32	-1.8	+2.4	38.2	- .2	+1.9	84.6	-1.3	+1.3
<b>Nonferrous metals and their products.</b>	109.7	-2.8	+19.6	108.7	-6.7	+33.0	27.37	-4.0	+11.2	39.2	-3.9	+5.4	70.1	- .3	+5.1
Aluminum manufactures	169.5	- .5	+30.9	191.5	-2.7	+37.8	27.62	-2.1	+5.4	39.3	-2.4	+2.8	70.1	+ .1	+1.9
Brass, bronze, and copper products	135.7	-1.5	+30.7	150.3	-5.4	+55.2	30.28	-4.0	+18.8	40.5	-3.2	+10.9	75.2	- .8	+7.3
Clocks and watches and time-recording devices	90.6	-2.7	+9.3	92.9	-4.1	+21.3	22.75	-1.5	+11.0	38.5	-1.3	+8.0	59.5	- .1	+2.9
Jewelry	89.0	-9.7	+5.8	72.7	-15.9	+5.9	22.89	-6.9	+ .2	37.7	-5.5	-2.1	60.5	-1.0	+2.8
Lighting equipment	92.8	-5.3	+10.6	74.2	-12.4	+14.1	25.54	-7.5	+3.0	36.2	-8.1	+1.5	70.6	+ .7	+2.1
Silverware and plated ware	71.7	-6.5	+9.5	61.3	-19.5	+10.2	24.74	-13.9	+ .4	38.9	-11.9	+ .1	63.0	-3.2	-1.2
Smelting and refining—copper, lead, and zinc	86.9	-(?)	+12.1	86.5	-1.6	+17.5	27.94	-1.6	+4.9	38.9	-1.6	+ .7	71.9	+ .1	+4.2
<b>Lumber and allied products.</b>	67.3	-5.3	+9.6	58.8	-9.8	+13.7	19.10	-4.7	+3.8	36.9	-4.4	-2.7	51.2	- .3	+4.9
Furniture	90.3	-4.7	+11.9	74.6	-12.8	+17.2	19.95	-8.4	+4.7	37.4	-6.9	+1.1	53.8	-1.5	+2.8
Lumber:															
Millwork	61.5	-3.3	+11.4	47.0	-9.6	+12.5	21.27	-6.5	+1.1	39.3	-6.5	+ .7	54.2	- .1	+ .2
Sawmills	59.5	-6.1	+8.2	51.1	-7.8	+11.9	17.73	-2.1	+1.3	36.1	-2.4	-5.5	49.1	+ .3	+7.2
<b>Stone, clay, and glass products.</b>	77.7	-7.1	+8.1	66.9	-12.4	+10.8	23.58	-5.8	+2.5	35.1	-6.4	+ .3	66.4	+ .7	+2.6
Brick, tile, and terra cotta	57.0	-8.9	+8.5	43.4	-15.9	+9.0	19.52	-7.6	+ .3	34.8	-8.1	-4.1	55.8	+ .2	+4.2
Cement	57.7	-13.0	+7.4	50.5	-20.2	+9.5	24.96	-8.2	+2.0	35.5	-8.6	+ .5	70.4	+ .4	+1.5
Glass	105.6	-2.7	+10.7	113.1	-4.8	+17.1	26.27	-2.2	+5.7	35.0	-3.5	+3.2	74.8	+1.5	+2.6
Marble, granite, slate, and other products	38.8	-19.9	-5.9	23.9	-31.4	-14.3	21.54	-14.3	-8.7	31.4	-12.9	-7.4	69.0	-2.2	+ .3
Pottery	92.4	-2.6	+9.4	80.7	-10.4	+11.1	22.20	-7.9	+1.6	37.0	-5.2	+4.6	62.9	+ .6	- .2

See footnotes at end of table.

TABLE 3.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, January 1940—Continued*

## MANUFACTURING—Continued

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

Industry	Employment			Pay rolls			Average weekly earnings			Average hours worked per week			Average hourly earnings		
	Index January 1940	Percentage change from—		Index January 1940	Percentage change from—		January 1940	Percentage change from—		January 1940	Percentage change from—		January 1940	Percentage change from—	
		December 1939	January 1939		December 1939	January 1939		December 1939	January 1939		December 1939	January 1939		December 1939	January 1939
<i>Nondurable goods</i>															
<b>Textiles and their products</b>	103.7	-2.0	+2.8	87.6	-4.6	+5.3	\$17.28	-2.6	+2.4	34.8	-3.1	-1.0	Cents 49.9	+0.3	+3.2
Fabrics	96.1	-2.6	+3.6	84.8	-5.3	+5.9	17.07	-2.8	+2.2	36.0	-3.0	-1.7	48.1	+3	+4.2
Carpets and rugs	82.3	-2.4	+9.5	72.3	-4.6	+19.5	24.31	-2.3	+9.2	36.8	-2.4	+3.0	66.2	+1	+5.9
Cotton goods	95.9	-9	+10.4	89.0	-2.7	+19.2	15.18	-1.9	+7.9	36.8	-2.1	+1	41.2	+2	+7.7
Cotton small wares	87.5	-3.8	+6.9	81.4	-6.7	+6.4	18.05	-3.0	-6	37.9	-2.8	-2.0	48.4	+5	+1.9
Dyeing and finishing textiles	129.7	-2.6	+4.3	109.5	-5.9	+3.1	20.64	-3.3	-1.2	37.6	-3.7	-2.9	54.4	+5	+1.3
Hats, fur-felt	90.9	-4	+9	84.8	-4.4	+8.1	25.26	-4.0	+7.3	35.3	-4.1	+3.0	73.3	-3	+3.9
Hosiery	143.8	-3.0	-4.8	146.1	-8.1	-9.5	18.49	-5.3	-5.0	33.1	-6.0	-7.1	55.5	+5	+4.3
Knitted outerwear	59.4	-8.4	-2.6	47.4	-5.0	-5	17.12	+3.7	+2.1	35.3	+1.7	-1.8	48.4	+2.7	+4.4
Knitted underwear	75.4	-4.4	+10.6	66.0	-8.9	+14.7	14.78	-4.7	+3.6	35.3	-4.3	+2.9	42.4	+8	+2.4
Knitted cloth	139.9	-2.9	+7.4	112.0	-3.8	+4.8	18.51	+1.0	-4	37.6	+1.9	-2.8	47.9	-1.3	+2
Silk and rayon goods	63.2	-3.1	-3.7	53.1	-6.5	+1	16.03	-3.5	+4.1	35.0	-4.2	-3.8	45.5	+5	+7.8
Woolen and worsted goods	86.5	-5.2	-3.3	73.1	-6.8	-3.1	19.46	-1.6	+4	36.2	-2.4	-2.0	53.7	+8	+2.4
Wearing apparel	116.1	-7	+1.5	87.4	-3.1	+4.2	17.85	-2.5	+2.7	32.4	-3.3	+2	53.3	+2	+1.7
Clothing, men's	105.5	+4	+6.4	80.1	-2	+13.3	19.60	-5	+6.5	32.9	-1.0	+4.2	59.0	-4	+2.9
Clothing, women's	162.2	-1.4	-2.2	112.8	-4.0	-1.8	18.74	-2.6	+5	32.0	-2.7	-2.1	52.8	-5	+3
Corsets and allied garments	114.8	-1.0	+8.6	110.4	-7.4	+4.0	15.87	-6.4	-4.1	33.3	-6.8	-8.5	47.1	+4	+3.1
Men's furnishings	111.5	-13.6	-8.0	95.0	-24.7	-4.3	13.15	-12.8	+5.2	32.3	-8.6	-1.8	40.1	-2.6	+7.8
Millinery	78.7	+19.0	+1	58.5	+25.8	-4.9	21.47	+5.6	-5.1	32.3	-6	-2.2	62.6	+1.6	-3.4
Shirts and collars	119.5	-2.5	+1.9	97.7	-12.0	+8.1	13.11	-9.7	+5.9	32.0	-9.3	-1.5	41.3	+1.0	+7.9
<b>Leather and its manufactures</b>	97.4	+4.5	-1.6	82.3	+9.2	-8	19.89	+4.4	+8	37.2	+4.4	-3.6	53.4	-5	+1.7
Boots and shoes	95.8	+5.5	-1.9	79.1	+12.6	-1.2	18.78	+6.7	+6	37.0	+6.0	-4.0	50.8	-4	+1.0
Leather	87.4	+5	+(?)	86.1	-4	+3	24.55	-9	+1	38.3	-1.4	-1.5	64.2	+2	+1.3

<b>Food and kindred products.....</b>	119.5	-5.2	+2.2	117.1	-5.9	+3.5	25.32	-7	+1.3	39.7	-1.9	-1.2	64.1	+1.2	+2.0
Baking.....	141.4	-2.4	+3	131.1	-2.2	+1.2	25.84	+1	+1.0	40.9	+1	-1.5	63.5	+2	+2.6
Beverages..	254.9	-2.2	+1.6	278.8	-6.7	+2.2	32.13	-4.6	+7	36.9	-4.2	-6	87.7	-4	+1.1
Butter.....	89.7	-3.1	+2	75.1	-3.9	-1.0	22.31	-9	-1.2	45.0	-1.5	-1.4	49.2	+8	-1.7
Canning and preserving..	91.0	-10.3	-6	80.6	-9.7	+5.7	17.41	+7	+6.6	35.4	-5	-2.6	50.5	-4	+5.0
Confectionery.....	82.9	-13.7	+1.5	81.2	-18.7	+6.1	19.07	-5.8	+4.7	38.4	-7.3	+3.0	49.8	+1.2	+2.0
Flour.....	79.0	+4	+1.3	73.4	+1.6	+2.1	25.18	+1.2	+6	41.2	+1.0	-4	60.8	+4	+1.4
Ice cream.....	66.1	-2.7	-3	55.6	-3.0	-9	29.55	-3	-6	44.3	-1.9	-3.9	64.7	+1.0	+3.2
Slaughtering and meat packing..	111.8	-3	+10.3	118.9	-2.2	+10.1	27.94	-1.9	-(2)	41.2	-2.1	-1	67.7	+1	-3
Sugar, beet.....	67.8	-64.6	-25.5	62.6	-63.9	-20.5	23.98	+2.0	+6.8	34.8	-22.9	+1.9	69.0	+29.9	+4.9
Sugar refining, cane..	90.1	-5.4	-1.6	72.6	-4.1	-6.2	22.68	+1.3	-4.6	35.0	-3.5	-3.7	64.9	+4.9	-9
<b>Tobacco manufactures.....</b>	59.0	-10.3	-2.5	52.9	-15.1	+3.1	16.52	-5.3	+5.8	33.3	-7.0	+2.5	49.6	+1.3	+3.2
Chewing and smoking tobacco and snuff.....	63.7	+4.7	+2.5	68.1	+1.4	+3.3	17.33	-3.2	+9	33.2	-2.3	-2.8	51.8	-1.4	+3.6
Cigars and cigarettes.....	58.4	-11.9	-3.0	51.0	-17.3	+3.1	16.35	-6.1	+0.3	33.3	-7.6	+3.2	49.3	+1.5	+3.2
<b>Paper and printing.....</b>	115.1	-2.9	+4.1	110.0	-5.8	+6.6	28.66	-3.0	+2.5	38.1	-3.3	+8	78.4	+1	+1.4
Boxes, paper.....	116.2	-7.0	+9.0	121.2	-11.5	+9.2	20.75	-4.9	+1	37.5	-6.4	-1.5	55.9	+1.6	+1.4
Paper and pulp.....	114.1	-9	+8.2	117.6	-4.0	+14.5	25.35	-3.2	+5.7	40.0	-3.8	+3.0	63.5	+6	+2.5
Printing and publishing:															
Book and job.....	102.6	-1.4	+1.1	91.6	-2.7	+3.7	31.30	-1.4	+2.5	38.9	-1.7	+1.1	81.5	+7	+1.6
Newspapers and periodicals..	113.5	-4.3	+5	105.7	-8.1	+2.1	37.55	-4.0	+1.5	35.7	-3.0	-6	101.8	-1.0	+2.5
<b>Chemical, petroleum, and coal products.....</b>	121.0	-1.1	+6.9	131.0	-1.8	+10.3	29.22	-7	+3.2	38.4	-1.5	+5	75.6	+8	+3.3
Petroleum refining.....	121.6	-6	+2.8	133.5	-3.0	-8	34.42	-2.4	-3.5	35.5	-2.7	-3.5	97.4	+3	-2
Other than petroleum refining..	120.9	-1.1	+7.9	130.3	-1.3	+14.4	27.24	-1	+6.0	39.4	-1.1	+1.9	68.0	+1.0	+5.9
Chemicals.....	135.8	-1.3	+15.6	159.8	-1.6	+22.7	31.82	-3	+6.2	39.8	-1.1	+1.8	80.0	+9	+4.2
Cottonseed—oil, cake, and meal..	103.2	-10.2	-5.3	99.3	-9.9	+13.5	15.69	+3	+19.7	46.3	+1	+5.7	33.5	+1.1	+13.9
Druggists' preparations..	118.5	-2	+8.8	129.2	-2.3	+9.3	24.76	-2.1	+4	39.6	-1.7	+8	59.5	-8	-5
Explosives.....	103.5	-4.1	+20.9	120.9	-6.0	+27.2	32.08	-2.0	+5.3	38.2	-3.2	+1.3	83.9	+1.3	+4.0
Fertilizers.....	105.1	+2.8	+2.0	82.5	+5	+9.8	14.27	-2.4	+6.1	34.0	-7	-2	42.0	-1.7	+8.1
Paints and varnishes.....	123.5	-5	+6.1	128.5	-1.5	+11.5	28.44	-1.0	+4.1	39.7	-1.8	+1.7	71.8	+8	+2.4
Rayon and allied products..	313.5	+4	+4.4	320.4	+2.0	+13.1	26.24	+1.6	+8.4	38.8	0	+2.4	67.6	+1.6	+5.8
Soap..	83.5	-1.9	+5.6	100.3	-1.8	+5.7	28.12	+1	-2	39.4	-7	+1	71.3	+9	-2
<b>Rubber products.....</b>	90.0	-3.2	+10.7	94.1	-6.4	+14.5	28.54	-3.2	+3.5	36.6	-3.8	+1.4	77.6	0	+1.3
Rubber boots and shoes.....	59.1	-6.4	+1.7	56.4	-14.1	-1.1	21.92	-8.3	-2.7	36.0	-8.0	-2.5	60.8	-4	-2
Rubber tires and inner tubes..	73.6	-1.5	+10.6	85.6	-4.8	+15.3	34.08	-3.4	+4.3	35.1	-2.7	+3.0	96.5	-9	+9
Rubber goods other.....	150.3	-4.0	+14.1	144.8	-6.8	+18.1	23.53	-3.0	+3.4	38.5	-3.5	+8	61.7	+6	+3.0

See footnotes at end of table.



TABLE 3.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, January 1940—Continued*

## NONMANUFACTURING

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

Industry	Employment			Pay rolls			Average weekly earnings			Average hours worked per week			Average hourly earnings		
	Index January 1940	Percentage change from—		Index January 1940	Percentage change from—		January 1940	Percentage change from—		January 1940	Percentage change from—		January 1940	Percentage change from—	
		December 1939	January 1939		December 1939	January 1939		December 1939	January 1939		December 1939	January 1939		December 1939	January 1939
Coal mining:													<i>Cents</i>		
Anthracite <sup>1</sup>	51.5	+1.0	+3.0	52.5	+97.0	+38.1	\$33.46	+95.0	+34.1	36.8	+95.1	+34.7	91.9	+0.8	-1.1
Bituminous <sup>2</sup>	91.8	-9	+3.4	87.0	+3.2	+11.2	25.71	+4.1	+7.5	29.4	+4.5	+9.3	87.6	-1.6	-1.8
Metalliferous mining	66.6	-1.0	+6.3	63.1	-2.9	+14.1	29.68	-1.9	+7.3	40.6	-1.5	+1.2	73.5	-3	+6.3
Quarrying and nonmetallic mining	37.5	-14.8	-2.2	29.8	-23.8	-1.3	19.66	-10.6	+9	34.9	-11.8	-4.1	56.3	+9	+5.2
Crude-petroleum production	63.1	-1.0	-5.7	58.4	-1.4	-4.1	33.99	-4	+1.7	37.5	-9	+( <sup>2</sup> )	88.8	+6	+1.4
Public utilities:															
Telephone and telegraph <sup>4</sup> <sup>5</sup>	76.2	+7	+1.5	98.6	+1.2	+4.9	31.79	+5	+3.4	39.2	+1.1	+1	80.5	-5	+1.4
Electric light and power <sup>4</sup> <sup>5</sup>	89.0	-1.3	+1.8	101.1	-1.3	+4.0	34.63	-( <sup>2</sup> )	+2.1	39.1	-1.6	+1.5	88.7	+1.8	-( <sup>2</sup> )
Street railways and busses <sup>4</sup> <sup>5</sup> <sup>6</sup>	68.5	-7	-( <sup>7</sup> )	69.3	-5	-1.1	33.26	+2	-1.0	45.4	-1.4	-2.4	72.0	+8	+8
Trade:															
Wholesale <sup>4</sup>	90.5	-1.8	+2.5	77.3	-2.3	+2.5	29.65	-5	-1	40.6	-2.3	-2.7	72.9	+1.9	+3.2
Retail <sup>4</sup> <sup>5</sup>	88.3	-15.3	+3.4	80.8	-12.0	+4.1	21.43	+3.9	+7	43.0	+1	( <sup>7</sup> )	54.1	+5.0	( <sup>7</sup> )
Food <sup>4</sup>	103.0	-2.8	+3.0	95.3	-1.2	+4.3	23.48	+1.6	+1.2	43.5	-1	( <sup>7</sup> )	52.2	+1.4	( <sup>7</sup> )
General merchandising <sup>4</sup> <sup>5</sup>	90.7	-38.0	+4.7	84.3	-33.0	+4.5	18.26	+8.1	-3	39.2	-2.8	( <sup>7</sup> )	46.2	+11.4	( <sup>7</sup> )
Apparel <sup>4</sup>	78.2	-21.9	+1.7	73.6	-17.8	+1.4	22.09	+5.3	-3	39.7	+6	( <sup>7</sup> )	55.1	+4.0	( <sup>7</sup> )
Furniture <sup>4</sup>	76.0	-8.5	-1	66.8	-11.2	+1.4	28.31	-2.9	+1.5	43.5	-1.5	( <sup>7</sup> )	67.8	+6	( <sup>7</sup> )
Automotive <sup>4</sup>	81.1	-9	+4.9	72.8	-4.6	+6.1	26.69	-3.8	+1.2	47.2	-8	( <sup>7</sup> )	56.7	-2.6	( <sup>7</sup> )
Lumber <sup>4</sup>	69.6	-5.2	+1.2	64.4	-6.9	+2.7	25.77	-1.9	+1.5	41.6	-2.9	( <sup>7</sup> )	63.3	+9	( <sup>7</sup> )
Hotels (year-round) <sup>4</sup> <sup>5</sup> <sup>6</sup>	91.4	+7	-4	81.0	-1	+1.0	15.39	-7	+1.4	46.2	-4	+3	33.2	+2	+1.8
Laundries <sup>3</sup>	95.8	+3	+2.7	83.3	-4	+4.6	17.76	-7	+1.9	42.9	+( <sup>2</sup> )	+7	41.5	-5	+1.4
Dyeing and cleaning <sup>3</sup>	93.9	-3.6	-3	65.8	-5.8	+( <sup>2</sup> )	19.41	-2.3	+3	39.9	-3.8	-2.9	49.9	+9	+3.6
Brokerage <sup>4</sup>	( <sup>7</sup> )	-9	-2.6	( <sup>7</sup> )	-1.7	-2.6	37.15	-8	+( <sup>2</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )
Insurance <sup>4</sup>	( <sup>7</sup> )	+6	+1.5	( <sup>7</sup> )	+2.6	+2.9	37.06	+2.0	+1.3	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )
Building construction	( <sup>7</sup> )	-16.7	-1.5	( <sup>7</sup> )	-20.1	+3.9	29.74	-4.0	+5.3	30.8	-6.0	+1.6	97.0	+2.4	+3.7

<sup>1</sup> Revised series. Mimeographed sheets giving averages by years, 1932 to 1938, inclusive, and by months, January 1938 to September 1939, inclusive, available on request. Average hours and average hourly earnings are computed from data supplied by a smaller number of establishments than average weekly earnings, 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.

<sup>2</sup> Less than 1/10 of 1 percent.

<sup>3</sup> Indexes adjusted to 1935 census. Comparable series back to January 1929 presented in January 1938 issue of this publication.

<sup>4</sup> Average weekly earnings, hourly earnings, and hours not strictly comparable with figures published in pamphlets prior to January 1938 as they now exclude corporation officers, executives, and other employees whose duties are mainly supervisory.

<sup>5</sup> Retail trade indexes adjusted to 1935 census and public utility indexes to 1937 census. Comparable series for earlier months available upon request.

<sup>6</sup> Covers street railways and trolley and motorbus operations of subsidiary, affiliated, and successor companies; formerly "electric-railroad and motorbus operation and maintenance."

<sup>7</sup> Not available. <sup>8</sup> Cash payments only; value of board, room, and tips not included.

TABLE 4.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries*

## MANUFACTURING

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

Industry	Employment index			Pay-roll index			Average weekly earnings <sup>1</sup>			Average hours worked per week <sup>1</sup>			Average hourly earnings <sup>1</sup>		
	January 1940	December 1939	November 1939	January 1940	December 1939	November 1939	January 1940	December 1939	November 1939	January 1940	December 1939	November 1939	January 1940	December 1939	November 1939
All manufacturing.....	101.5	104.1	103.8	98.3	103.7	101.6	\$25.51	\$26.26	\$25.73	37.4	38.6	38.5	Cents 66.3	Cents 68.2	Cents 65.3
Durable goods.....	97.4	100.0	98.2	98.2	104.6	100.9	28.96	30.04	29.41	38.1	39.6	39.6	72.7	72.7	71.5
Nondurable goods.....	105.3	108.0	108.2	98.5	102.8	102.4	21.87	22.30	22.03	36.9	37.7	37.6	60.7	60.5	59.9
<i>Durable goods</i>															
Iron and steel and their products, not including machinery.....	108.3	111.4	111.1	106.3	115.3	114.7	29.07	30.71	30.55	37.6	39.4	39.6	76.6	77.2	76.7
Blast furnaces, steel works, and rolling mills.....	120.9	123.3	121.8	119.3	129.2	127.3	31.25	33.19	33.08	37.1	39.0	39.2	84.1	85.1	84.7
Bolts, nuts, washers, and rivets.....	117.2	119.8	118.3	124.4	143.5	142.4	25.87	29.18	29.32	37.9	42.7	43.0	68.4	68.4	68.2
Cast-iron pipe.....	74.4	77.5	77.4	64.8	71.7	73.9	21.14	22.43	23.12	35.1	37.9	39.4	59.8	58.7	58.3
Cutlery (not including silver and plated cutlery) and edge tools.....	104.6	108.7	109.3	93.3	101.9	101.7	23.28	24.46	24.22	39.0	41.3	41.3	60.8	60.2	59.8
Forgings, iron and steel.....	72.3	72.6	70.1	85.8	88.2	83.7	32.27	33.05	32.59	41.3	42.1	41.8	78.2	78.6	78.1
Hardware.....	103.5	105.6	106.4	108.9	117.0	118.6	26.01	27.44	27.58	38.8	40.2	40.3	67.0	68.0	68.5
Plumbers' supplies.....	82.2	83.9	83.2	70.8	77.7	77.6	25.02	26.96	27.07	36.8	39.4	39.7	68.0	68.4	68.2
Stamped and enameled ware.....	158.0	165.6	166.3	160.2	173.7	171.3	24.05	25.01	24.49	37.9	39.4	39.3	63.8	63.4	62.2
Steam and hot-water heating apparatus and steam fittings.....	83.2	86.2	87.3	73.9	79.9	79.8	27.20	28.38	28.00	38.7	40.2	40.1	70.4	70.5	69.9
Stoves.....	78.0	89.3	96.0	64.6	78.5	88.4	23.75	25.24	26.51	35.7	38.0	39.3	66.7	66.9	67.4
Structural and ornamental metalwork.....	73.4	75.4	76.0	62.6	67.2	67.1	27.65	28.74	28.52	37.9	39.3	39.3	72.7	73.1	72.5
Tin cans and other tinware.....	93.6	95.4	100.6	96.9	100.4	105.4	23.46	23.82	23.70	37.9	38.6	38.9	61.9	61.9	61.4
Tools (not including edge tools, machine tools, files, and saws).....	96.1	96.9	95.3	97.5	102.0	97.3	25.71	26.66	25.77	41.3	43.0	41.7	62.6	62.2	62.0
Wirework.....	171.9	176.4	172.8	188.8	204.4	199.7	27.31	28.81	28.73	39.3	40.9	41.1	69.5	70.5	70.0
Machinery, not including transportation equipment.....	112.4	113.1	111.0	119.1	122.1	117.1	29.74	30.25	29.51	40.4	41.3	40.9	73.5	73.2	72.3
Agricultural implements (including tractors).....	135.2	130.9	124.6	155.8	151.5	140.5	30.91	31.07	30.27	38.9	39.3	38.7	79.6	79.3	78.7
Cash registers, adding machines, and calculating machines.....	126.4	128.1	127.1	128.6	131.6	128.6	32.11	32.48	31.93	39.1	39.4	38.9	82.5	82.8	82.3

See footnotes at end of table.

TABLE 4.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries—Continued*

## MANUFACTURING—Continued

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

Industry	Employment index			Pay-roll index			Average weekly earnings			Average hours worked per week			Average hourly earnings		
	January 1940	December 1939	November 1939	January 1940	December 1939	November 1939	January 1940	December 1939	November 1939	January 1940	December 1939	November 1939	January 1940	December 1939	November 1939
<i>Durable goods—Continued</i>															
<b>Machinery—Continued.</b>													<i>Cents</i>	<i>Cents</i>	<i>Cents</i>
Electrical machinery, apparatus, and supplies	101.7	102.6	100.4	112.4	114.2	109.6	\$29.67	\$29.89	\$29.34	39.7	40.4	40.2	74.9	74.2	73.1
Engines, turbines, water wheels, and wind-mills	125.3	119.8	109.8	161.4	156.6	139.1	34.10	34.49	33.46	42.6	43.0	42.1	80.4	80.5	79.9
Foundry and machine-shop products	97.2	97.2	95.4	95.2	98.6	94.3	29.27	30.35	29.43	40.4	41.7	40.9	72.6	72.7	72.0
Machine tools	196.8	192.2	183.9	258.5	256.2	237.8	36.41	37.03	35.91	47.4	48.2	47.0	76.9	77.0	76.5
Radios and phonographs	136.2	162.3	179.7	122.2	148.8	170.3	22.22	22.71	23.47	37.0	38.6	40.3	59.8	59.0	58.3
Textile machinery and parts	86.2	85.7	84.3	83.5	85.7	82.4	26.65	27.48	27.01	40.6	41.5	41.2	65.8	66.3	65.7
Typewriters and parts	122.6	127.3	128.0	111.3	121.5	125.7	22.27	23.41	24.09	34.9	36.6	37.9	63.7	64.0	63.5
<b>Transportation equipment</b>	115.5	116.5	102.9	118.3	124.1	105.6	33.23	34.51	33.26	37.4	38.5	37.6	89.4	90.1	88.6
Aircraft	2,029.7	1,886.0	1,749.5	1,900.6	1,777.9	1,718.0	29.21	29.39	30.65	41.5	42.3	41.8	74.1	73.5	74.8
Automobiles	115.8	118.1	102.3	119.9	127.9	106.0	34.28	35.81	34.25	36.7	38.1	37.2	93.4	94.0	92.2
Cars, electric- and steam-railroad	52.8	52.1	46.5	47.3	46.8	40.2	28.06	28.12	27.03	38.5	38.6	37.1	72.9	72.9	72.8
Locomotives	28.3	28.0	26.1	27.2	27.5	25.1	29.49	30.12	29.54	37.7	38.6	38.0	78.2	78.1	77.8
Shipbuilding	137.5	139.4	132.9	148.0	152.8	141.0	32.32	32.90	31.86	38.2	38.2	37.9	84.6	85.8	84.4
<b>Nonferrous metals and their products</b>	109.7	112.9	113.5	108.7	116.5	115.4	27.37	28.67	28.26	39.2	40.9	41.0	70.1	70.3	69.0
Aluminum manufactures	169.5	170.4	174.3	191.5	196.8	195.0	27.62	28.22	27.37	39.3	40.3	40.6	70.1	70.0	67.4
Brass, bronze, and copper products	135.7	137.7	137.4	150.3	158.9	157.0	30.28	31.63	31.39	40.5	41.8	41.7	75.2	75.8	75.3
Clocks and watches and time-recording devices	90.6	93.1	93.1	92.9	96.9	99.8	22.75	23.09	23.84	38.5	39.1	40.4	59.5	59.6	59.1
Jewelry	89.0	98.6	107.0	72.7	86.5	90.9	22.89	24.63	23.94	37.7	40.1	41.0	60.5	61.2	57.7
Lighting equipment	92.8	98.0	93.4	74.2	84.7	78.2	25.54	27.66	26.84	36.2	39.5	39.5	70.6	70.0	68.0
Silverware and plated ware	71.7	76.7	76.2	61.3	76.2	75.1	24.74	28.72	28.52	38.9	44.2	44.0	63.0	65.1	65.2
Smelting and refining—copper, lead, and zinc	86.9	86.9	86.0	86.5	87.8	85.3	27.94	28.36	27.80	38.9	39.6	39.1	71.9	71.7	71.2
<b>Lumber and allied products</b>	67.3	71.1	73.0	58.8	65.2	68.8	19.10	20.18	20.63	36.9	38.6	39.7	51.2	51.3	51.4
Furniture	90.3	94.8	96.8	74.6	85.5	86.2	19.95	21.87	21.63	37.4	40.3	40.5	53.8	54.4	53.6
Lumber:															
Millwork	61.5	63.6	64.1	47.0	52.0	52.8	21.27	22.73	22.94	39.3	41.9	42.6	54.2	54.2	54.0
Sawmills	59.5	63.3	65.5	51.1	55.4	60.8	17.73	18.11	19.20	36.1	37.0	38.6	49.1	48.9	49.7

Stone, clay, and glass products..	77.7	83.6	85.5	86.9	76.4	78.9	23.58	25.01	25.24	35.1	37.5	37.9	66.4	66.0	65.7
Brick, tile, and terra cotta..	57.0	62.6	64.7	43.4	51.6	54.3	19.52	21.18	21.58	34.8	37.9	38.5	55.8	55.8	55.6
Cement..	57.7	66.4	70.2	50.5	63.2	66.5	24.96	27.33	27.06	35.5	39.0	38.8	70.4	70.1	69.8
Glass.....	105.6	108.5	109.3	113.1	118.9	121.0	26.27	26.78	27.06	35.0	36.4	36.9	74.8	73.7	73.4
Marble, granite, slate, and other products..	38.8	48.5	50.1	23.9	34.8	38.5	21.54	25.00	26.76	31.4	36.0	38.0	69.0	70.4	71.4
Pottery..	92.4	94.9	95.1	80.7	90.1	89.1	22.20	24.12	23.83	37.0	39.0	38.4	62.9	62.7	62.1
<i>Nondurable goods</i>															
Textiles and their products..	103.7	105.8	107.9	87.6	91.8	92.9	17.26	17.72	17.68	34.8	35.9	36.1	49.9	49.7	49.3
Fabrics.....	96.1	98.7	100.9	84.8	89.5	91.7	17.07	17.54	17.64	36.0	37.2	37.4	48.1	47.9	47.7
Carpets and rugs..	82.3	84.4	85.2	72.3	75.8	75.9	24.31	24.86	24.67	36.8	37.6	37.5	66.2	66.1	65.7
Cotton goods.....	95.9	96.8	96.9	89.0	91.5	90.9	15.18	15.43	15.36	36.8	37.6	37.4	41.2	41.0	41.0
Cotton small wares..	87.5	91.0	92.9	81.4	87.3	90.3	18.05	18.61	18.89	37.9	39.0	39.8	48.4	48.1	48.1
Dyeing and finishing textiles..	129.7	133.2	134.2	109.5	116.4	115.2	20.64	21.33	20.96	37.6	39.1	38.7	54.4	54.0	53.7
Hats, fur-felt..	90.9	91.3	88.4	84.8	88.7	73.1	25.26	26.23	22.41	35.3	36.6	31.4	73.3	73.2	71.2
Hosiery.....	143.8	148.2	154.6	146.1	159.0	170.0	18.49	19.52	19.95	33.1	35.4	36.0	55.5	55.4	55.4
Knitted underwear..	59.4	64.8	77.7	47.4	49.9	63.5	17.12	16.54	17.62	35.3	34.7	37.2	48.4	47.1	46.8
Knitted underwear..	75.4	78.9	86.8	66.0	72.4	75.0	14.78	15.48	15.72	35.3	37.0	37.5	42.4	41.9	42.1
Knitted cloth.....	139.9	144.1	154.1	112.0	116.4	131.4	18.51	18.34	19.27	37.6	37.0	39.2	47.9	48.7	48.0
Silk and rayon goods.....	63.2	65.2	67.6	53.1	56.8	60.0	16.03	16.58	16.90	35.0	36.5	37.4	45.5	45.2	44.9
Woolen and worsted goods..	86.5	91.3	95.0	73.1	78.4	81.9	19.46	19.83	19.89	36.2	37.1	37.8	53.7	53.4	52.7
Wearing apparel.....	116.1	116.9	118.7	87.4	90.2	89.2	17.85	18.26	17.81	32.4	33.5	33.7	53.3	53.3	52.5
Clothing, men's..	105.5	105.1	104.7	80.1	80.2	76.1	19.60	19.76	18.84	32.9	33.5	32.2	59.0	59.2	58.4
Clothing, women's.....	162.2	164.6	168.0	112.8	117.4	116.1	18.74	19.24	18.64	32.0	32.6	33.6	52.8	53.3	51.8
Corsets and allied garments..	114.8	116.0	116.6	110.4	119.2	120.8	15.87	16.95	17.12	33.3	35.7	36.6	47.1	46.7	46.1
Men's furnishings..	111.5	129.0	136.7	95.0	126.0	138.8	13.15	15.13	15.73	32.3	35.2	37.4	40.1	41.3	41.1
Millinery.....	78.7	66.1	66.5	58.5	46.5	48.5	21.47	20.21	20.94	32.3	32.5	32.5	62.6	61.6	63.6
Shirts and collars..	119.5	122.6	127.6	97.7	111.0	117.5	13.11	14.27	14.80	32.0	35.5	36.1	41.3	40.9	40.9
Leather and its manufactures..	97.4	93.2	91.9	82.3	75.4	71.1	19.89	19.09	18.20	37.2	35.7	33.8	53.4	53.7	53.9
Boots and shoes..	95.8	90.8	89.0	79.1	70.2	64.6	18.78	17.62	16.46	37.0	34.9	32.5	50.8	51.1	51.4
Leather..	87.4	87.0	87.9	86.1	86.5	87.2	24.55	24.88	24.76	38.3	38.8	38.7	64.2	64.3	63.9
Food and kindred products..	119.5	126.0	129.8	117.1	124.4	125.3	25.32	25.48	24.80	39.7	40.5	40.1	64.1	63.3	62.5
Baking.....	141.4	144.8	146.5	131.1	134.1	136.9	25.84	25.83	25.97	40.9	41.0	41.7	63.5	63.3	62.7
Beverages..	254.9	260.6	261.2	278.8	298.8	293.7	32.13	33.56	32.89	36.9	38.5	37.7	87.7	88.0	88.1
Butter.....	89.7	82.5	94.1	75.1	78.1	79.1	22.31	22.51	22.49	45.0	45.8	46.1	49.2	48.8	48.4
Canning and preserving..	91.0	101.4	121.2	80.6	89.3	101.2	17.41	17.37	16.53	35.4	35.6	34.5	50.5	50.6	49.0
Confectionery..	82.9	96.0	98.0	81.2	99.8	96.2	19.07	20.25	19.06	38.4	41.4	39.5	49.8	49.3	48.8
Flour.....	79.0	78.7	77.9	73.4	72.2	70.5	25.18	24.83	24.48	41.2	40.8	40.5	60.8	60.4	60.2
Ice cream.....	66.1	68.0	69.3	55.6	57.3	57.8	29.55	29.62	29.32	44.3	44.3	44.1	64.7	64.0	64.2
Slaughtering and meat packing..	111.8	112.1	107.9	118.9	121.5	112.7	27.94	28.51	27.45	41.2	42.1	40.1	67.7	67.8	68.4
Sugar, beet.....	67.8	191.9	286.8	62.6	173.5	283.0	23.98	23.54	25.69	34.8	45.2	50.3	69.0	53.0	51.6
Sugar refining, cane..	90.1	95.2	93.8	72.6	75.8	77.4	22.68	22.39	23.21	35.0	36.2	36.9	64.9	61.8	62.8

See footnotes at end of table.

TABLE 4.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries—Continued*

## MANUFACTURING—Continued

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

Industry	Employment index			Pay-roll index			Average weekly earnings			Average hours worked per week			Average hourly earnings		
	January 1940	December 1939	November 1939	January 1940	December 1939	November 1939	January 1940	December 1939	November 1939	January 1940	December 1939	November 1939	January 1940	December 1939	November 1939
<i>Nondurable goods—Continued</i>															
Tobacco manufactures.....	59.0	65.8	66.4	52.9	62.3	62.9	\$16.52	\$17.47	\$17.50	33.3	35.8	36.6	Cents 49.6	Cents 48.9	Cents 47.9
Chewing and smoking tobacco and snuff..	63.7	60.8	61.0	68.1	67.2	67.7	17.33	17.90	17.92	33.2	34.2	34.2	51.8	52.5	52.4
Cigars and cigarettes.....	58.4	66.3	66.9	51.0	61.6	62.2	16.35	17.37	17.40	33.3	36.0	36.9	49.3	48.4	47.4
Paper and printing.....	115.1	118.5	117.5	110.0	116.8	114.2	28.66	29.51	29.26	38.1	39.4	39.5	78.4	78.3	77.4
Boxes, paper.....	116.2	124.9	128.9	121.2	136.9	145.4	20.75	21.92	22.60	37.5	40.1	41.7	55.9	55.0	54.5
Paper and pulp.....	114.1	115.1	115.2	117.6	122.5	124.6	25.35	26.19	26.61	40.0	41.6	42.5	63.5	63.1	62.7
Printing and publishing:															
Book and job.....	102.6	104.1	101.0	91.6	94.1	88.7	31.30	31.63	30.71	38.9	39.6	38.7	81.5	80.9	80.6
Newspapers and periodicals.....	113.5	118.7	116.6	105.7	115.0	109.3	37.55	39.04	37.81	35.7	36.7	36.1	101.8	102.7	101.6
Chemical, petroleum, and coal products.....	121.0	122.3	122.6	131.0	133.4	133.1	29.22	29.61	29.49	38.4	39.0	38.9	75.6	75.1	75.1
Petroleum refining.....	121.6	122.3	123.7	133.5	137.6	137.9	34.42	35.27	34.94	35.5	36.4	36.1	97.4	97.2	97.2
Other than petroleum refining.....	120.9	122.3	122.3	130.3	132.0	131.6	27.24	27.35	27.26	39.4	39.8	39.8	68.0	67.5	67.4
Chemicals.....	135.8	137.6	137.7	159.8	162.3	161.5	31.82	32.07	31.86	39.8	40.3	40.3	80.0	79.6	79.2
Cottonseed—oil, cake, and meal.....	103.2	114.9	119.7	99.3	110.2	114.8	15.69	15.64	15.60	46.3	46.2	46.0	33.5	33.1	33.0
Druggists' preparations.....	118.5	118.8	117.7	129.2	132.2	131.1	24.76	25.37	25.37	39.6	40.2	40.6	59.5	60.0	59.5
Explosives.....	103.5	107.8	106.1	120.9	128.7	127.6	32.08	32.74	32.98	38.2	39.5	39.9	83.9	82.8	82.6
Fertilizers.....	105.1	102.2	91.5	82.5	82.2	75.9	14.27	14.65	15.32	34.0	34.2	34.0	42.0	42.8	45.1
Paints and varnishes.....	123.5	124.2	125.1	128.5	130.5	131.5	28.44	28.75	28.72	39.7	40.3	40.2	71.8	71.4	71.5
Rayon and allied products.....	313.5	312.2	313.4	320.4	314.0	310.4	26.24	25.82	25.42	38.8	38.8	38.6	67.6	66.5	65.9
Soap.....	83.5	85.1	88.6	100.3	102.1	104.4	28.12	28.09	27.60	39.4	39.7	39.6	71.3	70.7	69.7
Rubber products.....	90.0	93.0	93.9	94.1	100.5	99.8	28.54	29.50	28.95	38.6	38.1	38.0	77.6	77.6	76.8
Rubber boots and shoes.....	59.1	63.1	62.3	56.4	65.7	66.6	21.02	23.90	24.51	36.0	39.1	40.1	60.8	61.1	61.1
Rubber tires and inner tubes.....	73.6	74.7	74.5	85.6	89.9	85.9	34.08	35.11	33.64	35.1	36.1	35.1	96.5	97.4	96.1
Rubber goods, other.....	150.3	156.5	161.3	144.8	155.4	162.6	23.53	24.19	24.55	38.5	39.9	40.4	61.7	61.2	61.2

# NONMANUFACTURING—Continued

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

Coal mining:																
Anthracite <sup>3</sup> ...	51.5	51.0	51.3	52.5	26.6	42.0	33.46	17.16	26.90	36.8	18.9	28.8	91.9	91.2	92.3	
Bituminous <sup>3</sup> ...	91.8	92.6	94.9	87.0	84.3	96.3	25.71	24.65	27.59	29.4	28.1	31.4	87.6	88.9	88.8	
Metalliferous mining.....	66.6	67.3	66.5	63.1	65.0	63.9	29.68	30.25	30.36	40.6	41.2	41.5	73.5	73.7	73.6	
Quarrying and nonmetallic mining..	37.5	44.0	47.1	29.8	39.2	42.9	19.66	21.99	22.14	34.9	39.5	40.1	56.3	55.9	54.8	
Crude-petroleum production..	63.1	63.8	63.8	58.4	59.2	59.6	33.99	34.11	34.31	37.5	37.8	38.3	88.8	88.3	87.8	
Public utilities:																
Telephone and telegraph <sup>4 5</sup> ...	76.2	75.8	76.1	98.6	97.4	96.4	31.79	31.62	31.22	39.2	38.8	39.1	80.5	80.9	80.3	
Electric light and power <sup>4 5</sup> .....	89.0	90.1	90.3	101.1	102.4	102.5	34.63	34.64	34.62	39.1	39.7	40.0	88.7	87.1	86.5	
Street railways and busses <sup>4 5 6</sup> ...	68.5	69.0	69.3	69.3	69.6	69.4	33.26	33.19	33.02	45.4	46.0	45.7	72.0	71.5	71.5	
Trade:																
Wholesale <sup>4</sup> .....	90.5	92.2	92.1	77.3	79.1	79.0	29.65	29.79	30.18	40.6	41.6	41.5	72.9	71.5	72.4	
Retail <sup>4 5</sup> .....	88.3	104.2	93.3	80.8	91.8	83.6	21.43	20.11	20.71	43.0	43.0	42.6	54.1	51.5	53.5	
Food <sup>5</sup> .....	103.0	106.0	103.8	95.3	96.5	94.3	23.48	23.21	23.12	43.5	43.6	43.7	52.2	51.5	51.9	
General merchandising <sup>4 5</sup> .....	90.7	146.4	105.9	84.3	125.8	92.4	18.26	17.05	17.30	39.2	40.3	38.5	46.3	41.5	44.9	
Apparel <sup>5</sup> .....	78.2	100.1	90.6	73.6	89.5	82.6	22.09	20.90	21.36	39.7	39.4	38.7	55.1	53.0	54.6	
Furniture <sup>5</sup> .....	76.0	83.1	80.6	66.8	75.2	72.1	28.31	29.16	28.66	43.5	44.2	44.1	67.8	67.4	67.1	
Automotive <sup>5</sup> .....	81.1	81.8	81.4	72.8	76.3	75.3	26.69	27.73	27.51	47.2	47.6	47.6	56.7	58.2	57.9	
Lumber <sup>5</sup> .....	69.6	73.4	75.1	64.4	69.2	70.7	25.77	26.33	26.30	41.6	42.8	42.8	63.3	62.7	62.8	
Hotels (year-round) <sup>3 4 7</sup> .....	91.4	90.8	91.8	81.0	81.1	81.8	15.39	15.51	15.54	46.2	46.4	46.5	33.2	33.1	33.2	
Laundries <sup>3</sup> .....	95.8	95.6	95.6	83.3	83.7	82.9	17.76	17.88	17.68	42.9	42.9	42.4	41.5	41.7	41.7	
Dyeing and cleaning <sup>3</sup> .....	93.9	97.4	97.8	65.8	69.9	70.8	19.41	19.86	19.89	39.9	41.5	41.2	49.9	49.5	50.0	
Brokerage <sup>4 8</sup> .....	-9	-8	-9	-1.7	+1.7	-1.2	37.15	37.44	36.44	(9)	(9)	(9)	(9)	(9)	(9)	
Insurance <sup>4 8</sup> .....	+6	(10)	-1	+2.6	+9	+3	37.06	36.34	36.21	(9)	(9)	(9)	(9)	(9)	(9)	
Building construction <sup>8</sup> .....	-16.7	-6.9	-3.1	-20.1	-7.0	-3.6	29.74	30.91	30.89	30.8	32.8	33.4	97.0	94.3	92.6	

<sup>1</sup> Revised series. Mimeographed sheets, giving averages by years, 1932 to 1938, inclusive, and by months, January 1933 to September 1939, inclusive, available on request. Average hours and average hourly earnings are computed from data supplied by a smaller number of establishments than average weekly earnings, 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.

<sup>2</sup> Average weekly earnings, average hours, and average hourly earnings not comparable to previously published averages because of change in reporting sample. Comparable October average weekly earnings, \$26.86; average hours, 39.1; average hourly earnings, 68.7 cents.

<sup>3</sup> Indexes adjusted to 1935 census. Comparable series back to January 1929 presented in January 1938 issue of this publication.

<sup>4</sup> Average weekly earnings, hourly earnings, and hours not strictly comparable with figures published in pamphlets prior to January 1938 as they now exclude corporation officers, executives, and other employees whose duties are mainly supervisory.

<sup>5</sup> Retail trade indexes adjusted to 1935 census and public utility indexes to 1937 census. Comparable series for earlier months available upon request.

<sup>6</sup> Covers street railways and trolley and motorbus operations of subsidiary, affiliated, and successor companies; formerly "electric-railroad and motorbus operation and maintenance."

<sup>7</sup> Cash payments only; additional value of board, room, and tips not included.

<sup>8</sup> Indexes of employment and pay rolls are not available; percentage changes from preceding month substituted.

<sup>9</sup> Not available.

<sup>10</sup> Less than 1/10 of 1 percent.

\*Average weekly earnings not comparable to previously published average because of change in reporting sample due to addition of new firms. Comparable October figure is \$21.53.

TABLE 5.—*Indexes of Employment and Pay Rolls in Selected Manufacturing<sup>1</sup> and Non-manufacturing<sup>2</sup> Industries, January 1939 to January 1940, Inclusive*

Industry	Employment													
	A.v. 1939	1939												1940
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
<i>Manufacturing</i>														
All industries.....	96.8	92.2	93.6	94.3	94.1	93.0	93.4	93.5	96.3	100.2	103.6	103.8	104.1	101.5
Durable goods <sup>3</sup> .....	87.8	82.3	83.3	84.1	84.8	84.0	84.6	83.0	83.9	89.8	96.1	98.2	100.0	97.4
Nondurable goods <sup>4</sup> .....	105.5	101.7	103.5	104.0	103.0	101.6	101.8	103.5	108.1	110.2	110.8	109.2	108.0	105.3
<i>Nonmanufacturing</i>														
Anthracite mining <sup>5</sup> .....	50.6	50.0	52.2	51.7	53.0	52.6	51.2	44.7	48.5	49.4	51.9	51.3	51.0	51.5
Bituminous-coal mining <sup>5</sup> .....	78.6	88.7	88.6	87.4	25.9	47.9	78.3	79.4	81.4	85.4	93.0	94.9	92.6	91.8
Metalliferous mining.....	62.7	62.6	60.9	61.0	61.5	61.9	61.6	60.4	60.4	62.9	65.3	66.5	67.3	66.6
Quarrying and nonmetallic mining.....	44.6	38.3	37.9	40.1	43.0	45.6	47.3	47.5	48.1	47.9	48.0	47.1	44.0	37.5
Crude-petroleum production.....	65.8	67.0	66.4	66.2	65.8	66.1	67.0	67.3	66.7	65.0	64.3	63.8	63.8	63.1
Telephone and telegraph <sup>6</sup> .....	75.8	75.1	74.3	74.4	75.1	75.8	76.4	76.5	76.6	76.4	76.5	76.1	75.8	76.2
Electric light and power <sup>6</sup> .....	89.0	87.4	86.9	87.0	87.7	88.2	89.2	90.0	90.6	90.6	90.4	90.3	90.1	89.0
Street railways and buses <sup>6,7</sup> .....	60.0	68.6	68.7	68.9	69.5	68.9	69.3	69.1	69.2	69.2	69.5	69.3	69.0	68.5
Wholesale trade.....	89.2	88.3	87.9	87.4	87.3	87.2	88.1	87.9	89.0	90.5	92.4	92.1	92.2	90.5
Retail trade <sup>6</sup> .....	89.8	85.4	84.9	86.9	88.5	88.8	89.4	87.2	86.3	90.5	91.7	93.3	104.2	88.3
Year-round hotels <sup>6</sup> .....	92.0	91.8	92.6	92.7	93.2	93.9	92.8	90.3	89.8	91.3	92.9	91.8	90.8	91.4
Laundries <sup>5</sup> .....	95.9	93.3	92.8	92.9	93.5	95.5	98.7	100.0	99.1	97.8	96.0	95.6	95.6	95.8
Dyeing and cleaning <sup>6</sup> .....	101.3	94.2	92.1	95.4	102.2	107.0	110.1	106.5	102.7	105.2	105.1	97.8	97.4	93.9
<i>Pay rolls</i>														
<i>Manufacturing</i>														
All industries.....	90.8	83.7	86.0	87.6	85.5	85.0	86.5	84.4	89.7	93.8	101.6	101.6	103.7	98.3
Durable goods <sup>3</sup> .....	85.2	76.0	77.7	79.4	79.5	78.8	80.7	76.0	81.5	87.8	99.6	100.9	104.6	98.2
Nondurable goods <sup>4</sup> .....	97.0	92.4	95.3	96.7	92.2	91.9	93.0	93.7	99.0	100.5	103.9	103.4	102.8	98.5
<i>Nonmanufacturing</i>														
Anthracite mining <sup>5</sup> .....	39.5	38.0	45.2	34.2	43.4	57.0	36.1	25.2	33.8	40.1	52.2	42.0	26.6	52.5
Bituminous-coal mining <sup>5</sup> .....	69.9	78.2	81.2	77.8	17.6	20.4	66.5	64.5	74.6	80.2	97.6	96.3	84.3	87.0
Metalliferous mining.....	56.0	55.3	53.4	53.6	52.6	54.1	53.8	48.5	53.0	55.1	63.4	63.9	65.0	63.1
Quarrying and nonmetallic mining.....	38.7	30.2	29.7	33.1	35.9	39.7	41.7	40.9	42.9	42.7	45.6	42.9	39.2	29.8
Crude-petroleum production.....	61.0	60.9	62.7	61.3	60.8	61.2	62.5	61.9	62.0	60.8	58.8	59.6	59.2	58.4
Telephone and telegraph <sup>6</sup> .....	95.6	93.9	93.6	93.8	94.0	95.7	95.7	96.6	96.3	96.9	97.2	96.4	97.4	98.6
Electric light and power <sup>6</sup> .....	100.4	97.3	97.7	98.2	98.3	99.9	101.2	101.1	102.2	102.2	102.0	102.5	102.4	101.1
Street railways and buses <sup>6,7</sup> .....	69.5	70.0	68.7	69.3	68.4	68.9	70.0	69.4	69.8	69.2	71.2	69.4	69.6	69.3
Wholesale trade.....	76.6	75.5	74.6	74.7	74.8	74.9	75.8	75.8	76.2	78.0	80.3	79.0	79.1	77.3
Retail trade <sup>6</sup> .....	80.8	77.6	76.5	77.7	79.6	79.9	81.1	79.5	78.0	80.9	83.2	83.6	91.8	80.8
Year-round hotels <sup>6</sup> .....	81.2	80.2	82.8	81.1	81.9	82.4	82.0	79.1	79.2	80.4	82.2	81.8	81.1	81.0
Laundries <sup>5</sup> .....	83.1	79.6	78.6	79.3	79.9	83.9	86.9	88.0	85.9	84.5	83.9	82.9	83.7	83.3
Dyeing and cleaning <sup>6</sup> .....	73.6	65.8	63.2	67.7	73.3	83.0	84.2	77.1	73.0	78.3	77.3	70.8	69.9	65.8

<sup>1</sup> 3-year average 1923-25=100—adjusted to 1937 Census of Manufactures.<sup>2</sup> 12-month average for 1929=100. Comparable indexes for quarrying, metal mining, and crude-petroleum production are in November 1934 and subsequent issues of EMPLOYMENT and PAY ROLLS, or in February 1935 and subsequent issues of MONTHLY LABOR REVIEW. For other nonmanufacturing indexes see notes 5 and 6.<sup>3</sup> Includes: Iron and steel, machinery, transportation equipment, nonferrous metals, lumber and allied products, and stone, clay, and glass products.<sup>4</sup> Includes: Textiles and their products, leather and its manufactures, food and kindred products, tobacco manufactures, paper and printing, chemicals and allied products, products of petroleum and coal, rubber products, and a number of miscellaneous industries not included in other groups.<sup>5</sup> Indexes have been adjusted to the 1935 census. Comparable series from January 1929 forward are presented in January 1938 and subsequent issues of EMPLOYMENT and PAY ROLLS.<sup>6</sup> Retail trade indexes adjusted to 1935 census and public utility indexes to 1937 census. Comparable series January 1929 to December 1939 available in mimeographed form.<sup>7</sup> Covers street railways and trolley and motorbus operations of subsidiary, affiliated, and successor companies.

## TREND OF INDUSTRIAL AND BUSINESS EMPLOYMENT, BY STATES

A comparison of employment and pay rolls, by States and geographic divisions, in December 1939 and January 1940 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 industries included in the manufacturing group and in the total for all groups have not been weighted according to their relative importance.

The totals for all manufacturing industries combined include figures for miscellaneous manufacturing industries in addition to the 90 manufacturing industries presented in table 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 production, 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 December 1939 and January 1940, 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]

Geographic division and State	Total—all groups					Manufacturing				
	Number of establishments	Number on pay roll January 1940	Percentage change from December 1939	Amount of pay roll (1 week) January 1940	Percentage change from December 1939	Number of establishments	Number on pay roll January 1940	Percentage change from December 1939	Amount of pay roll (1 week) January 1940	Percentage change from December 1939
				<i>Dollars</i>					<i>Dollars</i>	
<b>New England.....</b>	<b>12,472</b>	<b>905,248</b>	<b>-4.0</b>	<b>21,878,697</b>	<b>-3.9</b>	<b>3,492</b>	<b>632,709</b>	<b>-1.8</b>	<b>14,814,181</b>	<b>-3.3</b>
Maine.....	839	57,837	-1.5	1,230,303	-1.2	273	47,975	-3	988,756	-1
New Hampshire.....	627	42,242	-2.0	906,927	-1.2	198	35,195	-8	739,844	-(1)
Vermont.....	475	18,063	-5.4	405,418	-7.7	148	11,398	-5.8	251,002	-10.3
Massachusetts.....	<sup>2</sup> 7,569	<i>480,520</i>	<i>-4.7</i>	<i>11,592,291</i>	<i>-3.9</i>	<i>1,801</i>	<i>286,502</i>	<i>-1.3</i>	<i>6,588,271</i>	<i>-2.4</i>
Rhode Island.....	1,129	94,835	-6.4	2,114,235	-7.0	393	76,130	-5.4	1,643,015	-6.9
Connecticut.....	1,833	211,751	-2.4	5,627,520	-3.6	679	175,509	-1.3	4,603,293	-3.9
<b>Middle Atlantic.....</b>	<b>31,017</b>	<b>2,175,880</b>	<b>-5.5</b>	<b>59,498,197</b>	<b>-4.4</b>	<b>6,820</b>	<b>1,344,439</b>	<b>-2.2</b>	<b>36,219,770</b>	<b>-4.6</b>
New York.....	18,905	944,493	-6.8	26,591,804	-5.7	<sup>3</sup> 2,773	<i>474,020</i>	<i>-1.9</i>	<i>13,199,493</i>	<i>-3.5</i>
New Jersey.....	3,574	362,893	-3.7	9,684,530	-5.4	1,613	305,641	-3.1	8,115,752	-5.5
Pennsylvania.....	8,538	868,474	-4.8	23,221,863	-2.5	<i>2,434</i>	<i>564,778</i>	<i>-2.3</i>	<i>14,964,625</i>	<i>-5.4</i>
<b>East North Central.....</b>	<b>25,259</b>	<b>2,234,343</b>	<b>-4.8</b>	<b>63,253,330</b>	<b>-6.3</b>	<b>8,121</b>	<b>1,690,250</b>	<b>-2.5</b>	<b>49,068,662</b>	<b>-5.3</b>
Ohio.....	7,685	566,409	-5.5	15,768,179	-8.0	2,263	429,625	-2.2	12,334,561	-7.3
Indiana.....	<i>2,735</i>	<i>243,522</i>	<i>-5.5</i>	<i>6,405,462</i>	<i>-8.7</i>	<i>1,044</i>	<i>196,945</i>	<i>-4.9</i>	<i>5,291,555</i>	<i>-8.1</i>
Illinois.....	<sup>3</sup> <i>6,565</i>	<i>631,828</i>	<i>-4.2</i>	<i>17,173,416</i>	<i>-4.8</i>	<i>2,375</i>	<i>425,758</i>	<i>-3.1</i>	<i>11,554,378</i>	<i>-4.3</i>
Michigan.....	4,448	551,152	-4.2	17,597,563	-5.4	<i>1,002</i>	<i>466,104</i>	<i>-3.8</i>	<i>15,346,124</i>	<i>-3.0</i>
Wisconsin.....	<sup>4</sup> <i>3,826</i>	<i>241,402</i>	<i>-4.9</i>	<i>6,308,710</i>	<i>-6.2</i>	<sup>7</sup> <i>1,437</i>	<i>171,818</i>	<i>-2.0</i>	<i>4,542,061</i>	<i>-5.3</i>

See footnotes at end of table.



TABLE 6.—Comparison of Employment and Pay Rolls in Identical Establishments in December 1939 and January 1940, by Geographic Divisions and by States—Continued

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by the various State organizations]

Geographic division and State	Total—all groups					Manufacturing				
	Number of establishments	Number on pay roll January 1940	Percentage change from December 1939	Amount of pay roll (1 week) January 1940	Percentage change from December 1939	Number of establishments	Number on pay roll January 1940	Percentage change from December 1939	Amount of pay roll (1 week) January 1940	Percentage change from December 1939
				<i>Dollars</i>					<i>Dollars</i>	
<b>West North Central</b>	<b>12,281</b>	<b>444,978</b>	<b>-5.7</b>	<b>11,144,616</b>	<b>-5.7</b>	<b>2,333</b>	<b>220,084</b>	<b>-2.2</b>	<b>5,465,639</b>	<b>-4.7</b>
Minnesota	<sup>8</sup> 2,536	124,201	-8.0	3,384,462	-8.7	619	50,739	-4.4	1,532,278	-8.3
Iowa	1,906	64,858	-3.8	1,605,702	-3.2	345	38,489	-1.6	981,210	-3.2
Missouri	3,111	162,512	-4.4	3,974,207	-4.4	732	93,314	-1.6	2,206,592	-3.3
North Dakota	499	4,392	-7.0	109,564	-2.8	27	396	-2.9	10,079	-3.3
South Dakota	481	6,535	-2.0	153,559	-4.5	26	2,654	+2.6	67,862	+2.3
Nebraska	1,318	27,709	-6.9	638,976	-4.8	135	9,430	-6.2	243,098	-4.3
Kansas	<sup>9</sup> 2,430	54,771	<sup>10</sup> -22.4	1,278,146	<sup>4</sup> -5.5	449	25,062	-2.8	627,589	-4.3
<b>South Atlantic</b>	<b>10,031</b>	<b>900,938</b>	<b>-2.7</b>	<b>18,086,444</b>	<b>-4.6</b>	<b>2,843</b>	<b>614,766</b>	<b>-1.5</b>	<b>11,588,198</b>	<b>-4.0</b>
Delaware	237	16,420	-3.5	405,539	-5.5	78	11,453	-1.3	277,399	-4.0
Maryland	1,655	150,828	-4.9	3,794,261	-5.0	640	109,832	-1.3	2,761,712	-3.1
District of Columbia	1,051	39,959	-14.0	1,089,467	-9.6	39	3,173	-2.8	109,186	-5.6
Virginia	1,693	120,066	-4.0	2,381,125	-3.7	430	85,403	-1.2	1,665,874	-2.3
West Virginia	1,189	140,324	-3.5	3,574,877	-4.1	195	53,311	-3.6	1,351,754	-8.5
North Carolina	1,440	168,300	-2.9	2,665,585	-4.5	659	153,561	-1.2	2,413,888	-4.1
South Carolina	706	86,228	-3.1	1,395,308	-1.4	249	79,147	+1.6	1,172,955	-1.9
Georgia	1,219	130,232	+4.7	1,997,075	-4.6	370	97,418	-1.4	1,476,070	-4.5
Florida	941	48,581	-1.8	875,210	-4.5	183	21,468	-9.0	339,390	-10.9
<b>East North Central</b>	<b>4,662</b>	<b>300,897</b>	<b>-4.7</b>	<b>5,843,071</b>	<b>-2.6</b>	<b>978</b>	<b>191,232</b>	<b>-3.0</b>	<b>3,522,329</b>	<b>-4.3</b>
Kentucky	1,389	53,441	-4.5	1,853,967	+3.0	276	36,069	-2.6	795,635	-2.8
Tennessee	1,345	98,185	-5.7	1,832,753	-5.5	341	71,912	-3.3	1,333,384	-4.2
Alabama	1,340	98,457	-2.9	1,834,504	-3.8	269	69,492	-2.0	1,202,832	-4.3
Mississippi	588	20,814	-8.8	321,847	-8.4	92	13,809	-7.9	190,477	-9.6
<b>West South Central</b>	<b>4,998</b>	<b>201,387</b>	<b>-5.8</b>	<b>4,499,795</b>	<b>-5.8</b>	<b>1,170</b>	<b>100,963</b>	<b>-3.9</b>	<b>2,178,552</b>	<b>-6.4</b>
Arkansas	<sup>11</sup> 771	26,251	-11.3	440,944	-8.8	242	18,376	-8.4	301,371	-10.6
Louisiana	986	52,989	-7.2	1,054,193	-8.4	220	28,747	-6.6	536,866	-9.9
Oklahoma	1,299	36,391	-4.9	905,265	-5.1	135	10,520	-5.9	254,946	-8.3
Texas	1,980	85,756	-3.9	2,101,393	-4.1	673	43,320	+1.1	1,085,659	-2.5
<b>Mountain</b>	<b>3,928</b>	<b>119,615</b>	<b>-7.5</b>	<b>3,212,291</b>	<b>-4.9</b>	<b>596</b>	<b>32,435</b>	<b>-15.7</b>	<b>831,784</b>	<b>-15.8</b>
Montana	481	17,164	-8.1	495,298	-7.8	66	4,320	-17.6	116,932	-18.6
Idaho	576	10,085	-15.9	251,035	-15.7	58	2,464	-38.5	56,115	-41.8
Wyoming	323	7,729	-6.7	222,453	-2.1	35	1,068	-28.0	34,954	-24.5
Colorado	1,149	39,608	-6.3	1,050,233	-2.1	184	14,974	-9.0	396,719	-8.1
New Mexico	276	5,671	+ (1)	125,812	+1.5	27	697	-9.9	13,381	-2.7
Arizona	413	16,084	-2.6	469,257	-1.3	34	2,693	-4.8	65,684	-5.1
Utah	553	20,926	-11.0	528,040	-7.1	108	5,967	-20.0	140,789	-20.8
Nevada	155	2,347	-4.5	70,163	-5.6	14	252	-16.8	7,210	-19.1
<b>Pacific</b>	<b>10,130</b>	<b>474,616</b>	<b>-5.7</b>	<b>13,567,598</b>	<b>-5.5</b>	<b>2,653</b>	<b>252,859</b>	<b>-2.8</b>	<b>7,082,345</b>	<b>-4.6</b>
Washington	2,449	87,385	-5.8	2,382,609	-3.7	513	52,532	-1.7	1,451,476	-1.1
Oregon	1,118	41,896	-7.5	1,064,688	-7.9	283	24,950	-8.1	622,425	-9.8
California	<sup>12</sup> 6,663	345,335	-5.5	10,120,301	-5.6	1,857	175,368	-2.3	5,008,444	-5.1

<sup>1</sup> Less than 1/10 of 1 percent.<sup>2</sup> Includes banks and trust companies; construction, municipal, agricultural, and office employment; amusement and recreation; professional services; and trucking and handling.<sup>3</sup> Includes laundering and cleaning; and water, light, and power.<sup>4</sup> Weighted percentage change.<sup>5</sup> Includes automobile and miscellaneous services; restaurants; and building and contracting.<sup>6</sup> Includes construction but not public works.<sup>7</sup> Does not include logging.<sup>8</sup> 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.<sup>9</sup> Includes financial institutions, miscellaneous services, and restaurants.<sup>10</sup> Weighted percentage change, including hired farm labor.<sup>11</sup> Includes automobile dealers and garages; and sand, gravel, and building stone.<sup>12</sup> Includes banks, insurance, and office employment.

# INDUSTRIAL AND BUSINESS EMPLOYMENT IN PRINCIPAL METROPOLITAN AREAS

A comparison of employment and pay rolls in December 1939 and January 1940 is made in table 7 for 13 metropolitan areas, each of which had a population of 100,000 or over in 1930. Cities within these areas but having a population of 100,000 or over, are not included. Footnotes to the table specify which cities are excluded. Data concerning them have been prepared in a supplementary tabulation which is available on request. The figures represent reports from cooperating establishments and cover both full- and part-time workers in the manufacturing and nonmanufacturing industries presented in table 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 above. 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 December 1939 and January 1940 by Principal Metropolitan Areas*

Metropolitan area	Number of establishments January 1940	Number on pay roll January 1940	Percentage change from December 1939	Amount of pay roll (1 week) January 1940	Percentage change from December 1939
New York <sup>1</sup> ..	13, 277	616, 432	-7.9	\$17, 026, 529	-7.3
Chicago <sup>2</sup> .....	4, 328	454, 979	-4.6	12, 830, 594	-5.3
Philadelphia <sup>3</sup> ..	2, 250	209, 975	-5.0	5, 758, 680	-5.3
Detroit .....	1, 609	360, 209	-3.7	12, 252, 084	-3.6
Los Angeles <sup>4</sup> ..	2, 922	164, 150	-6.5	4, 751, 572	-6.7
Cleveland .....	1, 533	119, 285	-7.1	3, 452, 502	-8.6
St. Louis .....	1, 331	123, 356	-3.7	3, 121, 730	-4.9
Baltimore .....	1, 136	115, 769	-5.7	2, 925, 352	-5.6
Boston <sup>5</sup> .....	2, 996	183, 304	-6.2	4, 669, 988	-4.9
Pittsburgh .....	1, 166	192, 810	-4.5	5, 697, 723	-7.2
San Francisco <sup>6</sup> ..	1, 584	78, 238	-6.2	2, 326, 834	-6.7
Buffalo .....	767	72, 538	-4.4	2, 036, 937	-6.4
Milwaukee .....	980	102, 996	-4.6	2, 913, 704	-5.4

<sup>1</sup> Does not include Elizabeth, Jersey City, Newark, or Paterson, N. J., or Yonkers, N. Y.

<sup>2</sup> Does not include Gary, Ind.

<sup>3</sup> Does not include Camden, N. J.

<sup>4</sup> Does not include Long Beach, Calif.

<sup>5</sup> Does not include Cambridge, Lynn, or Somerville, Mass.

<sup>6</sup> Does not include Oakland, Calif.

## Public Employment

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

### EXECUTIVE SERVICE OF THE FEDERAL GOVERNMENT

Statistics of employment and pay rolls for the executive service of the Federal Government in January 1940 and December 1939 are given in table 8.

**TABLE 8.—Employment and Pay Rolls for the Executive Service of the United States Government, January 1940 and December 1939<sup>1</sup>**

[Subject to revision]

Class	Employment			Pay rolls		
	January 1940	December 1939 <sup>2</sup>	Percentage change	January 1940	December 1939 <sup>2</sup>	Percentage change
Entire service:						
Total.....	936,689	986,742	-5.1	\$143,963,368	\$152,256,658	-5.4
Regular appropriation.....	793,411	835,814	-5.1	125,658,053	134,163,345	-6.3
Emergency appropriation.....	57,604	57,902	-.5	7,410,060	7,396,238	+.2
Force-account.....	85,674	93,026	-7.9	10,895,255	10,697,075	+1.9
Inside the District of Columbia:						
Total.....	127,418	127,406	( <sup>3</sup> )	22,794,111	22,599,056	+ .9
Regular appropriation.....	112,280	112,276	( <sup>3</sup> )	20,392,222	20,254,304	+ .7
Emergency appropriation.....	8,701	8,853	-1.7	1,348,085	1,381,159	-2.4
Force-account.....	6,437	6,277	+2.5	1,053,804	963,593	+9.4
Outside the District of Columbia:						
Total.....	809,271	859,336	-5.8	121,169,257	129,657,602	-6.5
Regular appropriation.....	681,131	723,538	-5.9	105,265,831	113,909,041	-7.6
Emergency appropriation.....	48,903	49,049	-.3	6,061,975	6,015,079	+.8
Force-account.....	79,237	86,749	-8.7	9,841,451	9,733,482	+1.1

<sup>1</sup> Data include number of employees receiving pay during the last pay period of the month.

<sup>2</sup> Revised.

<sup>3</sup> Increase less than  $\frac{1}{10}$  of 1 percent.

### CONSTRUCTION PROJECTS FINANCED BY THE PUBLIC WORKS ADMINISTRATION

Details concerning employment, pay rolls, and man-hours worked during January 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, January 1940 <sup>1</sup>**

[Subject to revision]

Type of project	Wage earners		Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
	Maximum number employed <sup>2</sup>	Weekly average				
All programs.....	132,538	108,285	\$12,327,754	12,783,407	\$0.964	\$24,474,435
<b>Federal projects financed from National Industrial Recovery Act funds</b>						
All projects.....	<sup>3</sup> 815	736	\$65,562	94,507	\$0.694	\$104,253
Building construction.....	226	181	20,911	18,388	1.137	41,235
Naval vessels.....	5	5	675	699	.966	65
Public roads <sup>4</sup> .....	( <sup>5</sup> ) 243	243	21,423	30,082	.712	42,900
Reclamation.....	107	101	12,122	16,100	.753	4,828
River, harbor, and flood control....	54	36	2,004	3,354	.597	3,300
Water and sewerage.....	157	147	5,311	22,515	.236	11,650
Miscellaneous.....	23	23	3,116	3,369	.925	275
<b>Federal projects financed from Public Works Administration Appropriation Act 1938 funds</b>						
All projects.....	14,148	11,850	\$1,384,718	1,393,766	\$0.994	\$1,669,918
Airport construction (exclusive of buildings).....	711	649	68,145	98,816	.690	37,784
Building construction.....	9,721	7,960	933,355	886,922	1.052	1,284,084
Electrification.....	748	685	86,037	63,279	1.360	143,491
Reclamation.....	1,155	1,024	123,762	150,839	.820	117,298
River, harbor, and flood control....	619	525	55,227	62,074	.890	21,792
Ship construction.....	313	257	31,221	29,934	1.043	31,189
Streets and roads.....	77	73	7,897	9,964	.793	9,702
Water and sewerage.....	201	179	11,917	13,826	.862	7,469
Miscellaneous.....	313	279	29,777	36,320	.820	13,975
Professional, technical, and clerical....	290	219	37,380	41,792	.894	3,134
<b>Non-Federal projects financed from National Industrial Recovery Act funds</b>						
All projects <sup>6</sup> .....	4,458	3,876	\$545,463	549,388	\$0.993	\$491,973
Building construction <sup>6</sup> .....	2,571	2,325	444,952	339,048	1.312	290,831
Railroad construction.....	35	35	64	94	.681	0
Streets and roads.....	383	242	16,015	23,749	.674	46,739
Water and sewerage.....	40	31	2,830	1,828	1.548	5,238
Miscellaneous.....	1,429	1,243	81,602	184,669	.442	149,165
<b>Non-Federal projects financed from Emergency Relief Appropriation Act 1935, 1936, and 1937 funds</b>						
All projects.....	9,466	7,929	\$862,605	1,120,965	\$0.770	\$1,323,176
Building construction.....	1,124	951	107,900	109,753	.983	331,589
Electrification.....	940	777	66,512	98,640	.674	152,398
Heavy engineering.....	4,998	4,213	442,820	608,338	.728	349,674
Reclamation.....	807	617	104,607	132,203	.791	21,921
Streets and roads.....	19	13	305	392	.778	211,000
Water and sewerage.....	1,564	1,340	140,199	171,158	.819	261,594
Miscellaneous.....	14	8	262	481	.545	0

<sup>1</sup> Data are for the month ending on the 15th.

<sup>2</sup> Maximum number employed during any 1 week of the month by each contractor and Government agency doing force-account work.

<sup>3</sup> Includes weekly average for public roads.

<sup>4</sup> Under the jurisdiction of the Public Roads Administration.

<sup>5</sup> Not available; weekly average included in total for all projects.

<sup>6</sup> Includes data for workers engaged in construction of underground tunnel who, because of the additional risk involved, were paid at rates higher than those usually paid for building construction.

**TABLE 9.—Employment and Pay Rolls on Projects Financed From Public Works Administration Funds, January 1940—Continued**

[Subject to revision]

Type of project	Wage earners		Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
	Maximum number employed	Weekly average				
	Non-Federal projects financed from Public Works Administration Appropriation Act 1938 funds					
All projects-----	103, 651	83, 894	\$9, 469, 406	9, 624, 781	\$0. 984	\$20, 880, 115
Building construction.....	53, 418	43, 364	4, 672, 429	4, 476, 793	1. 044	9, 256, 158
Electrification.....	1, 588	1, 284	101, 198	134, 474	. 753	587, 097
Heavy engineering..	15, 804	13, 056	1, 808, 060	1, 560, 931	1. 158	2, 960, 503
Reclamation.....	764	603	70, 792	86, 923	. 814	33, 053
River, harbor, and flood control....	128	104	10, 041	13, 234	. 759	15, 210
Streets and roads.....	14, 129	10, 949	1, 125, 904	1, 415, 063	. 796	2, 059, 697
Water and sewerage....	17, 706	14, 450	1, 676, 147	1, 931, 085	. 868	2, 419, 210
Miscellaneous.....	114	84	4, 835	6, 278	. 770	3, 549, 187

### UNITED STATES HOUSING AUTHORITY

Table 10 shows data for January 1940 on projects of the United States Housing Authority. These figures pertain only to new projects under the United States Housing Authority and not to those formerly under the Public Works Administration.

**TABLE 10.—Employment and Pay Rolls on Low-Rent Housing Projects Operated by the United States Housing Authority, January 1940**

[Subject to revision]

Geographic division	Employment		Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
	Maximum number employed <sup>1</sup>	Weekly average				
Nine divisions..	32, 313	26, 770	\$2, 987, 099	3, 016, 420	\$0. 990	\$5, 616, 865
New England....	1, 294	1, 182	134, 292	127, 770	1. 051	94, 609
Middle Atlantic....	9, 843	8, 016	1, 123, 672	888, 607	1. 265	1, 648, 999
East North Central..	3, 092	2, 470	355, 802	307, 189	1. 158	456, 526
West North Central..	567	379	43, 632	48, 514	. 899	41, 570
South Atlantic....	8, 135	6, 881	604, 752	780, 227	. 775	1, 694, 942
East South Central..	5, 339	4, 367	381, 025	450, 857	. 845	1, 034, 856
West South Central..	3, 320	2, 886	276, 992	341, 722	. 811	480, 243
Pacific.....	466	369	51, 951	48, 614	1. 069	79, 640
Outside continental United States..	257	220	14, 981	22, 920	. 654	105, 480

<sup>1</sup> Maximum employed during any 1 week of the month.

### WORK PROJECTS ADMINISTRATION PROGRAM

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

TABLE 11.—*Employment and Pay Rolls on Projects Financed by the Work Projects Administration, January 1940*

[Subject to revision]

Type of project	Wage earners		Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
	Maximum number employed	Weekly average				
	Federal agency projects					
All projects . . . . .	1 96,663	92,141	\$4,411,390	10,778,896	\$0.409	\$600,235
Airport construction (exclusive of buildings) . . . . .	1,360	1,351	64,239	152,029	.423	3,490
Building construction . . . . .	41,102	38,790	1,911,303	4,357,585	.439	296,333
Electrification . . . . .	145	133	5,686	15,192	.374	523
Forestry . . . . .	8,215	8,163	397,163	979,095	.406	51,509
Grade-crossing elimination <sup>2</sup> . . . . .	206	171	8,708	18,779	.464	24,555
Hydroelectric power plants <sup>3</sup> . . . . .	1,069	1,022	38,127	154,093	.247	18,910
Plant, crop, and livestock conservation . . . . .	7,368	7,210	387,715	851,641	.455	47,080
Professional, technical, and clerical . . . . .	5,304	5,221	370,177	628,421	.589	10,123
Public roads <sup>2</sup> . . . . .	466	369	32,722	46,371	.706	13,466
Reclamation . . . . .	18,989	18,300	827,918	2,167,612	.382	72,283
River, harbor, and flood control . . . . .	642	538	32,760	59,848	.547	13,806
Streets and roads . . . . .	3,251	2,985	105,893	376,888	.281	7,759
Water and sewerage . . . . .	668	586	17,693	64,266	.275	8,096
Miscellaneous . . . . .	7,878	7,302	211,286	907,076	.233	32,302
	Projects operated by Work Projects Administration <sup>4</sup>					
All projects . . . . .	<sup>5</sup> 2,191,741	-	\$106,141,564	240,335,978	\$0.442	( <sup>6</sup> )

<sup>1</sup> Maximum number employed during any 1 week of the month by each contractor and Government agency doing force-account work.

<sup>2</sup> These data are for projects under the jurisdiction of the Public Roads Administration.

<sup>3</sup> These data are for projects under construction in Puerto Rico.

<sup>4</sup> Data are for the calendar month. Not available by type of project.

<sup>5</sup> Represents number of names on pay roll as of Jan. 31, 1940.

<sup>6</sup> Data on a monthly basis are not available.

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

TABLE 12.—*Employment and Pay Rolls on Projects Operated by the Work Projects Administration, by Type of Project, for Month of December 1939* <sup>1</sup>

[Subject to revision]

Type of project	Number employed <sup>2</sup>	Pay-roll disbursements	Number of man-hours worked	Average earnings per hour
All projects.	2,069,754	\$107,658,148	245,842,653	\$0.438
Conservation.	61,672	3,093,776	7,200,028	.430
Highway, road, and street.	903,613	42,328,930	106,003,787	.399
Professional, technical, and clerical.	327,728	20,685,306	41,115,775	.503
Public buildings.	164,411	9,585,730	19,641,197	.488
Publicly owned or operated utilities.	208,992	10,787,364	23,789,944	.453
Recreational facilities.	125,893	6,905,608	14,689,651	.470
Sanitation and health.	36,229	1,724,853	4,288,046	.402
Sewing, canning, and gardening, etc.	169,528	7,745,663	20,165,120	.384
Transportation.	23,543	1,468,315	2,806,145	.523
Not elsewhere classified.	48,145	3,332,603	6,142,960	.543

<sup>1</sup> Revised.

<sup>2</sup> Data are as of Dec. 27, 1939.

### NATIONAL YOUTH ADMINISTRATION

Employment and pay rolls on the National Youth Administration projects for December 1939 and January 1940 are shown in table 13.

**TABLE 13.—Employment and Pay Rolls on National Youth Administration Projects, December 1939 and January 1940**

[Subject to revision]

Type of project	Number of employees		Amount of pay rolls	
	January	December	January	December
Total .....	759,824	729,645	\$8,674,068	\$8,395,484
Student work program .....	437,457	434,350	2,858,839	2,967,327
Out-of-school work program .....	322,367	295,295	5,815,229	5,428,157

### CIVILIAN CONSERVATION CORPS

Employment and pay rolls in the Civilian Conservation Corps in December 1939 and January 1940 are presented in table 14.

**TABLE 14.—Employment and Pay Rolls in the Civilian Conservation Corps, December 1939 and January 1940 <sup>1</sup>**

[Subject to revision]

Group	Number of employees		Amount of pay rolls	
	January 1940	December 1939	January 1940	December 1939
All groups .....	336,725	308,569	\$14,066,446	\$13,775,996
Enrolled personnel <sup>2</sup> .....	300,072	271,584	9,339,218	8,442,646
Nurses <sup>3</sup> .....	287	293	39,897	40,056
Educational advisers <sup>3</sup> .....	1,686	1,591	295,325	268,951
Supervisory and technical <sup>3</sup> .....	34,680	35,101	4,992,006	5,024,343

<sup>1</sup> Data on number of employees refer to employment on last day of month. Amount of pay rolls are for the entire month.

<sup>2</sup> January data include 4,381 enrollees and pay roll of \$97,023 outside continental United States; in December the corresponding figures were 4,672 enrollees and pay roll of \$102,425.

<sup>3</sup> Included in executive service, table 8.

### 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 January 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, January 1940*<sup>1</sup>

[Subject to revision]

Type of project	Maximum number of wage earners <sup>2</sup>	Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
All projects..	2,260	\$227,685	239,285	\$0.952	\$519,921
Streets and roads.....	14	1,011	1,286	.786	46,528
Building construction <sup>3</sup> ..	2,109	204,540	216,550	.945	455,360
Water and sewerage...	137	22,134	21,449	1.032	18,033

<sup>1</sup> Data are for the month ending on the 15th.

<sup>2</sup> Maximum number employed during any 1 week of the month by each contractor.

<sup>3</sup> Includes 803 employees, pay-roll disbursements of \$75,852, 70,244 man-hours worked, and material orders placed of \$141,336 on projects financed by the RFC Mortgage Co.

### CONSTRUCTION PROJECTS FINANCED FROM REGULAR FEDERAL APPROPRIATIONS

Data concerning employment, pay rolls, and man-hours worked on construction projects financed from regular Federal appropriations during January are given in table 16, by type of project.

TABLE 16.—*Employment and Pay Rolls on Construction Projects Financed From Regular Federal Appropriations, by Type of Project, January 1940*<sup>1</sup>

[Subject to revision]

Type of project	Number of wage earners		Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
	Maximum number employed <sup>2</sup>	Weekly average				
All projects..	<sup>3</sup> 206,945	189,120	\$22,259,156	27,883,432	\$0.798	\$36,963,254
Building construction..	21,222	17,514	1,954,016	2,019,059	.968	3,907,514
Electrification:						
Rural Electrification Administration projects <sup>4</sup> .....	11,864	9,683	642,657	1,254,119	.512	2,538,806
Other than R. E. A. projects..	192	123	7,653	12,096	.633	1,593
Forestry.....	34	34	1,440	3,299	.436	552
Heavy engineering...	70	60	9,059	7,678	1.180	1,176
Public roads <sup>5</sup> ..	( <sup>6</sup> )	25,277	2,057,109	3,230,536	.637	3,428,515
Reclamation.....	21,539	20,051	2,621,039	2,924,203	.896	2,658,327
River, harbor, and flood control:						
Dredging, dikes, revetments, etc...	28,684	24,482	2,582,594	3,961,355	.652	2,876,013
Locks and dams..	8,355	7,532	1,051,524	1,212,021	.868	848,383
Ship construction:						
Naval vessels.....	62,922	60,745	8,945,145	10,104,965	.885	10,646,513
Other than naval vessels..	18,197	15,785	1,827,645	2,228,698	.820	8,533,785
Streets and roads.....	2,812	2,496	191,077	302,429	.632	218,485
Water and sewerage...	354	238	17,668	23,731	.745	43,853
Miscellaneous.....	5,423	5,100	350,530	599,243	.585	1,259,739

<sup>1</sup> Data are for the month ending on the 15th.

<sup>2</sup> Maximum number employed during any 1 week of the month by each contractor and Government agency doing force-account work.

<sup>3</sup> Includes weekly average for public-road projects.

<sup>4</sup> Financed by Rural Electrification Administration loans.

<sup>5</sup> Under the jurisdiction of the Public Roads Administration.

<sup>6</sup> Not available, weekly average included in the total for all projects.



## STATE-ROADS PROJECTS

A record of employment and pay-roll disbursements in the construction and maintenance of roads financed wholly from State or local funds in January 1940, compared with December 1939, and January 1939, is presented in table 17.

TABLE 17.—*Employment and Pay Rolls on Construction and Maintenance of State Roads, January 1940, December 1939, and January 1939*<sup>1</sup>

[Subject to revision]

Item	Number of employees <sup>2</sup>			Pay-roll disbursements		
	January 1940	December 1939	January 1939	January 1940	December 1939	January 1939
Total.....	119, 249	122, 882	143, 445	\$9, 017, 665	\$9, 030, 150	\$10, 243, 100
New roads.....	16, 502	19, 066	15, 254	1, 091, 019	1, 246, 390	989, 610
Maintenance.....	102, 747	103, 816	128, 191	7, 926, 646	7, 783, 760	9, 253, 490

<sup>1</sup> January 1940 data are for the calendar month; January and December 1939, for months ending on the 15th. Data are for projects financed wholly from State or local funds.

<sup>2</sup> Average number working during month.

