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EMPLOYMENT AND PAY ROLLS

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Employment and Pay Rolls

SUMMARY OF REPORTS FOR OCTOBER 1938

Total Nonagricultural Employment

THERE was a further substantial gain in nonagricultural employment in October. The addition of 255,000 workers to pay rolls since September marked the third successive monthly gain and brought the total increase since July to approximately 950,000. These figures do not include employees on projects of the Works Progress Administration and other Federal emergency agencies or temporary cannery workers who are not considered part of the normal labor supply, but are drawn into industry during the packing season.

Factory employment continued the upswing which began in July. The gain of 0.8 percent between September and October was larger than seasonal and represented the addition of 52,000 workers to the pay rolls of manufacturing industries including canning. The canning industry alone showed a reduction of approximately 104,000 in the number of workers, but this decrease was concentrated among the temporary workers mentioned above. The weekly wage disbursements of manufacturing firms showed an increase of 3.6 percent, or approximately \$5,400,000. Usual seasonal gains for manufacturing in October are 0.3 percent in employment and 1.6 percent in pay rolls.

Gains in employment, largely seasonal, were reported by wholesale and retail trade establishments, anthracite and bituminous-coal mines, metal mines, private building construction, electric railroads, and hotels. The remaining eight nonmanufacturing industries surveyed showed employment declines. Class I railroads added more than 12,000 to the number of employees on their rolls according to a preliminary report of the Interstate Commerce Commission.

In October employment increased on all work programs financed from Federal funds with the exception of work projects of the National Youth Administration and construction projects financed from regular Federal appropriations. In the regular services of the Federal Government increases occurred in the judicial service and decreases in the executive, legislative, and military services.

Industrial and Business Employment

Gains in employment were reported for 62 of the 87 manufacturing and 8 of the 16 nonmanufacturing industries regularly surveyed each month by the Bureau. The increase for all manufacturing industries combined was 0.8 percent as compared with an expected seasonal change of 0.3 percent. Corresponding factory pay rolls rose 3.6 percent instead of the 1.6 percent normally shown for October. The durable goods group of manufacturing industries showed an employment expansion of 5.0 percent, while the nondurable goods group showed a decline of 2.4 percent.

The outstanding factory employment gain in October was in the automobile industry in which approximately 88,000 workers were returned to jobs. This gain reflected the increased production of new models. The hardware industry, due largely to demand for automobile hardware, reported a gain of nearly 7,000 workers. Other durable goods industries reporting substantial gains were electrical machinery, apparatus, and supplies (7,400 workers); steel mills (6,100); radios and phonographs (4,300); glass (3,800); stamped and enameled ware (2,500); brass, bronze, and copper products (2,500); agricultural implements (1,500); and shipbuilding (1,200 workers). Nondurable goods industries in which seasonal gains were shown included beet sugar (13,200 workers); men's furnishings (2,200); cotton goods (2,200); cottonseed oil, cake, and meal (1,200); confectionery (3,200); leather (1,400); automobile tires (1,200); knit goods (5,200); chemicals (1,500); and slaughtering and meat packing (2,400).

The more pronounced losses in manufacturing employment over the month interval were in industries in which seasonal recessions normally occur in October. The largest decrease (104,000 workers) occurred in canning and preserving. Other nondurable industries reporting declines of a seasonal character were ice cream, beverages, boots and shoes, silk and rayon goods, millinery, and men's clothing. Among the durable goods industries showing losses were tin cans and other tinware, electric and steam railroad car building; and marble, slate, and granite products.

Retail trade establishments hired approximately 45,000 additional workers in October to handle the increased volume of fall business. While the gain is less than the average October increase during the preceding 9 years, the gain from August to October 1938 is greater than the average August-October gain in preceding years. The retail general merchandise group, which is composed of department, variety, and general merchandise stores, and mail-order houses, showed a gain of 2.5 percent. Other lines of retail trade showing substantial gains in the number of workers included apparel, furniture, jewelry, and building materials. Retail food stores showed a decrease of only one-

tenth of 1 percent. Wholesale trade establishments reported a seasonal gain of approximately 11,000 workers over the month interval. Among the lines of wholesale trade in which large gains were shown were farm products, automobiles, lumber and building materials, furniture, and dry goods and apparel. Anthracite mines continued to reemploy workers, employment increasing 12.8 percent, or 8,500 workers, since September. Bituminous coal mines also added workers, the rise of 4.5 percent indicating the reemployment of 17,400 men. A further expansion in employment of 4.9 percent, or 3,000 workers, was reported in metal mines. Electric railroad and bus companies added approximately 1,600 workers to their pay rolls and year-round hotels took on 3,200 additional employees. Employment in private building construction showed a more pronounced gain than the average for the preceding 6-year period. Reports from 14,634 private building contractors employing 132,360 workers showed an increase of 3.2 percent.

The employment loss in the laundry industry was 4,800. Crude-petroleum producing companies employed 3.1 percent fewer workers and small decreases were shown in the brokerage, insurance, dyeing and cleaning, and electric light and power industries. The decreases in employment in the remaining industries covered, quarrying and telephone and telegraph, were 0.5 percent and 0.2 percent, respectively.

A preliminary report of the Interstate Commerce Commission indicated a gain of 1.4 percent, or 12,131, in the number of employees on class I railroads. October pay rolls for railroads were not available when this report went to press. For September they were \$148,511,507 as against \$148,793,156 for August, a decline of \$281,649, or 0.2 percent.

Hours and earnings.—The average hours worked per week by factory wage earners were 37.4 in October, a gain of 1.4 percent since September. The corresponding average hourly earnings were 63.7 cents or 1.0 percent higher than in September. Average weekly earnings stood at \$23.92, a gain of 2.7 percent since September.

Of the 14 nonmanufacturing industries for which man-hour data are available, 9 showed gains in average hours worked per week and a like number showed increases in average hourly earnings. Average weekly earnings were higher for 12 of the 16 nonmanufacturing industries surveyed.

Prior to January 1938 the wording of the definition on the schedules for public utilities, wholesale and retail trade, hotels, and brokerage and insurance firms called for the inclusion of higher-salaried employees such as corporation officers, executives, and others whose duties are mainly supervisory. These employees have, for the most part, always been excluded from employment reports for other industries,

and beginning with January it was requested that they be omitted also for the industries named above. For this reason the average hours worked per week, average hourly earnings, and average weekly earnings for these industries are not comparable with the figures appearing in issues of this pamphlet dated earlier than January 1938.

Employment and pay-roll indexes and average weekly earnings in October 1938 for all manufacturing industries combined, for selected nonmanufacturing industries, and for class I railroads, with percentage changes over the month and year intervals except in the few industries for which data are not available, are presented in table 1.

TABLE 1.—*Employment, Pay Rolls, and Earnings in All Manufacturing Industries Combined and in Nonmanufacturing Industries, October 1938*

Industry	Employment			Pay roll			Average weekly earnings		
	Index October 1938	Percentage change from—		Index October 1938	Percentage change from—		Average in October 1938	Percentage change from—	
		September 1938	October 1937		September 1938	October 1937		September 1938	October 1937
All manufacturing industries combined ¹	(1923-25=100) 89.5	+0.8	-18.5	(1923-25=100) 83.9	+3.6	-19.7	\$23.92	+2.7	-3.9
Class I steam railroads ¹	54.6	+1.4	-12.6	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Coal mining:	(1929=100)			(1929=100)					
Anthracite ²	52.4	+12.8	-14.9	43.4	+47.5	-21.7	26.99	+30.8	-8.1
Bituminous ²	87.2	+4.5	-14.8	78.3	+8.8	-22.2	23.84	+4.2	-8.7
Metalliferous mining.....	57.9	+4.9	-30.1	49.2	+6.8	-30.8	26.52	+1.8	-13.8
Quarrying and nonmetallic mining.....	44.4	-5	-16.8	39.2	+2.2	-20.6	22.37	+2.7	-4.5
Crude-petroleum producing....	69.3	-3.1	-10.5	63.9	-3.9	-8.6	33.30	-.8	+2.2
Public utilities:									
Telephone and telegraph....	74.7	-.2	-6.1	95.3	+3.0	+4	\$ 31.57	+3.2	+7.0
Electric light and power and manufactured gas....	92.5	-(¹)	-6.2	99.8	+1.5	-5.2	\$ 33.79	+1.5	+1.1
Electric-railroad and motorbus operation and maintenance.....	69.9	+8	-4.8	68.9	+6	-3.5	\$ 32.22	-.2	+1.3
Trade:									
Wholesale.....	89.2	+8	-5.1	75.1	+1.1	-5.3	\$ 29.69	+4	-.2
Retail.....	86.1	+1.4	-6.5	71.1	+2.0	-6.3	\$ 21.04	+6	+1
General merchandising.....	100.7	+2.5	-6.8	89.7	+3.4	-6.7	\$ 17.62	+9	+2
Other than general merchandising.....	82.3	+9	-6.4	67.2	+1.7	-6.3	\$ 24.04	+8	+1
Hotels (year-round) ³ & ⁴	92.9	+1.2	-4.2	80.8	+2.5	-3.9	\$ 15.04	+1.3	+3
Laundries ⁵	94.4	-2.2	-5.5	79.5	-2.3	-4.7	17.24	-.1	+8
Dyeing and cleaning ⁵	106.8	-1.0	-3.4	78.0	-4.5	-6.7	19.91	-3.6	-3.4
Brokerage.....	(¹)	-.9	-11.4	(¹)	+1.2	-16.0	\$ 35.76	+2.1	-5.2
Insurance.....	(¹)	-.4	+2.5	(¹)	+1	-1.9	\$ 35.50	+5	-4.4
Building construction.....	(¹)	+3.2	-26.7	(¹)	+5.0	-27.0	30.19	+1.7	-.8

¹ Revised indexes—Adjusted to 1935 Census of Manufactures. Indexes for earlier months and years given in the August issue of this pamphlet.

² Does not include railroad repair shops.

³ Preliminary—Source: Interstate Commerce Commission.

⁴ Not available.

⁵ Indexes adjusted to 1935 Census. Comparable series back to January 1929 presented in January 1938 issue of this pamphlet.

⁶ 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.

⁷ Less than $\frac{1}{10}$ of 1 percent.

⁸ Cash payments only: the additional value of board, room, and tips cannot be computed.

Public Employment

The number at work on P. W. A. projects during the month ending October 15 was 148,000, an increase of 29,000 from September and 6,000 less than the October 1937 employment figure. The gain in employment was due to the marked increase in workers on projects financed from funds provided by the Public Works Administration Appropriation Act of 1938. Of the total number at work in October, 18,000 were working on Federal and non-Federal projects financed from National Industrial Recovery Act funds, 68,000 on non-Federal projects financed from funds provided by the Emergency Relief Appropriation Acts of 1935, 1936, and 1937, and 62,000 on Federal and non-Federal projects financed with funds provided by the Public Works Administration Appropriation Act of 1938. Pay-roll disbursements of \$12,090,000 were \$2,110,000 above the September pay roll.

During the month ending October 15, over 700 men were working on new construction and demolition projects of the U. S. Housing Authority; pay rolls amounted to \$103,000. These figures pertain only to new projects under the U. S. Housing Authority and not to those formerly under the Public Works Administration.

There was a decrease of 4,000 in the number working on construction projects financed by regular Federal appropriations during the month ending October 15 due primarily to a transfer of workers paid from regular Federal appropriations on reclamation projects to P. W. A. pay rolls. Compared with the level of a year ago, 41,000 more men were at work in October 1938. Decreases in employment since September were reported on projects with the exception of the following types: Building construction, forestry, heavy engineering, and ship construction. Pay-roll disbursements of \$24,650,000 were \$2,854,000 less than in September and \$3,738,000 greater than in October 1937.

A decrease in the number of men at work on water and sewerage projects financed by the Reconstruction Finance Corporation and the completion of miscellaneous projects failed to offset a relatively sharp rise in employment on building construction. During the month ending October 15 slightly over 3,000 were working. Pay rolls for the period were \$388,000 or \$7,000 less than during September. Most of the building construction projects were located in the South where hourly rates are lower than in other parts of the country. Moreover, a large number of the lower paid workers, such as common laborers, were at work during the period covered.

An increase of 125,000 was reported for projects operated by the Works Progress Administration, where the number working in October was 3,245,000 and pay rolls amounted to \$170,347,000. In October 1938 employment exceeded that for October 1937 by 1,718,000; pay rolls were \$88,861,000 higher. Employment on Federal projects under The Works Program, for which reports show activity in the month ending October 15, showed a gain of 3,000 from September. Compared with a year ago, however, the number working was 78,000 less. The number employed on work projects of the National Youth Administration was 220,000. Data on employment and pay rolls for Student Aid in October will not be available until next month.

In the regular services of the Federal Government increases in the number working were reported for the judicial service; decreases occurred in the executive, legislative, and military services. Of the 870,000 employees in the executive service in October 118,000 were working in the District of Columbia and 752,000 outside the District. Force-account employees (employees who are on the Federal pay roll and are engaged on construction projects) were 10 percent of the total number of employees in the executive service. Increases in employment occurred in the Navy Department, the Department of Commerce, the Tennessee Valley Authority, and the administrative staff of the Public Works Administration. The Department of Agriculture and the Post Office Department were among the agencies reporting decreases in the number working.

A new enlistment period started for the Civilian Conservation Corps, resulting in an increase of more than 7,000. Of the 325,000 in camps in October 287,000 were enrollees, 5,000 reserve officers, 300 nurses, 1,600 educational advisers, and 31,000 supervisory and technical employees. Monthly pay-roll disbursements for all groups of workers totaled \$14,603,000.

On State-financed road projects the number of men working increased 16,000 during the month ending October 15. Of the 221,000 at work 35,000 were engaged on new road construction and 186,000 on maintenance. Pay rolls for both types of work were \$14,496,000 an increase of \$545,000 over September pay-roll disbursements.

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

TABLE 2.—*Summary of Federal Employment and Pay Rolls, October 1938*¹

[Preliminary figures]

Class	Employment		Per- cent- age change	Pay rolls		Per- cent- age change
	October	September		October	September	
Federal services:						•
Executive ²	869,885	870,859	-0.1	\$131,087,375	\$131,931,961	-0.6
Judicial.....	2,265	2,170	+4.4	548,093	544,404	+7
Legislative.....	5,244	5,390	-2.7	1,217,374	1,235,210	-1.4
Military.....	337,408	339,127	-5	26,791,118	27,346,929	-2.0
Construction projects:						
Financed by P. W. A. ³	147,973	118,886	+24.5	12,090,092	9,979,680	+21.1
U. S. H. A. low-cost housing.....	727	436	+66.7	102,658	71,947	+42.7
Financed by R. F. C. ⁴	3,305	2,829	+16.8	388,027	395,189	-1.8
Financed by regular Federal appropriations.....	259,402	263,721	-1.6	24,649,559	27,503,233	-10.4
Federal projects under The Works Program.....	120,754	117,518	+2.8	6,055,209	6,020,021	+7
Projects operated by W. P. A.	3,245,271	3,120,399	+4.0	170,347,326	164,507,381	+3.5
National Youth Administration:						
Work projects.....	220,066	220,756	-3	4,012,209	3,927,491	+2.2
Student Aid.....	(5)	44,805	-----	(5)	190,999	-----
Civilian Conservation Corps.....	324,747	317,252	+2.4	14,602,688	14,467,301	+9

¹ Includes data on projects financed wholly or partially from Federal funds.² Includes force-account and supervisory and technical employees shown under other classifications to the extent of 116,408 employees and pay-roll disbursements of \$14,372,651 for October and 118,450 employees and pay-roll disbursements of \$14,519,415 for September.³ Revised.⁴ Data covering P. W. A. projects financed from 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 The Works Program. Includes 67,733 wage earners and \$5,866,208 pay roll for October; 80,860 wage earners and \$7,068,139 for September, covering Public Works Administration projects financed from Emergency Relief Appropriation Acts of 1935, 1936, and 1937 funds. Includes 62,550 wage earners and \$4,471,342 pay roll for October; 18,984 and \$1,187,308 pay roll for September, covering Public Works Administration projects financed from funds provided by the Public Works Administration Appropriation Act of 1938.⁵ Includes 283 employees and pay-roll disbursements of \$30,771 for October; 241 employees and pay-roll disbursements of \$20,152 for September on projects financed by the RFC Mortgage Co.⁶ Data not available.

DETAILED TABLES FOR OCTOBER 1938

Industrial and Business Employment

MONTHLY reports on employment and pay rolls are available for the following groups: 87 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, and in virtually all industries the samples are large enough to be entirely representative. The figures on class I steam railroads are compiled by the Interstate Commerce Commission and are presented in the foregoing summary.

EMPLOYMENT, PAY ROLLS, HOURS, AND EARNINGS

The indexes of employment and pay rolls as well as average hours worked per week, average hourly earnings, and average weekly earnings in manufacturing and nonmanufacturing industries in October

1938 are shown in table 3. Percentage changes from September 1938 and October 1937 are also given.

The indexes for the manufacturing industries have been adjusted to the 1935 Census of Manufactures and are not comparable to those published in the July 1938 and earlier issues of this pamphlet. Electric and steam railroad repair shops have been excluded from the new series in keeping with the reclassification for the 1937 Census of Manufactures.

The average hours worked per week, average hourly earnings, and average weekly earnings for all manufacturing industries combined now relate to 87 industries instead of 89, because of the exclusion of electric and steam railroad repair shops. This exclusion also affects the averages for the durable-goods group because these industries were classified in that group. The average hours and hourly earnings for the 87 manufacturing industries combined, and for the manufacturing groups are weighted on the basis of estimated employment for the separate industries. As these estimates have been affected by the revision of the indexes, it follows that the weighted averages for September and October differ from the averages that would result if the former estimates of employment were used as weights. Revised averages for earlier months will be computed and made available in the near future.

The indexes and averages for the iron and steel group and the nonferrous metal products group have been affected by the transfer of the stamped and enameled ware industry from the latter group to the former. The indexes, hours, and hourly earnings for the knit-goods industry are now weighted on the basis of four subdivisions (hosiery, knitted outerwear, knitted underwear, and knitted cloth) for which separate figures are now given. Tractor manufacturing establishments have been transferred from the engine, turbine, water wheel, and windmill industry to the agricultural implements industry, thereby affecting the figures for both industries.

The revised series of employment and pay-roll indexes, as well as average hours worked per week, average hourly earnings, and average weekly earnings for August, September, and October 1938, where available, are presented in table 4. The August and September averages where given, may differ in some instances from those previously published not only because of the foregoing, but also because of revisions necessitated by the inclusion of late reports and other causes.

The weekly average 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 all reporting establishments do not supply man-hour data, average hours worked per week and average hourly earnings are necessarily based on

data supplied by a smaller number of reporting firms. The size and composition of the reporting sample varies slightly from month to month and therefore the average hours per week, average hourly earnings, and average weekly earnings shown in tables 3 and 4 are not strictly comparable from 1 month to another, even after revisions. 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 October 1937 are computed from chain indexes based on the month-to-month percentage changes.

TABLE 3.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, October 1938*

MANUFACTURING

[Indexes are based on 3-year average, 1923-25=100, and are adjusted to 1935 Census of Manufactures. Not comparable to indexes published in pamphlets prior to August 1938. Comparable series available upon request]

Industry	Employment			Pay rolls			Average weekly earnings ¹			Average hours worked per week ¹			Average hourly earnings ¹		
	Index October 1938	Percentage change from—		Index October 1938	Percentage change from—		October 1938	Percentage change from—		October 1938	Percentage change from—		October 1938	Percentage change from—	
		Sep- tember 1938	Octo- ber 1937		Sep- tember 1938	Octo- ber 1937		Sep- tember 1938	Octo- ber 1937		Sep- tember 1938	Octo- ber 1937		Sep- tember 1938	Octo- ber 1937
All manufacturing industries.....	89.5	+0.8	-16.5	83.9	+3.6	-19.7	\$23.92	+2.7	-3.9	37.4	+1.4	(?)	Cents 63.7	+1.0	(?)
Durable goods.....	79.1	+5.0	-25.8	75.4	+9.8	-30.3	23.92	+4.5	-6.1	37.4	+3.6	(?)	71.0	+5	(?)
Nondurable goods.....	99.3	-2.4	-7.9	93.5	-1.5	-6.8	21.34	+1.0	+1.3	37.4	-1	(?)	57.9	+7	(?)
<i>Durable goods</i>															
Iron and steel and their products, not including machinery.....	84.1	+2.9	-25.7	74.9	+9.2	-31.8	28.09	+8.1	-8.1	34.9	+5.7	(?)	75.3	+2	(?)
Blast furnaces, steel works, and rolling mills.....	86.6	+1.8	-29.5	73.8	+9.3	-37.0	27.11	+7.4	-10.8	32.2	+7.2	-11.0	84.0	+1	+0.7
Bolts, nuts, washers, and rivets.....	84.9	+3.6	-24.0	81.0	+10.8	-28.7	24.42	+7.0	-6.0	35.0	+7.9	-8.2	69.9	-9	+2.3
Cast-iron pipe.....	65.4	+1.3	-4.8	53.8	+1	-6.5	19.54	-1.2	-1.6	34.1	-3	-8	56.9	-8	-8
Cutlery (not including silver and plated cut- lery) and edge tools.....	80.0	+3.2	-16.5	73.4	+9.1	-19.4	23.22	+5.8	-3.4	39.3	+6.5	-2.2	59.7	-1.0	-1.5
Forgings, iron and steel.....	45.6	+5.0	-35.3	41.9	+11.1	-39.7	26.94	+5.9	-6.9	36.3	+5.1	-8.8	74.3	+6	+1.7
Hardware.....	79.5	+18.9	-20.8	86.3	+31.3	-23.7	26.32	+10.4	-3.7	38.8	+6.7	-2.5	68.0	+3.5	-1.4
Plumbers' supplies.....	73.1	-2	-13.2	62.0	+4.1	-18.9	24.14	+4.2	-6.4	36.1	+3.5	-7.5	66.7	+8	+1.0
Stamped and enameled ware.....	129.1	+6.1	-24.9	135.1	+12.7	-24.4	23.94	+6.3	+2.0	39.5	+5.5	+2.4	60.5	+8	-7
Steam and hot-water heating apparatus and steam fittings.....	71.3	+2.1	-15.0	59.0	+10.7	-19.5	24.98	+8.4	-5.3	36.3	+8.6	-4.6	69.0	-1	-8
Stoves.....	83.1	+4.3	-19.9	75.7	+9.4	-15.3	20.98	+4.8	+5.6	41.0	+3.9	+3.3	66.2	+3	+2.0
Structural and ornamental metalwork.....	61.1	+1.1	-25.5	50.5	+1.7	-33.1	26.12	+5	-10.3	36.3	+7	-11.5	72.0	-2	+1.2
Tin cans and other tinware.....	86.2	-11.7	-17.0	89.2	-13.5	-19.0	22.50	-2.0	-3.0	37.3	-2.4	-2.5	60.6	+7	+1.1
Tools (not including edge tools, machine tools, files, and saws).....	77.0	+2.9	-20.5	71.9	+6.7	-23.6	23.11	+3.7	-3.9	38.2	+4.9	-2.2	60.8	-1.1	-2.3
Wirework.....	146.5	+14.5	-29.9	156.1	+16.3	-33.7	25.65	+1.5	-6.6	37.9	+2.7	-2.0	68.0	-1.0	-3.4
Machinery, not including transportation equip- ment.....	87.2	+2.2	-32.2	81.9	+4.2	-38.6	26.07	+2.1	-9.4	36.3	+2.5	(?)	71.7	-4	(?)
Agricultural implements (including tractors).....	93.7	+3.8	-48.3	92.4	+6.1	-55.8	27.11	+2.2	-14.5	35.2	+1.5	-12.6	77.7	+8	-2.1
Cash registers, adding machines, and calculat- ing machines.....	136.1	-2	-12.1	119.7	-9	-23.6	28.43	-7	-12.9	34.9	-1.1	-14.7	82.2	+5	+2.1
Electrical machinery, apparatus, and supplies.....	80.7	+4.2	-32.4	78.0	+6.8	-36.9	26.71	+2.5	-6.6	36.5	+3.2	-6.9	73.2	-6	+3
Engines, turbines, water wheels, and wind- mills.....	83.4	+4	-23.4	90.4	+4	-26.8	28.01	+(?)	-4.7	35.8	+5	-5.6	78.5	-4	+1.4

Foundry and machine-shop products.....	77.5	-2	-31.3	69.4	+1.8	-38.8	25.54	+2.0	-12.0	36.0	+2.2	-11.6	70.9	-2	+3
Machine tools.....	115.8	+1.4	-31.0	110.5	+2.5	-43.6	27.12	+1.1	-18.2	36.8	+1.4	-18.1	73.8	-3	-1
Radios and phonographs.....	108.0	+15.5	-39.2	97.9	+17.2	-38.0	22.53	+1.5	+2.0	39.1	+4.2	+8.4	57.7	-2.6	-5.7
Textile machinery and parts.....	61.2	+2.4	-23.7	56.2	+4.5	-31.4	24.09	+2.1	-10.0	36.6	+3.2	-8.0	66.0	-1.1	-2.2
Typewriters and parts.....	125.3	+3.0	-17.6	128.1	+10.7	-9.7	24.55	+7.4	+3.2	38.0	+7.5	+7.2	64.6	-1	+2.2
Transportation equipment.....	79.9	+25.2	-34.6	84.7	+30.7	-33.9	33.87	+4.3	+1.0	38.6	+5.7	(?)	87.8	-1.4	(?)
Aircraft.....	785.8	+4.0	-13.1	780.8	+7.4	-6.7	30.79	+3.2	+5.2	40.4	+7	-2.1	75.5	+6	+7.9
Automobiles.....	86.9	+34.0	-35.1	92.5	+39.6	-33.6	35.03	+4.2	+1.6	39.0	+7.0	+1.1	90.0	-2.6	-1.6
Cars, electric- and steam-railroad.....	25.2	-0.0	-58.3	23.4	-8.9	-63.5	25.61	+1	-12.5	34.7	-1.1	-11.2	73.9	+1.1	-1.4
Locomotives.....	16.1	+5	-69.3	11.1	+6	-80.1	22.14	+ (?)	-35.1	29.2	+6	-33.8	75.9	-6	-1.9
Shipbuilding.....	92.1	+2.5	-18.4	95.1	+3.1	-19.9	30.75	+5	-1.1	36.9	+1.2	-1.5	83.2	-6	+3
Nonferrous metals and their products.....	92.2	+4.9	-16.1	88.5	+8.7	-18.6	26.06	+3.7	-2.9	39.7	+4.3	(?)	65.9	-5	(?)
Aluminum manufactures.....	142.4	+4.5	+2.5	148.4	+6.9	-6	26.66	+4.4	-2.9	40.1	+3.4	+1	66.5	-1.0	-3.1
Brass, bronze, and copper products.....	96.4	+4.0	-18.4	96.2	+7.9	-16.6	27.28	+2.8	+2.5	38.5	+4.3	+5.0	70.9	-5	-2.7
Clocks and watches and time-recording devices.....	83.6	+4.6	-25.2	85.6	+9.6	-32.4	21.66	+4.8	-10.0	37.7	+3.8	-8.7	57.5	+1.0	-1.1
Jewelry.....	100.3	+4.4	-7.8	91.8	+12.8	-8.2	25.89	+8.1	-9	45.0	+9.5	+4.7	56.6	-1.2	-5.3
Lighting equipment.....	85.4	+12.0	-20.7	78.1	+12.9	-25.8	25.53	+8	-7.3	38.7	+1.5	-6.1	65.9	-7	-1
Silverware and plated ware.....	64.0	+7.0	-8.2	62.4	+12.2	-9.6	26.77	+4.9	-1.7	41.5	+5.4	-2.9	64.5	-3	+7.7
Smelting and refining—copper, lead, and zinc.....	66.4	+1.5	-23.6	62.2	+3.0	-30.9	26.34	+1.5	-9.7	38.2	+1.4	-9.0	68.9	+1	-5
Lumber and allied products.....	65.7	-2	-15.4	60.0	0	-13.8	21.09	+1	+1.9	41.0	+7	(?)	52.0	-7	(?)
Furniture.....	79.7	+1.0	-16.3	68.4	+5	-15.5	20.77	-5	+3	40.5	+2	-8	51.8	-1.1	-2.6
Lumber.....															
Millwork.....	54.0	+1	-9.5	46.0	+1.2	-6.2	22.40	+1.0	+1.0	42.4	+1.4	+3.5	52.8	-5	-1.4
Sawmills.....	53.1	-8	-16.4	50.4	-5	-14.4	20.94	+3	+2.4	40.9	+8	+6	52.0	-4	+9
Stone, clay, and glass products.....	70.1	+3.4	-14.5	63.0	+8.1	-17.9	33.96	+4.5	-3.9	37.1	+2.9	(?)	64.0	+7	(?)
Brick, tile, and terra cotta.....	52.0	+1.6	-14.2	40.6	+5.0	-17.1	20.37	+3.4	-3.2	38.8	+3.0	-8	52.6	+1.2	-2.5
Cement.....	70.1	+3.0	-6.4	65.4	+3.1	-8.4	26.02	+1	-2.9	37.8	+7	-5.5	69.2	-6	+2.6
Glass.....	87.5	+6.7	-20.2	92.9	+12.5	-22.7	25.47	+5.5	-2.2	35.6	+1.1	-5.4	71.6	+1.1	+2.2
Marble, granite, slate, and other products.....	42.3	-1.7	-16.6	30.1	-3.8	-21.5	23.99	-2.2	-1.1	35.1	-1.5	-11.2	67.5	-9	-3
Pottery.....	77.7	+3.9	-7.6	72.8	+14.0	-11.6	23.33	+9.6	-4.4	37.4	+5.0	-7.5	62.0	+3	+1.1
Nondurable goods.....															
Textiles and their products.....	97.5	-4	-6.7	83.1	-1.2	-4.7	17.00	-8	+2.2	35.5	+4	(?)	48.6	-5	(?)
Fabrics.....	87.2	+7	-6.6	76.5	+2.3	-4.6	16.64	+1.5	+2.1	37.0	+2.1	(?)	45.9	-3	(?)
Carpets and rugs.....	76.9	+5.8	-12.4	68.3	+8.8	+16.2	22.95	+2.9	+28.9	36.1	+3.2	+35.9	63.6	-4	-2.0
Cotton goods.....	83.7	+6	-6.4	72.5	+2.0	-7.1	14.03	+1.3	-1.0	36.8	+1.6	+8.8	38.1	-2	-8.7
Cotton small wares.....	79.9	+4.5	-10.3	77.5	+8.8	-7.8	18.56	+4.2	+2.6	39.9	+3.0	+5.5	46.9	+6	-4.6
Dyeing and finishing textiles.....	105.8	+1.6	-5.8	92.0	+2.7	-2.8	20.99	+1	+3.1	39.2	+1.3	+11.0	53.0	-2	-7.3
Hats, fur-felt.....	89.1	-1.0	-2.8	78.0	-17.9	+6.3	22.13	-17.1	+9.1	31.2	-15.0	+18.4	67.2	-4.4	-6.2
Knit goods.....	114.5	+2.4	-5.5	121.9	+5.1	-4.8	18.63	+2.6	+6.3	37.7	+3.6	+5.2	50.8	-8	-3.2
Hosiery.....	143.9	+2.3	-2.4	167.0	+5.0	-2.3	20.13	+2.7	-2	37.5	+4.1	+4.3	54.4	-1.2	-3.7
Knitted outerwear.....	83.3	+4.1	-3.5	77.0	+7.6	-6.4	17.91	+3.3	-3.1	39.2	+2.2	-2.7	45.4	+8	-3
Knitted underwear.....	70.2	+1.6	-15.2	61.9	+4.4	-12.8	14.86	+2.8	+2.8	36.1	+4.0	+9.0	41.5	+4	-2.9
Knitted cloth.....	156.3	+4.0	-15.5	131.0	+2.3	-14.2	18.99	-1.7	+1.4	40.8	+2	+1.6	46.0	-1.9	-2.0
Silk and rayon goods.....	61.2	-3.1	-18.8	50.2	-9	-19.0	15.83	+2.2	-3	37.2	+3.1	+6.4	42.2	-7	-7.3
Woolen and worsted goods.....	71.9	-1.0	+5	58.1	+9	+5.4	18.75	+2.0	+5.1	35.6	+1.9	+16.4	52.7	+2	-9.8
Wearing apparel.....	119.6	-2.0	-6.6	93.0	-6.5	-5.2	18.01	-4.5	+1.6	33.1	-2.6	(?)	63.1	-5	(?)
Clothing, men's.....	104.5	-2.8	-6.8	74.9	-6.6	-0.6	18.68	-3.9	+ (?)	31.5	-3.0	+4.4	59.1	-1	-5.2
Clothing, women's.....	171.4	-3.2	-8.6	128.8	-6.4	-5.4	19.94	-3.3	+3.0	33.0	-3.1	+3.9	54.8	+1.0	-2.2
Corsets and allied garments.....	98.9	+1.6	-2.7	104.8	+9.1	+6.4	17.75	+7.3	+10.3	32.8	+7.1	+12.9	45.8	+4	-2.9

See footnotes at end of table.

TABLE 3.—Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, October 1938—Continued

MANUFACTURING—Continued

Industry	Employment			Pay rolls			Average weekly earnings			Average hours worked per week			Average hourly earnings		
	Index October 1938	Percentage change from—		Index October 1938	Percentage change from—		October 1938	Percentage change from—		October 1938	Percentage change from—		October 1938	Percentage change from—	
		Sep-tember 1938	October 1937		Sep-tember 1938	October 1937		Sep-tember 1938	October 1937		Sep-tember 1938	October 1937			
Nondurable goods—Continued															
Wearing apparel—Continued.													Cents		
Men's furnishings.....	149.2	+8.1	— .3	140.1	+12.1	+2.1	14.85	+3.8	+3.8	36.7	+4.0	+11.3	39.4	+2.1	—2.5
Millinery.....	74.2	—6.3	+2.8	62.7	—31.5	+12.6	21.92	—26.9	+9.1	33.9	—14.9	+14.1	62.3	—10.1	—6.8
Shirts and collars.....	119.2	+1.1	—5.2	99.3	+2.0	—13.7	12.84	+ .9	—8.3	34.7	— .7	— .7	37.6	+ .6	—8.6
Leather and its manufactures.....	89.6	—2.3	—4.1	69.6	—5.9	+ .9	18.32	—3.1	+5.1	35.3	—3.8	(?)	53.0	+1.0	(?)
Boots and shoes.....	89.9	—4.1	—3.2	61.5	—9.0	+3.4	16.97	—5.1	+6.4	34.6	—4.8	+3.1	50.6	+ .7	—5.3
Leather.....	81.2	+3.3	—7.4	81.7	+3.5	—5.3	21.23	+ .2	+2.1	38.5	— .1	+2.8	63.0	+ .6	— .4
Food and kindred products.....	128.7	—9.8	—6.9	127.0	—7.1	—6.1	24.16	+3.0	+ .9	41.0	— .7	(?)	59.8	+3.8	(?)
Baking.....	141.3	— .9	—4.5	139.5	—2.8	—6.7	25.30	—2.0	—2.3	42.0	—1.6	—3.0	60.9	+ ⁽³⁾	+ .8
Beverages.....	233.6	—6.7	—3.1	272.6	—8.4	—2.3	32.50	—1.8	+ .9	38.5	—1.8	—1.6	85.5	+ .1	+2.8
Butter.....	99.4	+4.1	—5.1	85.6	+4.9	—2.9	22.52	— .8	+2.6	46.6	—1.4	+1.6	48.3	+ .7	+2.1
Canning and preserving.....	147.3	—45.9	—23.1	130.3	—45.3	—26.2	16.07	+1.1	—4.1	37.4	—2.7	—2.9	44.8	+5.1	—1.6
Confectionery.....	93.0	+5.7	—5.8	91.5	+ .7	—7.9	18.23	—4.8	—2.4	40.2	—4.4	—3.2	45.9	— .3	+ .4
Flour.....	77.5	+ .4	—2.6	79.7	—1.9	—3.0	26.88	—2.3	— .6	45.2	—2.1	—1.8	58.7	—1.1	+ .6
Ice cream.....	73.8	—11.5	—2.5	63.7	—9.2	— .1	29.33	+2.7	+2.5	45.1	—2.5	—3.2	63.5	+4.0	+4.2
Slaughtering and meat packing.....	97.4	+2.0	—1.2	110.0	+1.3	+ .4	28.51	— .7	+1.6	41.8	— .4	+2.5	68.5	— .3	— .7
Sugar, beet.....	260.7	+100.2	—7.4	225.1	+132.3	— .4	22.22	—10.8	+7.5	43.7	+5.5	+4.8	51.4	—16.0	— .1
Sugar refining, cane.....	90.0	—2.9	+9.8	80.0	—5.7	+9.6	24.15	—2.9	+ .5	38.6	—1.3	—2.4	62.5	+1.5	— .5
Tobacco manufactures.....	68.3	0	—1.2	60.7	— .5	—2.9	16.84	— .4	—1.6	37.1	+ .2	(?)	45.6	— .7	(?)
Chewing and smoking tobacco and snuff.....	57.7	—7.8	—6.4	63.3	—11.9	—10.0	17.17	—4.4	—4.0	35.0	—1.5	—1.0	49.3	—2.9	—3.2
Cigars and cigarettes.....	67.4	+1.0	— .5	60.3	+1.2	—1.8	16.77	+ .2	—1.0	37.4	+ .4	—1.4	45.2	— .3	+ .7
Paper and printing.....	105.5	+1.2	—6.9	103.7	+2.6	—6.0	28.14	+1.4	+ .9	38.6	+1.6	(?)	76.4	+ ⁽³⁾	(?)
Boxes, paper.....	102.8	+4.1	—5.8	112.7	+6.9	—1.7	22.29	+2.8	+4.3	42.2	+3.3	+2.5	53.2	— .7	+1.7
Paper and pulp.....	101.8	+ .8	—8.5	106.5	+4.9	—7.3	24.85	+4.1	+1.2	40.6	+3.8	+3.7	61.3	+ .3	—2.3
Printing and publishing:															
Book and job.....	99.6	+ .7	—8.4	87.9	— .4	—9.3	20.35	—1.0	—1.2	37.3	— .6	—2.8	79.9	+ .1	+1.8
Newspapers and periodicals.....	106.0	+ .9	—3.8	102.7	+2.2	—3.2	37.25	+1.3	+ .6	36.5	+ .7	— .4	99.1	+ .3	+1.5
Chemicals and allied products, and petroleum refining.....	113.4	+ .4	—11.8	120.1	+1.0	—11.1	28.35	+ .7	+ .8	38.7	+1.1	(?)	73.6	— .7	(?)
Petroleum refining.....	119.5	—1.2	—7.6	132.8	—1.4	—7.4	34.45	— .1	+ .2	35.5	+ .7	—1.0	97.6	— .7	+1.0
Other than petroleum refining.....	111.9	+ .7	—12.8	116.2	+1.8	—12.3	25.64	+1.1	+ .5	39.9	+1.2	— ⁽²⁾	64.8	— .3	⁽²⁾
Chemicals.....	115.0	+2.3	—16.5	128.3	+5.6	—15.5	30.65	+3.3	+1.1	39.9	+3.7	+ .5	76.8	— .4	+ .6

Cottonseed—oil, cake, and meal	122.1	+7.6	-20.2	104.0	+9.3	-20.7	13.04	+1.6	-1.7	51.3	+1.6	-4.8	25.2	-.4	+4.8
Druggists' preparations	110.3	+.6	-7.4	123.9	+4.5	-3.6	25.31	+3.8	+5.1	40.3	+2.2	+2.3	58.9	+.6	+1.1
Explosives	84.1	-1.0	-8.4	96.5	+3.7	-10.3	31.62	+4.7	-1.3	39.4	+4.4	-3.0	80.3	+.3	+1.0
Fertilizers	79.5	-3.2	-11.1	70.1	-9.4	-14.8	16.41	-6.4	-3.7	36.7	-3.6	-4.3	44.8	-2.8	+1.2
Paints and varnishes	112.9	+.4	-11.3	116.3	+1.6	-11.3	27.83	+1.2	+1	40.1	+1.1	-.8	69.4	+.1	+.9
Rayon and allied products	314.4	-.3	-13.1	302.6	-1.8	-13.9	23.63	-1.5	-.9	37.0	-1.8	-1.1	63.9	+.3	+.3
Soap	93.2	+.6	-1.5	94.8	+.2	-1.8	28.98	-.4	-.2	39.4	-.7	-1.2	73.7	+.2	+.7
Rubber products	77.7	+2.4	-20.0	79.7	+3.9	-15.7	27.27	+1.5	+5.4	36.6	+1.7	(?)	75.6	+.2	(?)
Rubber boots and shoes	60.1	+3.6	-23.1	61.6	+6.8	-20.6	23.48	+3.0	+3.3	33.7	+2.7	+4.1	60.7	+.3	-1.1
Rubber tires and inner tubes	63.5	+2.6	-24.1	69.1	+2.6	-16.1	31.25	-(?)	+10.7	33.1	-.3	+13.1	94.4	+.3	-1.6
Rubber goods, other	123.3	+2.0	-13.2	122.6	+5.2	-12.8	23.43	+3.1	+.4	40.0	+3.4	+2.6	59.2	-.1	-3.1

NONMANUFACTURING

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

Coal mining:															
Anthracite ¹	52.4	+12.8	-14.9	43.4	+47.5	-21.7	\$26.99	+30.8	-8.1	28.8	+30.3	-9.6	92.5	+1.6	+1.8
Bituminous ¹	87.2	+4.5	-14.8	78.3	+8.8	-22.2	23.84	+4.2	-8.7	26.8	+8.9	-9.0	88.7	-.4	-1.1
Metalliferous mining	57.0	+4.9	-30.1	49.2	+6.8	-39.8	26.52	+1.8	-13.8	39.5	+1.2	-8.9	67.5	+.6	-5.1
Quarrying and nonmetallic mining	44.4	-.5	-16.8	39.2	+2.2	-20.6	22.37	+2.7	-4.5	40.9	+1.7	-4.6	54.4	+.3	-.7
Crude petroleum producing	69.3	-3.1	-10.5	63.9	-3.9	-8.6	33.30	-.8	+2.2	39.9	-1.2	-.3	83.9	+.3	+1.6
Public utilities:															
Telephone and telegraph ²	74.7	-.2	-6.1	95.3	+3.0	+.4	31.57	+3.2	+7.0	39.8	+2.1	+1.2	82.7	+1.4	+4.9
Electric light and power and manufactured gas ²	92.5	-(?)	-6.2	99.8	+1.5	-5.2	33.79	+1.5	+1.1	39.7	0	-2.8	84.7	+1.1	+3.2
Electric-railroad and motor-bus operation and maintenance ²	69.9	+.8	-4.8	68.9	+.6	-3.5	32.22	-.2	+1.3	44.7	-.2	-3.1	71.3	-(?)	+4.7
Trade:															
Wholesale ³	89.2	+.8	-5.1	75.1	+1.1	-5.3	29.69	+.4	-.2	42.4	+.5	-1.6	70.7	-.3	+.6
Retail ³	86.1	+1.4	-6.5	71.1	+2.1	-6.3	21.04	+.6	+.1	42.4	+.2	-1.1	53.8	+.3	+1.9
General merchandising ⁴	100.7	+2.5	-6.8	89.7	+3.4	-6.7	17.62	+.9	+.1	39.0	+.8	+.6	48.1	+.5	-1.0
Other than general merchandising ⁵	82.3	+.9	-6.4	67.2	+1.7	-6.3	24.04	+.8	+.1	43.5	+.1	-1.4	55.7	+.3	+2.5
Hotels (year-round) ^{4, 5, 6}	92.9	+1.2	-4.2	80.8	+2.5	-3.9	15.04	+1.3	+.3	46.7	+.3	-3.0	32.0	+1.2	+3.0
Laundries ⁴	94.4	-2.2	-5.5	79.5	-2.3	-4.7	17.24	-.1	+.8	41.4	-1.0	-2.0	41.8	+.8	+3.0
Dyeing and cleaning ⁴	106.8	-1.0	-3.4	78.0	-4.5	-6.7	19.91	-3.6	-3.4	42.1	-3.4	-3.0	47.9	-.9	-1.5
Brokerage ⁵	(?)	-.9	-11.4	(?)	+1.2	-16.0	35.76	+2.1	-5.2	(?)	(?)	(?)	(?)	(?)	(?)
Insurance ⁵	(?)	-.4	+2.5	(?)	+.1	-1.9	35.50	+.5	-4.4	(?)	(?)	(?)	(?)	(?)	(?)
Building construction	(?)	+3.2	-26.7	(?)	+5.0	-27.0	30.19	+1.7	-.8	33.8	+3.2	-2.4	89.4	-1.5	+1.2

¹ Average weekly earnings are computed from figures furnished by all reporting establishments. Average hours and average hourly earnings are computed from data supplied by a smaller number of establishments, as all reporting firms do not 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. Hours and earnings for all manufacturing industries now relate to 87 industries instead of 89 which were covered in the July and prior issues of the pamphlet. The two industries excluded are electric- and steam-railroad repair shops. The averages for the durable goods group have also been affected by this exclusion. See text in section headed, "Employment, Pay Rolls, Hours, and Earnings."

² Not yet computed.

³ Less than $\frac{1}{10}$ of 1 percent.

⁴ Indexes adjusted to 1935 Census. Comparable series back to January 1929 presented in January 1938 issue of this pamphlet.

⁵ 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.

⁶ Cash payments only; the additional value of board, room, and tips cannot be computed.

⁷ Not available.

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 1935 Census of Manufactures. Not comparable to indexes published in pamphlets prior to August 1938. Comparable series available upon request]

Industry	Employment index			Pay-roll index			Average weekly earnings ¹			Average hours worked per week ¹			Average hourly earnings ¹		
	Octo-ber 1938	Septem-ber 1938	August 1938	Octo-ber 1938	Septem-ber 1938	August 1938	Octo-ber 1938	Septem-ber 1938	August 1938	Octo-ber 1938	Septem-ber 1938	August 1938	Octo-ber 1938	Septem-ber 1938	August 1938
All manufacturing industries.....	89.5	88.8	85.7	83.9	81.0	76.9	\$23.92	\$23.32	\$22.90	37.4	36.9	36.3	63.7	63.2	62.9
Durable goods.....	79.1	75.3	71.7	75.4	69.7	63.7	26.92	25.81	24.88	37.4	36.0	35.4	71.0	70.9	70.2
Nondurable goods.....	99.5	101.7	99.0	93.5	94.9	91.7	21.34	21.34	21.25	37.4	37.5	36.9	57.9	57.7	57.8
<i>Durable goods</i>															
Iron and steel and their products, not including machinery.....	84.1	81.7	79.4	74.9	68.6	65.3	26.09	24.59	24.11	34.9	33.0	32.4	75.3	75.3	75.3
Blast furnaces, steel works, and rolling mills.....	86.0	85.1	84.0	73.8	67.0	65.3	27.11	25.25	24.70	32.2	30.0	29.6	84.0	83.9	83.5
Bolts, nuts, washers, and rivets.....	84.9	81.9	78.1	81.0	73.1	66.3	24.42	22.82	21.68	35.0	32.5	30.7	69.9	70.5	70.7
Cast-iron pipe.....	65.4	64.0	63.0	53.8	53.8	53.0	19.54	19.77	20.00	34.1	34.2	34.3	56.9	57.4	57.8
Cutlery (not including silver and plated cutlery) and edge tools.....	80.0	77.6	74.5	73.4	67.3	60.9	23.22	21.82	20.63	39.3	36.8	34.6	59.7	60.0	60.8
Forgings, iron and steel.....	45.6	43.5	41.5	41.9	37.7	34.5	26.94	25.45	24.48	36.3	34.5	33.0	74.3	73.9	74.1
Hardware.....	79.5	66.9	60.6	80.3	65.7	57.6	26.32	23.86	23.06	38.8	36.3	35.2	68.0	65.8	65.7
Plumbers' supplies.....	73.1	73.2	73.1	62.0	59.6	57.3	24.14	23.21	22.38	36.1	35.0	34.0	66.7	66.3	65.8
Stamped and enameled ware.....	129.1	121.6	114.1	135.1	119.9	109.9	23.94	23.07	23.13	39.5	37.9	37.0	60.5	62.6	62.7
Steam and hot-water heating apparatus and steam fittings.....	71.3	69.8	69.0	59.0	53.3	55.5	24.98	23.00	24.27	36.3	33.3	35.2	69.0	69.1	69.2
Stoves.....	83.1	79.7	76.0	75.7	69.2	61.5	26.98	25.71	23.95	41.0	39.4	36.0	66.2	65.9	66.6
Structural and ornamental metalwork.....	61.1	60.5	59.8	50.5	49.7	51.2	26.12	25.93	26.94	36.3	35.8	36.9	72.0	72.6	73.1
Tin cans and other tinware.....	86.2	97.6	99.5	89.2	103.0	107.0	22.50	22.85	23.40	37.3	38.2	39.2	60.6	59.9	59.7
Tools (not including edge tools, machine tools, files, and saws).....	77.0	74.8	71.9	71.9	67.4	63.0	23.11	22.28	21.64	38.2	36.4	35.2	60.8	61.5	61.3
Wirework.....	146.5	127.9	106.2	156.1	134.2	99.8	25.65	25.31	22.64	37.9	36.9	34.0	68.0	68.7	69.7
Machinery, not including transportation equipment.....	87.2	85.4	84.1	81.9	78.6	76.1	26.07	25.57	25.08	36.3	35.4	34.6	71.7	72.1	72.0
Agricultural implements (including tractors).....	93.7	90.3	99.8	92.4	87.1	95.6	27.11	26.55	26.43	35.2	34.6	34.5	77.7	77.1	76.8
Cash registers, adding machines, and calculating machines.....	136.1	136.4	135.0	119.7	120.8	120.5	28.43	28.62	28.82	34.9	35.3	35.7	82.2	81.8	81.6
Electrical machinery, apparatus, and supplies.....	80.7	77.4	74.0	78.0	73.0	67.7	26.71	26.07	25.28	36.5	35.3	34.2	73.2	73.7	73.8
Engines, turbines, water wheels, and windmills.....	83.4	83.1	82.6	90.4	90.0	89.9	28.01	28.00	28.13	35.8	35.6	35.9	78.5	78.8	78.7
Foundry and machine-shop products.....	77.5	77.7	77.1	69.4	68.1	67.2	25.54	25.02	24.87	36.0	35.2	34.9	70.9	71.0	70.9
Machine tools.....	115.8	114.2	107.1	110.5	107.8	97.4	27.12	26.87	25.86	36.8	36.3	35.4	73.8	74.1	73.2
Radios and phonographs.....	108.0	93.5	88.9	97.9	83.5	75.5	22.53	22.21	21.20	39.1	37.5	35.7	57.7	59.4	59.5
Textile machinery and parts.....	61.2	59.8	57.7	56.2	53.8	50.2	24.09	23.42	22.78	36.6	35.3	33.9	66.0	66.5	67.3
Typewriters and parts.....	125.3	121.6	117.7	128.1	115.7	97.9	24.55	22.85	19.97	38.0	35.4	31.0	64.6	64.6	64.3

Transportation equipment	79.9	83.8	81.0	84.7	84.8	49.9	33.87	32.65	31.22	38.6	38.4	35.3	87.8	99.7	88.3
Aircraft.....	785.8	755.5	758.7	780.8	727.2	712.8	30.79	29.87	29.10	40.4	40.1	39.8	75.5	75.1	74.1
Automobiles.....	86.9	64.9	48.0	92.5	66.3	47.0	35.03	33.81	32.33	39.0	36.3	34.6	90.0	93.3	93.6
Cars, electric- and steam-railroad.....	25.2	27.7	24.3	23.4	25.7	22.3	25.61	25.48	25.26	34.7	35.0	34.7	73.9	72.8	72.8
Locomotives.....	16.1	16.1	18.0	11.1	11.1	13.1	22.14	22.13	23.37	29.2	29.0	31.1	75.9	76.4	75.2
Shipbuilding.....	92.1	89.9	89.1	95.1	92.3	90.0	30.75	30.60	29.99	36.9	36.5	35.9	83.2	83.7	83.6
Nonferrous metals and their products	92.2	87.9	83.0	88.5	81.4	74.1	26.06	25.15	24.14	39.7	37.8	36.2	65.9	66.1	66.6
Aluminum manufactures.....	142.4	136.3	128.3	148.4	138.8	125.8	26.66	26.04	24.89	40.1	33.8	36.9	66.5	67.2	67.5
Brass, bronze, and copper products.....	96.4	92.7	89.0	96.2	89.1	83.4	27.28	26.32	25.63	38.5	36.9	35.9	70.9	71.3	71.5
Clocks and watches and time-recording devices.....	83.6	79.9	77.7	85.6	78.1	70.3	21.66	20.66	19.11	37.7	36.3	33.0	57.5	56.9	57.8
Jewelry.....	100.3	96.0	86.7	91.8	81.4	70.1	25.89	23.95	22.70	45.0	41.0	38.6	56.6	57.7	57.7
Lighting equipment.....	85.4	76.2	68.4	78.1	69.2	58.2	25.53	25.31	23.73	38.7	38.1	35.4	65.9	66.5	67.1
Silverware and plated ware.....	64.0	59.8	57.5	62.4	55.6	48.5	26.77	25.56	23.13	41.5	39.5	35.9	64.5	64.6	64.6
Smelting and refining—copper, lead, and zinc.....	66.4	65.4	63.1	62.2	60.3	57.9	26.34	25.95	25.72	38.2	37.7	37.6	68.9	68.8	68.4
Lumber and allied products	65.7	65.8	64.0	60.0	60.0	58.1	21.09	21.81	21.02	41.0	40.3	40.5	52.0	52.6	52.3
Furniture.....	79.7	79.0	76.0	68.4	68.1	62.5	20.77	21.50	20.43	40.5	39.9	39.3	51.8	52.4	52.2
Lumber:															
Millwork.....	54.0	54.0	52.8	46.0	45.5	45.6	22.40	22.17	22.79	42.4	41.6	41.8	52.8	53.4	54.6
Sawmills.....	53.1	53.5	52.4	50.4	50.6	50.2	20.94	20.88	20.90	40.9	40.3	40.9	52.0	52.5	51.9
Stone, clay, and glass products	70.1	67.8	66.3	63.0	58.3	56.5	23.96	23.00	22.77	37.1	36.2	35.9	64.0	63.2	63.4
Brick, tile, and terra cotta.....	52.0	51.2	49.9	40.6	38.6	37.2	20.37	19.77	19.56	38.8	38.0	38.3	52.6	51.6	51.1
Cement.....	70.1	68.0	69.9	65.4	63.4	65.4	26.02	25.96	26.06	37.8	37.4	37.8	69.2	69.4	69.0
Glass.....	87.5	82.1	78.7	92.9	82.6	78.6	25.47	24.13	23.95	35.6	34.3	33.6	71.6	70.7	71.2
Marble, granite, slate, and other products.....	42.3	43.0	43.3	30.1	31.3	32.0	23.99	24.31	24.37	35.1	35.7	35.7	67.5	67.1	67.7
Pottery.....	77.7	74.8	72.3	72.8	63.9	58.7	23.33	21.40	20.40	37.4	35.7	34.4	62.0	62.4	62.9
<i>Nondurable goods</i>															
Textiles and their products	97.5	97.9	95.1	83.1	84.1	80.0	17.00	17.03	16.87	35.5	35.4	34.7	48.6	49.2	48.9
Fabrics.....	87.2	86.6	85.1	76.5	74.8	73.4	16.64	16.43	16.56	37.0	36.3	36.1	45.9	46.2	46.4
Carpets and rugs.....	76.9	72.7	67.6	66.3	60.9	55.4	22.95	22.31	21.65	36.1	34.9	34.1	63.6	63.9	63.7
Cotton goods.....	83.7	83.2	81.3	72.5	71.1	68.4	14.03	13.82	13.67	36.8	36.2	35.6	38.1	38.3	38.3
Cotton small wares.....	79.9	76.5	72.1	77.5	71.2	65.3	18.56	17.95	17.17	39.9	39.0	36.8	46.9	46.4	46.6
Dyeing and finishing textiles.....	105.8	104.1	101.5	92.0	89.5	87.4	20.99	20.85	20.75	39.2	38.6	38.3	53.0	53.4	53.8
Hats, fur-felt.....	89.1	90.0	88.1	78.0	95.0	87.2	22.13	26.85	25.21	31.2	36.4	35.3	67.2	71.1	73.1
Knit goods.....	114.5	111.8	109.2	121.9	116.0	111.7	18.63	18.11	17.88	37.7	36.4	35.9	50.8	51.1	51.6
Hosiery.....	143.9	140.7	138.2	157.0	159.1	154.3	20.13	19.60	19.38	37.5	36.2	35.7	54.4	54.9	55.5
Knitted outerwear.....	83.3	80.1	71.4	77.6	71.6	65.2	17.91	17.27	16.89	39.2	38.2	37.1	45.4	44.8	44.6
Knitted underwear.....	70.2	69.1	68.4	61.9	59.3	57.7	14.86	14.39	14.12	36.1	34.6	34.1	41.5	41.6	41.6
Knitted cloth.....	156.3	150.3	150.3	131.0	128.1	126.1	18.99	19.06	18.91	40.8	40.8	40.4	46.0	47.6	47.0
Silk and rayon goods.....	61.2	63.2	61.3	50.2	50.6	50.2	15.83	15.99	16.22	37.2	35.7	36.7	42.2	44.5	43.8
Woolen and worsted goods.....	71.9	72.7	75.1	58.1	57.5	62.1	18.75	18.39	19.21	35.6	35.0	36.4	52.7	52.7	52.9
Wearing apparel.....	119.6	122.1	116.3	99.0	99.5	90.4	18.01	18.68	17.68	33.1	33.9	32.5	53.1	53.9	53.1
Clothing, men's.....	104.5	107.5	104.3	74.9	80.1	74.4	18.68	19.33	18.40	31.5	32.3	31.3	59.1	59.4	58.6
Clothing, women's.....	171.4	177.1	165.9	128.8	137.6	128.1	19.94	20.69	20.23	33.0	34.0	32.9	54.8	55.4	54.8
Corsets and allied garments.....	98.9	97.3	94.7	104.8	96.1	85.8	17.75	16.54	15.27	38.8	36.2	35.3	45.8	45.7	46.0
Men's furnishings.....	149.2	138.1	127.2	140.1	124.9	109.5	14.85	14.17	13.46	36.7	34.9	33.8	36.4	35.7	36.0
Millinery.....	74.2	79.3	68.2	62.7	91.6	59.6	21.92	28.29	21.98	33.9	40.1	34.3	62.3	69.0	62.3
Shirts and collars.....	119.2	117.0	117.9	99.3	97.4	93.4	12.84	12.69	12.17	34.7	34.9	33.9	37.0	36.5	36.4
Leather and its manufactures	89.6	93.8	92.7	69.6	74.0	77.0	18.32	18.98	19.80	35.3	36.8	38.4	53.0	52.4	51.6
Boots and shoes.....	89.9	93.8	94.6	64.5	70.9	75.1	16.97	17.87	18.85	34.6	36.3	38.4	50.6	50.1	49.3
Leather.....	81.2	78.6	77.3	81.7	78.9	77.9	24.23	24.24	24.29	38.5	38.7	38.7	63.0	62.9	62.9

See footnotes at end of table.

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

MANUFACTURING—Continued

Industry	Employment index			Pay-roll index			Average weekly earnings ¹			Average hours worked per week ¹			Average hourly earnings ¹		
	October 1938	September 1938	August 1938	October 1938	September 1938	August 1938	October 1938	September 1938	August 1938	October 1938	September 1938	August 1938	October 1938	September 1938	August 1938
<i>Nondurable goods—Continued</i>															
Food and kindred products	128.7	142.7	138.3	127.0	136.7	131.1	24.16	23.43	23.18	41.0	41.3	39.7	59.8	57.6	58.6
Baking.....	144.3	145.6	144.5	139.5	143.5	139.8	25.30	25.86	25.33	42.0	42.8	41.6	60.9	61.0	61.5
Beverages.....	233.6	250.3	260.0	272.6	297.6	322.0	32.50	33.12	34.51	38.5	39.2	40.8	85.5	85.4	85.2
Butter.....	99.4	103.7	110.1	85.6	90.0	94.4	22.52	22.76	22.89	46.6	46.9	47.7	48.3	48.3	47.8
Canning and preserving.....	147.3	272.0	251.2	130.3	238.1	203.8	16.07	15.83	14.67	37.4	38.3	35.1	44.8	42.5	42.9
Confectionery.....	93.0	87.9	71.6	91.6	90.9	69.3	18.23	19.22	18.03	40.2	42.1	37.0	45.9	46.2	49.0
Flour.....	77.5	77.2	77.9	79.7	81.2	78.7	26.88	27.72	26.75	45.2	46.1	44.6	58.7	59.9	59.6
Ice cream.....	73.8	83.4	93.1	63.7	70.1	80.3	29.33	28.19	28.92	45.1	46.0	48.3	63.5	60.7	59.8
Slaughtering and meat packing.....	97.4	95.5	94.2	110.0	108.7	104.8	28.51	28.66	27.93	41.8	41.9	40.6	68.5	68.6	68.9
Sugar, beet.....	260.7	100.2	74.7	226.1	97.3	67.7	22.22	25.00	23.33	43.7	41.3	36.2	51.4	61.7	64.6
Sugar refining, cane.....	90.0	92.7	90.1	80.0	84.8	80.1	24.15	24.59	23.90	38.6	40.3	38.8	62.5	61.0	61.6
Tobacco manufactures	66.3	66.3	64.3	60.7	61.0	59.0	16.84	16.96	16.89	37.1	37.1	36.7	45.6	45.8	46.2
Chewing and smoking tobacco and snuff.....	57.7	62.6	60.4	63.3	71.8	66.1	17.17	17.97	17.17	35.0	35.5	34.0	49.3	50.7	50.7
Cigars and cigarettes.....	67.4	66.8	64.8	60.3	59.6	58.0	16.77	16.72	16.82	37.4	37.2	37.0	45.2	45.3	45.9
Paper and printing	105.5	104.3	102.7	103.7	101.1	98.0	28.14	27.91	27.48	38.6	38.0	37.7	76.4	76.6	76.0
Boxes, paper.....	102.8	98.8	94.8	112.7	105.4	97.3	22.29	21.74	20.90	42.2	40.8	38.9	53.2	53.8	54.2
Paper and pulp.....	104.8	104.0	102.8	106.5	101.5	101.9	24.85	23.92	24.26	40.6	39.1	39.4	61.3	61.3	61.7
Printing and publishing:															
Book and job.....	99.6	98.9	99.0	87.9	88.2	86.2	29.35	29.68	29.01	37.3	37.5	37.1	79.9	80.0	79.3
Newspapers and periodicals.....	106.0	105.1	102.5	108.7	106.4	101.1	37.25	37.26	36.25	36.5	36.2	36.1	99.1	98.8	97.1
Chemicals and allied products, and petroleum refining	113.4	113.0	108.1	120.1	118.9	116.9	28.35	28.36	29.02	38.7	38.3	38.1	73.6	74.4	76.3
Petroleum refining.....	119.5	121.0	121.9	132.8	134.6	138.1	34.45	34.58	35.25	35.5	35.3	36.0	97.6	98.4	98.6
Other than petroleum refining.....	111.9	111.1	104.8	116.2	114.1	110.4	25.64	25.70	26.16	39.9	39.5	39.0	64.8	65.3	67.2
Chemicals.....	115.0	112.5	110.3	128.3	121.4	121.0	30.65	29.90	30.39	39.9	38.3	38.8	76.8	78.1	78.5
Cottonseed—oil, cake, and meal.....	122.1	113.5	68.4	104.0	95.1	57.0	13.04	12.93	12.83	51.3	50.8	46.8	25.2	25.3	26.8
Druggists' preparations.....	110.3	109.6	108.2	123.9	118.6	117.2	25.31	24.40	24.48	40.3	39.4	39.3	58.9	58.7	58.9
Explosives.....	84.1	84.9	81.9	96.5	93.1	93.1	31.62	30.16	31.26	39.4	37.7	33.6	80.3	80.1	80.9
Fertilizers.....	79.5	82.1	68.9	70.1	77.4	65.4	16.41	17.68	17.70	36.7	38.3	37.3	44.8	45.9	47.5
Paints and varnishes.....	112.9	112.5	110.6	116.3	114.5	111.2	27.83	27.70	27.39	40.1	39.7	39.2	69.4	69.9	70.0
Rayon and allied products.....	314.4	315.2	293.9	302.6	308.2	289.0	23.63	24.02	24.16	37.0	37.7	37.8	63.9	63.8	63.9
Soap.....	93.2	92.6	90.7	94.8	94.6	91.2	28.98	29.10	28.04	39.4	39.7	39.0	73.7	73.5	73.5
Rubber products	77.7	75.9	72.6	79.7	76.7	69.5	27.27	26.91	25.39	36.6	35.9	33.9	75.6	75.8	76.0
Rubber boots and shoes.....	60.1	58.0	54.1	61.6	57.7	50.9	23.48	22.79	21.54	38.7	37.7	35.8	60.7	60.5	60.2
Rubber tires and inner tubes.....	63.5	61.9	60.6	69.1	67.3	60.6	31.25	31.27	28.73	33.1	33.0	30.3	94.4	94.6	94.1
Rubber goods, other.....	123.3	121.0	113.2	122.6	116.6	107.7	23.43	22.73	22.34	40.0	38.5	37.7	59.2	59.4	59.7

NONMANUFACTURING

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

Coal mining:																				
Anthracite ¹	52.4	46.4	37.6	43.4	29.4	20.0	\$26.99	\$20.64	\$17.35	28.8	22.1	18.6	•	92.5	91.1	90.5				
Bituminous ¹	57.2	53.4	50.1	78.3	71.9	64.2	23.84	22.93	21.38	26.8	26.0	23.6	88.2	88.5	88.8					
Metalliferous mining.....	57.9	55.2	51.4	49.2	46.1	43.7	26.52	26.04	26.52	39.5	39.0	39.5	67.0	67.0	67.7					
Quarrying and nonmetallic mining.....	44.4	44.6	44.6	39.2	38.4	39.2	22.37	21.68	22.17	40.9	40.6	41.2	54.4	53.5	53.7					
Crude-petroleum producing.....	69.3	71.5	72.4	63.9	66.5	66.8	33.30	34.38	34.11	39.9	40.2	40.5	83.9	83.8	82.9					
Public utilities:																				
Telephone and telegraph ¹	74.7	74.9	74.8	95.3	92.6	91.3	31.57	30.72	30.25	30.8	39.1	38.6	82.7	81.6	81.3					
Electric light and power and manufactured gas ¹	92.5	92.5	92.7	90.8	98.4	98.9	33.79	33.19	33.54	39.7	39.8	40.4	84.7	83.4	83.4					
Electric-railroad and motor-bus operation and maintenance ¹	69.9	69.3	69.5	68.9	68.4	69.5	32.22	32.27	32.73	44.7	44.8	45.3	71.3	71.3	71.4					
Trade:																				
Wholesale ¹	80.2	88.5	87.6	75.1	74.3	73.7	29.69	29.38	29.35	42.4	42.1	42.3	70.7	70.3	69.9					
Retail ¹	86.1	85.0	80.0	71.1	69.7	66.8	21.04	20.81	21.38	42.4	42.2	42.7	53.8	53.3	54.6					
General merchandising ¹	100.7	98.2	86.4	89.7	86.8	78.8	17.62	17.58	18.12	39.0	38.6	38.7	48.1	48.2	49.8					
Other than general merchandising ¹	82.3	81.5	78.3	67.2	66.1	64.3	24.04	23.71	23.98	43.5	43.4	43.8	55.7	54.9	56.0					
Hotels (year-round) ^{2, 3, 4}	92.9	91.8	90.4	80.8	78.9	77.4	15.04	14.81	14.64	46.7	46.4	47.1	32.0	31.6	30.7					
Laundries ¹	94.4	96.5	97.5	79.5	81.4	83.1	17.24	17.05	17.36	41.4	41.9	42.5	41.8	41.3	41.1					
Dyeing and cleaning ¹	106.8	107.8	105.0	78.0	81.7	74.3	19.91	20.85	19.47	42.1	43.5	42.0	47.9	48.3	46.8					
Brokerage ^{1, 4}	— 9	— 1.4	+1.0	+1.2	— 1.2	+ 4	35.76	34.82	34.71	(9)	(9)	(9)	(9)	(9)	(9)					
Insurance ^{1, 4}	— 4	+ 6	+ (7)	+ 1	— 8	— 2.5	35.50	35.18	35.70	(9)	(9)	(9)	(9)	(9)	(9)					
Building construction ¹	+3.2	— 4	+2.6	+5.0	— 5	+3.6	30.19	29.66	29.69	33.8	32.9	32.9	89.4	90.3	90.3					

¹ Average weekly earnings are computed from figures furnished by all reporting establishments. Average hours and average hourly earnings are computed from data supplied by a smaller number of establishments, as all reporting firms do not 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. Hours and earnings for all manufacturing industries now relate to 87 industries instead of 89 which were covered in the July and prior issues of the pamphlet. The two industries excluded are electric- and steam-railroad repair shops. The averages for the durable goods group have also been affected by this exclusion. See text in section headed, "Employment, Pay Rolls, Hours, and Earnings."
² Indexes adjusted to 1935 census. Comparable series back to January 1929, presented in January 1938 issues of this publication.

³ 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.

⁴ Cash payments only; the additional value of board, room, and tips cannot be computed.

⁵ Indexes of employment and pay rolls are not available; percentage changes from preceding month substituted.

⁶ Not available.

⁷ Less than $\frac{1}{10}$ of 1 percent.

INDEXES OF EMPLOYMENT AND PAY ROLLS

Indexes of employment and pay rolls are given in table 5 for all manufacturing industries combined, for the durable- and nondurable-goods groups of manufacturing industries, and for 13 nonmanufacturing industries, including 2 subgroups under retail trade, by months, from October 1937 to October 1938, inclusive. The accompanying chart indicates the trend of factory employment and pay rolls from January 1919 to October 1938.

The indexes of factory employment and pay rolls are computed from returns supplied by representative manufacturing establishments in 87 manufacturing industries and relate to wage earners only. Formerly 89 manufacturing industries were covered in the Bureau's monthly survey, but two of these—electric and steam railroad repair shops—are now excluded. The base used in computing the indexes is the 3-year average 1923–25 as 100. In October 1938 reports were received from 24,943 manufacturing establishments employing 4,094,975 workers, whose weekly earnings were \$97,963,237. The employment reports received from these establishments 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 87 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, dyeing and cleaning, and building construction cover wage earners only, but the figures for public utilities, trade, hotels, brokerage, and insurance relate to all employees, except corporation officers, executives, and other employees whose duties are mainly supervisory. For crude-petroleum producing they cover wage earners and clerical field force.

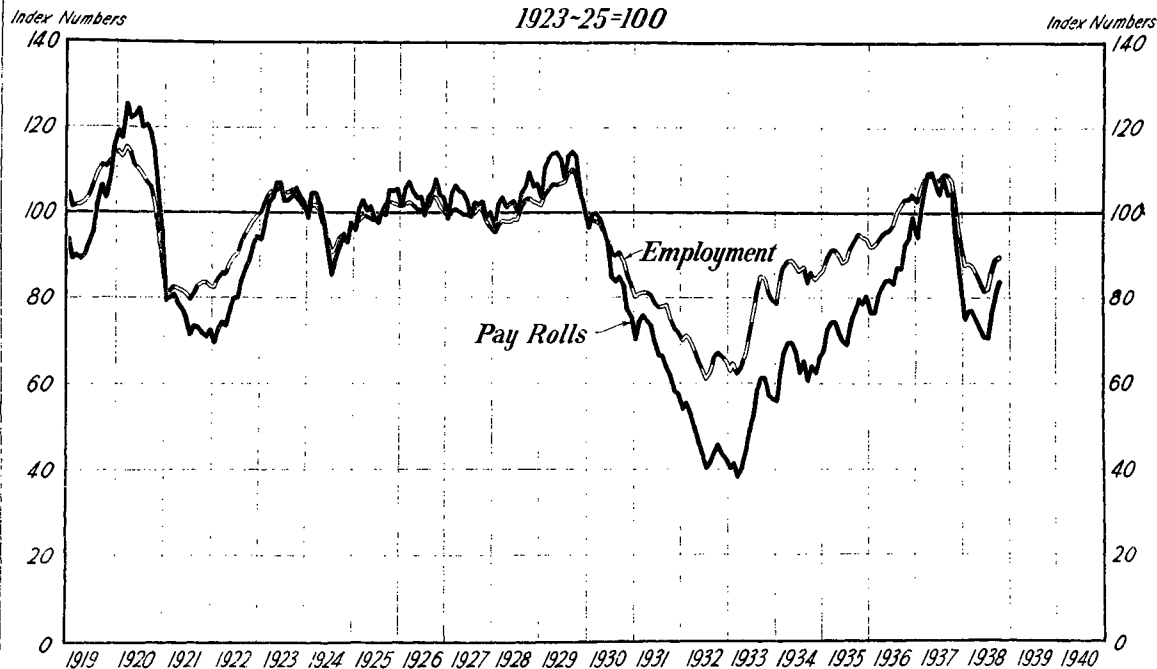
Data for both manufacturing and nonmanufacturing industries are based on reports of the number of employees and amount of pay rolls for the pay period ending nearest the 15th of the month.

TREND OF INDUSTRIAL AND BUSINESS EMPLOYMENT, BY STATES

A comparison of employment and pay rolls, by States and geographic divisions, in September and October 1938, 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 grand total have not been weighted according to their relative importance.

EMPLOYMENT & PAY ROLLS ALL MANUFACTURING INDUSTRIES

1923-25=100



UNITED STATES BUREAU OF LABOR STATISTICS

TABLE 5.—*Indexes of Employment and Pay Rolls in Selected Manufacturing¹ and Non-manufacturing² Industries, October 1937 to October 1938, Inclusive*

Industry	Employment													
	1937				1938									
	Avg. 1937	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
<i>Manufacturing</i>														
All industries.....	105.8	107.2	101.1	94.5	87.8	88.2	87.7	85.7	83.4	81.6	81.9	85.7	88.8	89.5
Durable goods ³	104.0	106.6	100.8	91.7	81.7	80.1	79.3	77.0	75.0	72.4	70.3	71.7	75.3	79.1
Non-durable goods ⁴	107.6	107.8	101.4	97.2	93.7	95.9	95.8	94.0	91.5	90.3	92.9	99.0	101.7	99.3
<i>Nonmanufacturing</i>														
Anthracite mining.....	60.2	61.5	60.9	61.4	59.6	60.0	59.3	57.0	52.8	56.0	44.6	37.6	46.4	52.4
Bituminous-coal mining.....	99.3	102.4	101.4	99.4	96.9	95.5	93.2	85.8	82.2	80.2	78.5	80.1	83.4	87.2
Metalliferous mining.....	76.8	82.9	75.4	70.4	67.4	63.6	62.3	61.6	58.8	56.0	49.7	51.4	55.2	57.9
Quarrying and nonmetallic mining.....	51.4	53.3	49.9	43.9	38.2	37.8	38.9	41.7	43.7	43.6	44.1	44.6	44.6	44.4
Crude-petroleum producing.....	76.5	77.5	77.2	70.5	75.3	74.2	73.6	73.8	73.2	72.8	72.3	72.4	71.5	69.5
Telephone and telegraph.....	77.8	79.6	78.9	78.0	77.8	75.7	74.9	74.8	75.0	74.8	74.9	74.8	74.9	74.7
Electric light and power, and manufactured gas.....	95.6	98.5	97.3	96.1	93.8	92.6	92.0	91.8	91.7	92.2	92.3	92.7	92.5	92.5
Electric-railroad and motorbus operation and maintenance ⁵	73.1	73.4	73.2	72.8	72.3	71.2	70.8	71.1	70.6	70.4	70.1	69.5	69.3	69.9
Wholesale trade.....	92.0	94.0	93.5	93.3	91.0	90.4	89.1	88.5	87.3	87.2	86.8	87.6	88.5	89.2
Retail trade.....	89.8	92.1	91.7	100.4	84.1	82.4	83.0	88.2	83.8	83.6	81.1	80.0	85.0	86.1
General merchandising.....	104.3	108.1	109.8	145.9	91.5	88.8	90.5	101.0	92.4	91.9	87.9	86.4	98.2	100.7
Other than general merchandising.....	85.9	87.9	86.9	88.5	82.1	80.7	81.0	84.9	81.5	81.4	79.3	78.3	81.5	82.3
Year-round hotels.....	94.9	96.9	96.6	94.9	94.3	94.5	93.4	93.5	93.7	92.2	90.7	90.4	91.8	92.9
Laundries.....	100.6	99.9	97.8	97.0	96.8	95.7	94.8	95.4	96.2	96.6	97.8	97.5	96.5	94.4
Dyeing and cleaning.....	107.5	110.5	103.5	99.2	96.8	95.6	98.5	111.8	109.9	110.8	108.6	105.0	107.8	106.8
<i>Pay rolls</i>														
<i>Manufacturing</i>														
All industries.....	102.0	104.5	92.9	84.2	75.0	70.9	77.1	74.6	72.9	70.8	70.6	76.9	81.0	83.9
Durable goods ³	103.5	108.2	94.8	81.0	67.1	67.2	67.4	65.6	64.2	61.7	58.6	63.7	68.7	75.4
Non-durable goods ⁴	100.4	100.3	90.8	87.7	84.0	87.8	87.9	84.7	82.6	80.9	84.1	91.7	94.9	93.5
<i>Nonmanufacturing</i>														
Anthracite mining.....	46.9	55.4	49.0	51.3	46.5	46.1	47.3	39.0	38.3	49.7	20.2	20.0	29.4	43.4
Bituminous-coal mining.....	88.5	100.7	91.1	95.1	70.4	74.0	68.4	56.3	55.3	57.0	56.8	64.2	71.9	78.3
Metalliferous mining.....	74.0	81.7	71.6	65.1	59.1	55.8	56.3	53.3	51.2	46.1	38.0	43.7	46.1	49.2
Quarrying and nonmetallic mining.....	45.4	49.3	41.7	33.4	27.7	28.6	30.2	33.9	38.3	37.3	37.0	39.2	38.4	39.2
Crude-petroleum producing.....	68.2	69.9	70.2	69.8	68.2	69.6	68.0	68.0	68.7	67.6	66.7	66.8	66.5	63.7
Telephone and telegraph.....	89.6	94.9	91.4	94.7	93.7	89.9	92.6	91.6	91.3	90.9	90.9	91.3	92.6	95.3
Electric light and power, and manufactured gas.....	99.6	105.3	103.8	102.4	98.9	98.5	98.6	97.6	97.4	98.6	98.3	98.9	98.4	99.8
Electric-railroad and motorbus operation and maintenance ⁵	70.6	71.4	71.8	71.9	70.6	70.2	69.9	70.0	71.2	69.7	69.0	69.5	68.4	68.9
Wholesale trade.....	76.6	79.3	78.3	77.8	75.4	75.3	74.7	74.6	75.1	73.8	73.6	73.7	74.3	75.1
Retail trade.....	73.1	75.9	75.3	80.6	70.1	68.4	68.6	72.2	70.0	69.5	68.1	66.8	69.7	71.1
General merchandising.....	92.5	96.2	97.1	123.3	84.6	81.5	82.2	89.4	84.4	84.3	80.4	78.8	86.8	89.7
Other than general merchandising.....	69.1	71.7	70.8	71.8	67.1	65.7	65.8	68.6	67.0	66.4	65.6	64.3	66.1	67.2
Year-round hotels.....	80.6	84.1	84.3	82.6	81.6	83.6	80.9	80.5	80.5	79.6	77.4	77.4	78.9	80.8
Laundries.....	83.0	83.4	81.1	81.1	80.1	79.1	78.6	80.6	80.9	81.8	83.0	83.1	81.4	79.5
Dyeing and cleaning.....	77.6	83.6	73.7	68.6	65.5	65.2	68.2	87.2	80.7	83.3	77.5	74.3	81.7	78.0

¹ 3-year average, 1923-25=100—adjusted to 1935 Census of Manufactures. Comparable indexes for earlier months are in August issue of pamphlet and November issue of Monthly Labor Review.

² 12-month average for 1929=100. Comparable indexes are in November 1934 and subsequent issues of Employment and Pay Rolls, or in February 1935 and subsequent issues of Monthly Labor Review, except for anthracite and bituminous-coal mining, year-round hotels, laundries, and dyeing and cleaning. Indexes for these industries from January 1929 forward have been adjusted to the 1935 census and are presented in the January 1938 and subsequent issues of Employment and Pay Rolls.

³ Includes: Iron and steel, machinery, transportation equipment, railroad repair shops, nonferrous metals, lumber and allied products, and stone, clay, and glass products.

⁴ Includes: Textiles and their products, leather and its manufactures, food and kindred products, 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.

⁵ Not including electric-railroad car building and repairing.

The totals for all manufacturing industries combined include figures for miscellaneous manufacturing industries in addition to the 87 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," for "all manufacturing," for anthracite mining, bituminous-coal mining, metalliferous mining, quarrying and nonmetallic mining, crude-petroleum producing, public utilities, wholesale trade, retail trade, hotels, laundries, dyeing and cleaning, brokerage, and insurance.

TABLE 6.—Comparison of Employment and Pay Rolls in Identical Establishments in September and October 1938, 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 October 1938	Percentage change from September 1938	Amount of pay roll (1 week) October 1938	Percentage change from September 1938	Number of establishments	Number on pay roll October 1938	Percentage change from September 1938	Amount of pay roll (1 week) October 1938	Percentage change from September 1938
				<i>Dollars</i>					<i>Dollars</i>	
New England.....	13,585	853,831	+1.6	19,897,099	+4.4	3,611	576,313	+0.9	12,612,182	+2.8
Maine.....	850	53,238	-2.6	1,054,100	-1.9	289	42,613	-3.1	790,371	-3.5
New Hampshire.....	641	39,889	+2	831,875	+1.5	206	33,317	-1	668,265	-3
Vermont.....	468	15,959	-8	349,824	+7	153	9,639	-1.3	199,259	-1.8
Massachusetts.....	¹ 7,960	<i>461,830</i>	<i>+1.9</i>	<i>10,904,002</i>	<i>+3.3</i>	<i>1,786</i>	<i>264,629</i>	<i>+8</i>	<i>5,820,141</i>	<i>+7</i>
Rhode Island.....	1,226	89,984	+2.0	1,999,896	+9.6	432	70,153	+1.4	1,437,948	+7.2
Connecticut.....	2,440	193,431	+2.5	4,757,432	+7.0	745	155,962	+2.3	3,696,198	+6.9
Middle Atlantic.....	33,503	2,068,279	+1.3	54,038,932	+3.1	6,369	1,148,256	+8	28,902,563	+2.3
New York.....	20,768	948,273	+1.1	26,174,490	+1.0	² 2,522	<i>424,934</i>	<i>+5</i>	<i>11,421,198</i>	<i>-6</i>
New Jersey.....	4,350	338,537	-5	8,754,506	+1.7	1,541	264,234	-3	6,709,533	+2.5
Pennsylvania.....	8,385	781,460	+2.4	19,107,936	+6.7	³ 2,306	<i>459,088</i>	<i>+1.4</i>	<i>10,771,832</i>	<i>+5.7</i>
East North Central.....	25,390	1,985,576	+3.8	53,256,453	+7.9	8,548	1,448,368	+5.1	39,955,604	+10.5
Ohio.....	7,386	522,665	+1.5	13,545,023	+5.1	2,459	376,139	+1.9	9,937,530	+6.3
Indiana.....	² 2,987	<i>239,133</i>	<i>+1.0</i>	<i>5,896,444</i>	<i>+7.1</i>	<i>1,089</i>	<i>185,511</i>	<i>+1.1</i>	<i>4,703,787</i>	<i>+8.5</i>
Illinois.....	⁴ 6,730	<i>562,590</i>	<i>+1.7</i>	<i>14,628,363</i>	<i>+3.0</i>	<i>2,458</i>	<i>368,660</i>	<i>+1.0</i>	<i>9,478,591</i>	<i>+3.1</i>
Michigan.....	3,966	434,719	+14.3	13,556,915	+20.0	⁵ 1,046	<i>363,593</i>	<i>+18.9</i>	<i>12,019,158</i>	<i>+24.6</i>
Wisconsin.....	³ 4,321	<i>226,469</i>	<i>-4</i>	<i>5,629,708</i>	<i>+3.1</i>	⁶ 1,496	<i>152,465</i>	<i>-2.0</i>	<i>3,816,529</i>	<i>+4.1</i>
West North Central.....	12,251	450,537	-2	10,699,338	+1.0	2,495	209,720	+5	5,030,125	+1.9
Minnesota.....	⁷ 2,561	<i>125,744</i>	<i>-2.5</i>	<i>3,269,177</i>	<i>-5</i>	<i>640</i>	<i>49,183</i>	<i>-3.4</i>	<i>1,294,315</i>	<i>+5</i>
Iowa.....	2,182	66,791	+3	1,517,082	+7	387	35,466	-1.0	849,771	-1.0
Missouri.....	2,946	160,730	+2	3,709,523	+2.4	816	88,551	+2.1	1,979,372	+4.2
North Dakota.....	618	5,815	-3	133,741	-5	30	482	-2.0	12,472	-4.0
South Dakota.....	525	8,751	+1.1	219,115	+2.9	29	2,367	+9.8	59,937	+11.9
Nebraska.....	1,183	29,821	+5.2	641,773	+2.9	135	10,593	+15.1	244,139	+10.3
Kansas.....	⁸ 2,236	<i>52,885</i>	<i>+1.0</i>	<i>1,208,927</i>	<i>-2</i>	<i>458</i>	<i>23,078</i>	<i>-1.0</i>	<i>590,119</i>	<i>-1.9</i>
South Atlantic.....	11,216	847,510	+1.7	16,187,449	+3.1	2,889	565,408	+1.1	9,826,435	+3.1
Delaware.....	260	15,270	-6.6	349,740	-2.1	84	<i>10,014</i>	<i>-7.2</i>	<i>226,247</i>	<i>-4.0</i>
Maryland.....	1,632	129,416	+1.4	3,019,254	+5.6	⁶ 42	<i>87,262</i>	<i>-5</i>	<i>2,000,416</i>	<i>+3.1</i>
District of Columbia.....	1,109	41,389	+1.7	1,091,925	+2.8	41	3,435	-5	117,062	-1
Virginia.....	2,073	113,142	+7	2,068,286	+9	436	76,686	+4	1,372,685	-6
West Virginia.....	1,205	135,046	+2.3	3,338,243	+5.0	213	48,248	+1.3	1,170,782	+7.0

See footnotes at end of table.

TABLE 6.—Comparison of Employment and Pay Rolls in Identical Establishments in September and October 1938, by Geographic Divisions and by States—Continued

Geographic division and State	Total—all groups				Manufacturing				
	Number of establishments	Number on pay roll October 1938	Percentage change from September 1938	Amount of pay roll (1 week) October 1938	Percentage change from September 1938	Number of establishments	Number on pay roll October 1938	Percentage change from September 1938	Amount of pay roll (1 week) October 1938
South Atlantic—Continued				<i>Dollars</i>					<i>Dollars</i>
North Carolina	1,617	172,092	+1.5	2,601,828	+1.9	668	154,917	+1.3	2,329,812
South Carolina	798	89,114	+1.0	1,255,850	+2.4	241	80,876	+1.0	1,105,535
Georgia	1,483	110,398	+2.4	1,730,460	+5.3	371	83,774	+2.9	1,187,878
Florida	1,039	41,643	+5.4	731,854	+3.7	193	20,196	+2.2	316,018
East South Central	4,725	268,578	+1.2	5,330,968	+3.0	1,052	177,279	+9.9	3,056,679
Kentucky	1,411	78,242	+8	1,686,564	+3.5	292	30,870	+8	650,952
Tennessee	1,344	99,736	+2	1,774,124	+7	372	71,581	+2	1,240,526
Alabama	1,444	92,578	+2.2	1,601,488	+4.8	301	61,906	+1.4	988,282
Mississippi	526	19,020	+4.0	268,792	+4.7	87	12,922	+4.5	170,919
West South Central	6,302	235,027	+6	5,087,481	+2	1,386	115,235	+10	2,445,799
Arkansas	1,126	56,277	+2.8	606,761	+2.1	306	22,217	+8.1	375,404
Louisiana	1,087	57,719	+1.4	1,132,353	+1.0	253	32,257	+8	588,230
Oklahoma	1,455	42,852	+1	1,038,175	+1.2	131	10,705	+3	254,440
Texas	2,634	99,179	+4	2,311,192	+9	710	60,060	+1.4	1,227,725
Mountain	4,485	128,557	+5.3	3,033,091	+4.4	544	39,418	+10.6	905,521
Montana	687	13,772	+9.6	374,910	+8.4	75	4,976	+26.2	132,500
Idaho	590	12,182	+11.8	288,218	+9.0	60	4,186	+19.6	93,814
Wyoming	347	9,319	+4.0	261,046	+3.2	37	1,929	+32.6	56,455
Colorado	1,299	45,292	+5.3	1,033,078	+2.7	193	16,308	+13.2	365,883
New Mexico	310	7,354	+6.8	141,591	+3.1	29	1,010	+11.0	16,856
Arizona	452	15,057	+4.4	393,749	+6.9	40	2,776	+2.7	68,350
Utah	623	20,827	+4	458,756	+1.6	97	7,968	+5.7	164,002
Nevada	187	2,754	+1.2	81,743	+4.4	13	265	+7	7,601
Pacific	10,522	454,826	+5.3	12,828,700	+2.5	2,616	237,938	+8.7	6,475,254
Washington	2,893	92,425	+2.0	2,427,138	+1.0	532	48,069	+3.9	1,248,062
Oregon	1,415	49,459	+9.1	1,291,478	+7.0	289	27,748	+14.4	721,028
California	6,214	312,942	+5.7	9,110,084	+2.8	1,795	162,121	+9.0	4,506,164

¹ Includes banks and trust companies; construction, municipal, agricultural, and office employment; amusement and recreation; professional services; and trucking and handling.

² Includes laundering and cleaning; and water, light, and power.

³ Weighted percentage change.

⁴ Includes automobile and miscellaneous services, restaurants; and building and contracting.

⁵ Includes construction but not public works.

⁶ Does not include logging.

⁷ Includes banks, real estate, pipe-line transportation, trucking and transfer, railroads (other than repair shops), motor transportation (other than operation and maintenance), water transportation, hospitals and clinics; personal, business, mechanical repair, and miscellaneous services; and building construction.

⁸ Includes financial institutions, miscellaneous services, and restaurants.

⁹ Weighted percentage change including hired farm labor.

¹⁰ Less than $\frac{1}{10}$ of 1 percent.

¹¹ Includes automobile dealers and garages; and sand, gravel, and building stone.

¹² Includes banks, insurance, and office employment.

INDUSTRIAL AND BUSINESS EMPLOYMENT IN PRINCIPAL METROPOLITAN AREAS

A comparison of employment and pay rolls in September and October 1938 is made in table 7 for 13 metropolitan areas which had a population of 500,000 or over in 1930. Cities within these areas, but having a population of 100,000 or over, are not included. Data concerning them are presented in a supplementary tabulation which is available on request.

Footnotes to the table indicate which cities are excluded. 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 September and October 1938, by Principal Metropolitan Areas*

Metropolitan area	Number of establishments, October 1938	Number on pay roll October	Percentage change from September	Amount of pay roll (1 week) October	Percentage change from September
New York, N. Y. ¹	14, 814	671, 762	+2.7	\$18, 520, 472	+1.7
Chicago, Ill. ²	4, 549	410, 416	+2.0	11, 213, 099	+2.7
Philadelphia, Pa. ³	2, 183	194, 378	+1.6	5, 233, 604	+1.7
Detroit, Mich.....	1, 670	270, 181	+17.7	9, 080, 752	+21.4
Los Angeles, Calif. ⁴	3, 051	150, 607	+()	4, 376, 377	+1.8
Cleveland, Ohio.....	1, 723	118, 162	+2.1	3, 169, 953	+5.6
St. Louis, Mo.....	1, 494	117, 085	+5	2, 794, 483	+3.3
Baltimore, Md.....	1, 188	98, 649	+1.9	2, 337, 829	+5.1
Boston, Mass. ⁵	1, 574	108, 539	+2.7	2, 961, 950	+1.6
Pittsburgh, Pa.....	1, 211	168, 212	+3.5	4, 295, 360	+8.4
San Francisco, Calif. ⁶	1, 691	79, 784	-2.8	2, 355, 111	-2
Buffalo, N. Y.....	895	72, 746	+5.6	2, 035, 694	+7.1
Milwaukee, Wis.....	1, 159	92, 045	-3	2, 450, 021	+4.1

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

² Does not include Gary, Ind.

³ Does not include Camden, N. J.

⁴ Does not include Long Beach, Calif.

⁵ Figures relate to city of Boston only.

⁶ Does not include Oakland, Calif.

⁷ Less than $\frac{1}{10}$ of 1 percent.

Public Employment

Employment created by the Federal Government includes employment in the regular agencies of the Government, employment on the various construction programs wholly or partially financed by Federal funds, and employment on relief-work projects.

EXECUTIVE SERVICE OF THE FEDERAL GOVERNMENT

Statistics of employment and pay rolls for the executive service of the Federal Government in September and October 1938 are given in table 8.

TABLE 8.—Employment and Pay Rolls for the Executive Service of the U. S. Government, September and October 1938 ¹

[Subject to revision]

Item	Employment		Per-centage change	Pay rolls		Per-centage change
	October	Sep-tember ²		October	September ²	
Entire service:						
Total.....	869, 885	870, 859	—0.1	\$131, 087, 375	\$131, 931, 961	—0.6
Regular appropriation.....	718, 819	719, 162	(³)	112, 051, 679	112, 923, 770	— .8
Emergency appropriation.....	67, 432	66, 321	+1.7	9, 018, 869	8, 895, 663	+1.4
Force-account (regular and emer-gency).....	83, 634	85, 376	—2.0	10, 016, 827	10, 112, 528	— .9
Inside the District of Columbia:						
Total.....	118, 188	118, 036	+ .1	20, 908, 286	20, 970, 161	— .3
Regular appropriation.....	100, 882	100, 925	(³)	18, 183, 689	18, 280, 369	— .5
Emergency appropriation.....	12, 297	12, 367	— .6	1, 924, 610	1, 932, 158	— .4
Force-account (regular and emer-gency).....	5, 009	4, 744	+5.6	799, 987	757, 634	+5.6
Outside the District of Columbia:						
Total.....	751, 697	752, 823	— .1	110, 179, 089	110, 961, 800	— .7
Regular appropriation.....	617, 937	618, 237	(³)	93, 867, 990	94, 643, 401	— .8
Emergency appropriation.....	55, 135	53, 954	+2.2	7, 094, 259	6, 963, 505	+1.9
Force-account (regular and emer-gency).....	78, 625	80, 632	—2.5	9, 216, 840	9, 354, 894	—1.5

¹ Data include number of employees receiving pay during the last pay period of the month.

² Revised.

³ 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 October on construction projects financed by Public Works Administration funds are given in table 9, by type of project.

TABLE 9.—Employment and Pay Rolls on Projects Financed from Public Works Administration Funds, October 1938 ¹

[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 ¹	Weekly average				
	Federal projects financed from National Industrial Recovery Act funds					
All projects.....	8, 249	7, 914	\$687, 688	1, 005, 740	\$0. 684	\$632, 110
Building construction.....	516	440	52, 578	51, 573	1. 019	45, 993
Naval vessels.....	398	380	57, 285	62, 112	. 922	18, 795
Public roads ²	(³) 5, 003	5, 003	327, 877	568, 747	. 576	280, 000
Reclamation.....	1, 470	1, 386	192, 895	228, 164	. 845	194, 176
River, harbor, and flood control.....	781	642	50, 086	89, 137	. 562	89, 869
Water and sewerage.....	80	62	6, 817	5, 767	1. 182	2, 077
Miscellaneous.....	1	1	150	240	. 625	1, 200

See footnotes at end of table.

TABLE 9.—Employment and Pay Rolls on Projects Financed from Public Works Administration Funds, October 1938 ¹—Continued

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 ¹	Weekly average				
Federal projects financed from Public Works Administration Appropriation Act 1938 funds						
All projects.....	22, 153	18, 956	\$2, 232, 659	2, 574, 089	\$0. 867	\$3, 493, 200
Building construction.....	10, 562	8, 753	844, 939	1, 026, 307	. 823	2, 271, 669
Electrification.....	155	146	16, 257	17, 973	. 905	34, 126
Reclamation.....	8, 153	7, 338	1, 119, 533	1, 154, 437	. 970	222, 996
River, harbor, and flood control.....	149	121	10, 751	11, 752	. 915	53, 643
Ship construction.....	240	212	23, 982	30, 662	. 782	205, 582
Streets and roads.....	283	245	13, 598	24, 621	. 552	89, 430
Water and sewerage.....	159	143	9, 515	17, 421	. 546	14, 923
Miscellaneous.....	1, 400	1, 232	92, 962	147, 847	. 629	473, 474
Professional, technical, and clerical.....	1, 052	766	101, 117	143, 069	. 707	127, 357
Non-Federal projects financed from National Industrial Recovery Act funds						
All projects ²	9, 441	8, 004	\$1, 064, 854	845, 220	\$1. 260	\$1, 351, 868
Building construction ³	4, 724	4, 090	647, 747	393, 435	1. 646	773, 529
Railroad construction.....	49	49	195	392	. 497	0
Streets and roads.....	814	623	30, 941	47, 512	. 651	42, 692
Water and sewerage.....	2, 512	2, 049	270, 404	236, 947	1. 141	427, 857
Miscellaneous.....	1, 342	1, 193	115, 567	166, 934	. 692	107, 790
Projects financed from Emergency Relief Appropriation Act 1935, 1936, and 1937 funds ⁴						
All projects ⁵	67, 733	57, 058	\$5, 866, 208	6, 876, 044	\$0. 853	\$11, 070, 224
Building construction ³	43, 441	36, 461	3, 866, 592	4, 233, 410	. 913	6, 694, 740
Electrification.....	1, 407	1, 227	107, 201	147, 253	. 728	357, 377
Heavy engineering.....	5, 023	4, 360	807, 964	582, 590	. 872	674, 528
Reclamation.....	1, 302	1, 161	129, 903	171, 871	. 756	937, 590
River, harbor, and flood control.....	250	231	17, 955	29, 347	. 612	18, 488
Streets and roads.....	7, 302	5, 707	406, 081	689, 317	. 589	673, 583
Water and sewerage.....	8, 959	7, 869	526, 683	1, 016, 738	. 813	1, 630, 683
Miscellaneous.....	49	42	3, 829	5, 518	. 694	83, 235
Non-Federal projects financed from Public Works Administration Appropriation Act 1938 funds						
All projects.....	40, 397	31, 210	\$2, 238, 683	2, 982, 105	\$0. 751	\$9, 104, 944
Building construction.....	23, 633	18, 339	1, 278, 563	1, 606, 244	. 796	4, 471, 693
Heavy engineering.....	978	767	108, 308	83, 303	1. 300	908, 241
Reclamation.....	138	110	5, 031	8, 808	. 571	6, 192
River, harbor, and flood control.....	339	254	26, 625	26, 822	. 993	200, 412
Streets and roads.....	9, 334	7, 191	479, 449	765, 372	. 626	1, 319, 675
Water and sewerage.....	5, 718	4, 349	327, 008	474, 110	. 690	1, 988, 838
Miscellaneous.....	257	200	13, 699	17, 446	. 785	209, 893

¹ Data are for the month ending on the 15th.

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

³ Includes weekly average for public roads.

⁴ Under the jurisdiction of the Bureau of Public Roads.

⁵ Not available; weekly average included in total for all projects.

⁶ 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.

⁷ These data are also included in separate tables covering projects financed by The Works Program.

⁸ Includes a maximum of 868 and an average of 634 employees working on low-cost housing projects financed from E. R. A. A. 1935 funds who were paid \$56,134 for 67,186 man-hours of labor. Material orders in the amount of \$37,148 were placed for these projects. These data were also included in separate tables covering projects financed from The Works Program.

Construction projects financed by the Public Works Administration are those projects authorized by title II of the National Industrial Recovery Act of June 16, 1933. This program of public works was extended to June 30, 1937, by the Emergency Relief Appropriation Act of 1935 and title II of the First Deficiency Appropriation Act of 1936. The First Deficiency Appropriation Act of 1936, cited as the Emergency Relief Appropriation Act of 1936, reappropriated unobligated funds originally made available under the Emergency Relief Appropriation Act of 1935 and authorized the use of \$300,-000,000 from funds on hand or received from the sale of securities. The Public Works Administration was continued until July 1, 1939, by the Public Works Administration Extension Act of 1937, and the Public Works Administration Appropriation Act of 1938 further continued the program to June 30, 1941.

Federal construction projects for which data are included in table 9 are financed by allotments made by the Public Works Administration to the various agencies and departments of the Federal Government from funds provided under the National Industrial Recovery Act. The major portion of the low-cost housing program now under way, however, is financed by funds provided under the Emergency Relief Appropriation Act of 1935. Federal construction projects are also financed by allotments from funds provided under the Public Works Administration Appropriation Act of 1938. The work is performed either by commercial firms which have been awarded contracts, or by day labor hired directly by the Federal agencies.

Non-Federal projects are financed by allotments made by the Public Works Administration from funds available under either the National Industrial Recovery Act, the Emergency Relief Appropriation Act of 1935, the First Deficiency Appropriation Act of 1936, the Public Works Administration Extension Act of 1937, or the Public Works Administration Appropriation Act of 1938. Most of the allotments have been made to the States and their political subdivisions, but occasionally allotments have been made to commercial firms. In financing projects for the States or their political subdivisions from funds appropriated under the National Industrial Recovery Act, the Public Works Administration makes a direct grant of not more than 30 percent of the total labor and material cost. When funds provided under the Emergency Relief Appropriation Act of 1935, the First Deficiency Appropriation Act of 1936, the Public Works Administration Extension Act of 1937, or the Public Works Administration Appropriation Act of 1938 are

used to finance a non-Federal project, as much as 45 percent of the total cost may be furnished in the form of a grant. The remaining 55 percent or more of the cost is financed by the recipient. When circumstances justify such action, the Public Works Administration may provide the grantee with the additional funds by means of a loan. Allotments to commercial enterprises are made only as loans. All loans made by the Public Works Administration carry interest charges and have a definite date of maturity. Collateral posted with the Public Works Administration to secure loans may be offered for sale to the public. In this way a revolving fund is provided which enlarges the scope of the activities of the Public Works Administration.

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

THE WORKS PROGRAM

By authority of Public Resolution No. 11, Seventy-fourth Congress, approved April 8, 1935, the President, in a series of Executive orders, inaugurated a broad program of work to be carried out by 61 units of the Federal Government. The Works Program was continued by title II of the First Deficiency Appropriation Act of 1936, cited as the Emergency Relief Appropriation Act of 1936, and was further continued by the Emergency Relief Appropriation Act of 1937. The Emergency Relief Appropriation Act of 1938 extended this program to June 30, 1939. Employment created by this program includes employment on Federal projects and employment on projects operated by the Works Progress Administration. Federal projects are those conducted by Federal agencies which have received allotments from The Works Program fund. Projects operated by the Works Progress Administration are those projects conducted under the supervision of the Works Progress Administration with the cooperation of States, cities, or counties.

A record of employment, pay rolls, and man-hours worked on projects financed by The Works Program in October is shown in table 10, by type of project.

TABLE 10.—*Employment and Pay Rolls on Projects Financed by the Works Program.*
October 1938 ¹

[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 projects						
All projects.....	² 120,754	110,996	\$0,055,209	12,788,922	\$0.473	\$1,423,139
Building construction.....	41,606	38,925	2,246,735	4,102,059	.548	373,162
Electrification.....	331	213	14,597	34,188	.427	27,930
Forestry ³	10,644	9,522	462,793	1,067,020	.434	43,655
Grade-crossing elimination ⁴	3,336	2,570	184,160	303,932	.606	236,444
Hydroelectric power plants ⁴	1,659	1,332	44,023	181,404	.243	19,328
Plant, crop, and livestock conservation ⁵	12,650	11,354	614,290	1,494,846	.411	59,377
Professional, technical, and clerical.....	3,732	3,546	260,139	404,755	.643	11,894
Public roads ⁴	1,908	1,607	98,579	188,223	.524	53,230
Reclamation.....	30,181	29,078	1,601,360	3,555,096	.450	429,013
River, harbor, and flood control.....	2,367	1,801	135,751	239,114	.568	80,042
Streets and roads.....	2,680	2,304	76,155	237,971	.320	39,523
Water and sewerage.....	1,058	930	35,556	101,869	.349	23,571
Miscellaneous.....	8,602	7,808	281,062	878,445	.320	25,970
P. W. A. projects financed from Emergency Relief Appropriation Act funds of 1935, 1936, and 1937 ⁶						
All projects.....	² 67,733	57,058	\$5,866,208	6,876,044	\$0.853	\$11,070,224
Building construction.....	43,441	36,461	3,866,592	4,233,410	.913	6,094,740
Electrification.....	1,467	1,227	107,201	147,253	.728	357,377
Heavy engineering.....	5,023	4,360	507,964	582,590	.872	674,528
Reclamation.....	1,302	1,161	129,903	171,871	.756	937,590
River, harbor, and flood control.....	250	231	17,955	29,347	.612	18,488
Streets and roads.....	7,302	5,707	406,081	689,317	.589	673,583
Water and sewerage.....	8,959	7,869	826,683	1,016,738	.813	1,030,683
Miscellaneous.....	40	42	3,829	5,518	.094	83,235
Projects operated by Works Progress Administration ⁷						
All projects.....	⁸ 3,245,271	-----	\$170,347,326	341,023,189	\$0.500	(⁹)

¹ Unless otherwise noted data are for the month ending on the 15th.

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

³ The data for the Bureau of Entomology and Plant Quarantine, under plant, crop, and livestock conservation, and the Bureau of Forest Service, under forestry, are for the calendar month.

⁴ These data are for projects under the jurisdiction of the Bureau of Public Roads.

⁵ These data are for projects under construction in Puerto Rico.

⁶ Includes data for 66,865 employees working on non-Federal projects and 868 employees working on low-cost housing projects. These data are included in separate tables covering projects under the jurisdiction of the Public Works Administration.

⁷ Data are for the calendar month. Not available by type of project.

⁸ Represents number of names on pay roll for week ending October 29, 1938.

⁹ Data on a monthly basis are not available.

Table 11 shows employment, pay rolls, and man-hours worked for the third quarter of 1938 on projects operated by the Works Progress Administration, by type of project.

TABLE 11.—Employment and Pay Rolls on Projects Operated by the Works Progress Administration, by Type of Project, for the Third Quarter of 1938

[Subject to revision]

Type of project	Number employed ¹	Pay-roll disbursements	Number of man-hours worked	Average earnings per hour
All projects.....	3,116,471	\$179,261,489	952,904,427	\$0.503
Conservation.....	121,289	18,591,062	37,442,190	.497
Highway, road, and street.....	1,476,425	194,641,045	429,708,110	.453
Professional, technical, and clerical.....	324,714	66,845,492	104,626,879	.639
Public buildings ²	278,878	49,373,425	72,325,239	.685
Publicly owned or operated utilities.....	251,127	48,080,279	97,121,924	.495
Recreational facilities ²	247,495	44,981,867	75,249,208	.598
Sanitation and health.....	74,903	9,683,016	23,122,665	.419
Sewing, canning, gardening, etc.....	258,942	33,882,002	89,060,282	.377
Transportation.....	50,918	8,108,159	13,532,605	.608
Not elsewhere classified.....	31,791	4,875,142	10,167,265	.482

¹ Data are for the week ending Sept. 24, 1938.

² Exclusive of buildings.

³ Separate data for housing projects are not available.

Table 12 shows the employment, pay rolls, and man-hours worked on work projects of the National Youth Administration from the beginning of the program in January 1936 to October 1938, inclusive. Similar data for Student Aid are shown from September 1935, the starting date, to September 1938, inclusive.

TABLE 12.—Employment and Pay Rolls on National Youth Administration Projects Financed by The Works Program from the Beginning of Program through October 1938¹

[Subject to revision]

Year and month	Number of persons employed	Pay-roll disbursements	Number of man-hours worked	Average earnings per hour	Value of material orders placed
Work projects					
January 1936 to October 1938, inclusive.....		\$91,132,340	254,704,566	\$0.370	\$9,017,670
January to December 1936.....	28,883,589	75,827,799	.381		
January to December 1937.....	32,601,360	87,092,351	.374		
January 1938.....	114,797	2,549,914	6,896,668	.370	
February 1938.....	151,406	2,667,226	7,288,377	.366	
March 1938.....	154,367	2,751,797	7,610,360	.362	
April 1938.....	158,082	2,760,533	7,673,809	.360	
May 1938.....	172,134	2,967,134	8,286,913	.358	
June 1938.....	202,184	3,437,299	9,519,163	.361	
July 1938.....	213,972	3,685,148	10,332,962	.357	
August 1938.....	221,307	3,888,640	11,125,311	.350	
September 1938.....	220,756	3,927,491	11,421,877	.344	
October 1938.....	220,066	4,012,209	11,628,976	.345	
Student Aid					
September 1935 to September 1938, inclusive.....		\$69,213,875	232,662,465	\$0.297	(²)
September to December 1935.....	6,363,543	19,612,976	.324		
January to December 1936.....	25,888,559	83,424,616	.306		
January to December 1937.....	24,188,039	84,028,847	.291		
January 1938.....	307,544	2,601,785	6,889,595	.287	
February 1938.....	319,707	2,162,506	7,584,382	.285	
March 1938.....	328,037	2,217,712	7,781,022	.285	
April 1938.....	333,902	2,256,566	7,929,912	.285	
May 1938.....	326,644	2,393,522	8,355,521	.286	
June 1938.....	217,447	1,538,947	5,123,792	.300	
July 1938 ⁴					
August 1938.....	1,780	5,696	31,871	.179	
September 1938.....	44,865	196,999	817,901	.241	

¹ Data are for a calendar month.

² Data on a monthly basis are not available. This total represents expenditures through June 30, 1938, and includes rentals and services and some sponsors' contributions.

³ No expenditures for materials on this type of project.

⁴ Student Aid program was not active.

CIVILIAN CONSERVATION CORPS

The Civilian Conservation Corps was created by an act of Congress approved June 28, 1937, and succeeded the Emergency Conservation Work which had been set up in April 1933.

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

Employment and pay rolls in the Civilian Conservation Corps in September and October 1938 are presented in table 13.

TABLE 13.—Employment and Pay Rolls in the Civilian Conservation Corps, September and October 1938 ¹

[Subject to revision]

Group	Number of employees		Amount of pay rolls	
	October	September	October	September
All groups.....	324, 747	317, 252	\$14, 602, 688	\$14, 467, 301
Enrolled personnel ²	286, 908	279, 110	8, 934, 249	8, 697, 163
Reserve officers.....	5, 065	5, 068	1, 312, 615	1, 363, 251
Nurses ³	282	283	20, 773	20, 879
Educational advisers ³	1, 566	1, 566	265, 807	261, 007
Supervisory and technical ³	30, 926	31, 225	4, 060, 244	4, 115, 401

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

² October data include 3,902 enrollees and pay roll of \$87,646 outside continental United States; in September the corresponding figures were 3,960 enrollees and \$90,766.

³ 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 October are presented in table 14, by type of project.

TABLE 14.—Employment and Pay Rolls on Projects Financed by the Reconstruction Finance Corporation, by Type of Project, October 1938 ¹

[Subject to revision]

Type of project	Maximum number of wage earners ²	Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
All projects.....	3, 305	\$388, 027	528, 529	\$0. 734	\$462, 339
Building construction ³	1, 508	113, 485	223, 004	. 509	168, 435
Water and sewerage.....	1, 797	274, 542	305, 525	. 899	293, 904

¹ Data are for the month ending on the 15th.

² Maximum number employed during any 1 week of the month by each contractor.

³ Includes 283 employees; pay-roll disbursements of \$30,771; 20,380 man-hours worked, and material orders placed of \$32,886 on projects financed by RFC Mortgage Co.

CONSTRUCTION PROJECTS FINANCED FROM REGULAR FEDERAL APPROPRIATIONS

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

Data concerning employment, pay rolls, and man-hours worked on construction projects financed from regular Federal appropriations during October are given in table 15, by type of project.

TABLE 15.—Employment and Pay Rolls on Construction Projects Financed From Regular Federal Appropriations, by Type of Project, October 1938 ¹

[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 ²	Weekly average				
All projects.....	³ 259, 402	245, 463	\$24, 649, 559	35, 567, 408	\$0. 693	\$34, 434, 698
Building construction.....	16, 654	13, 799	1, 512, 459	1, 565, 461	. 966	2, 430, 693
Electrification:						
Rural Electrification Administration projects ⁴	6, 183	5, 119	351, 734	669, 144	. 526	2, 000, 335
Other than Rural Electrification Administration projects.....	148	100	7, 883	7, 986	. 987	5, 206
Forestry.....	114	110	10, 614	19, 557	. 543	9, 331
Heavy engineering.....	141	129	17, 280	19, 373	. 892	6, 197
Public roads ⁵	(⁶)	113, 324	8, 921, 074	15, 165, 421	. 588	14, 868, 457
Reclamation.....	17, 009	15, 900	1, 935, 599	2, 518, 370	. 769	2, 020, 133
River, harbor, and flood control:						
Dredging, dikes, revetments, etc.....	43, 200	37, 864	4, 239, 833	6, 505, 300	. 652	3, 159, 664
Locks and dams.....	10, 248	9, 476	1, 119, 764	1, 514, 113	. 740	1, 717, 753
Ship construction:						
Naval vessels.....	43, 437	41, 970	5, 880, 514	6, 591, 014	. 892	5, 653, 003
Other than naval vessels.....	3, 950	3, 188	346, 752	422, 708	. 820	1, 974, 536
Streets and roads.....	3, 749	3, 437	219, 516	437, 601	. 502	386, 159
Water and sewerage.....	304	259	23, 704	32, 605	. 727	71, 501
Miscellaneous.....	941	808	62, 833	98, 755	. 636	131, 730

¹ Data are for the month ending on the 15th.

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

³ Includes weekly average for public-road projects.

⁴ Financed by Rural Electrification Administration loans.

⁵ Under the jurisdiction of the Bureau of Public Roads.

⁶ Not available, weekly average included in 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 October 1938, compared with September 1938, and October 1937, is presented in table 16.

TABLE 16.—*Employment and Pay Rolls on Construction and Maintenance of State Roads, October 1938, September 1938, and October 1937*¹

[Subject to revision]

Item	Number of employees ²			Pay-roll disbursements		
	October 1938	September 1938	October 1937	October 1938	September 1938	October 1937
Total.....	220,820	205,248	187,325	\$14,496,340	\$13,951,370	\$12,134,860
New roads.....	35,426	32,054	27,280	2,204,290	2,151,590	1,730,250
Maintenance.....	185,394	173,194	160,045	12,292,050	11,799,780	10,404,610

¹ Data are for the month ending on the 15th and are for projects financed wholly from State or local funds.

² Average number working during month.

