

UNITED STATES DEPARTMENT OF LABOR

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TREND OF EMPLOYMENT

JULY 1934



Prepared by Division of Employment Statistics

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CONTENTS

Industrial:	Page
By industries:	
Manufacturing industries	1-13
Nonmanufacturing industries	14-18
Anthracite and bituminous coal mining.	
Metalliferous mining.	
Quarrying and nonmetallic mining.	
Crude-petroleum producing.	
Public utilities:	
Telephone and telegraph.	
Electric light and power and manufactured gas.	
Electric railroads.	
Wholesale and retail trade.	
Hotels.	
Laundries.	
Dyeing and cleaning.	
Banks, brokerage, insurance, and real estate.	
Building	19-22
Class I steam railroads	31-32
By States	22-30
By cities	31
Public:	
Federal employees	32-34
Public Works Administration	34-40
Emergency work relief	40-41
Emergency conservation work	41-42
Public roads not financed by P.W.A.	42-43
Construction projects financed by R.F.C.	43-45
Wage-rate changes	45-49

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JULY 1934

THE Bureau of Labor Statistics of the United States Department of Labor presents herewith data compiled from pay-roll reports supplied by representative establishments in 90 of the principal manufacturing industries of the country and 18 nonmanufacturing industries, covering the pay period ending nearest the 15th of the month. Additional information is presented concerning employment on Public Works Administration projects, public roads, the Federal service, and class I steam railroads.

MANUFACTURING INDUSTRIES

FACTORY employment and pay rolls decreased 3 percent and 6.8 percent, respectively, from June to July. These declines were due to inventory taking, repairs, vacations, and the closing down of plants over an extended July 4 holiday period. The decreases this year were further augmented by strikes in various localities. In a number of instances, plants reported that operations were affected by the drought and extreme heat. During the preceding 15-year period, 1919-33, inclusive, for which data are available in the Bureau of Labor Statistics, employment declined in July in 12 instances and pay rolls decreased in 13 instances. The only years in which increases in employment in July were shown were 1919, 1929, and 1933. The general indexes of factory employment and pay rolls for July are 78.6 and 60.4, respectively.

A comparison of these indexes with those of July 1933 shows gains over the year interval of 9.9 percent in employment and 18.9 percent in pay rolls.

The Bureau recently revised its indexes of factory employment and pay rolls. The base now used in computing these index numbers is the average for the 3-year period, 1923-25, taken as 100. This new series of indexes has been adjusted to conform to census trends over the period 1919-31. Prior to March 1934 the indexes of factory employment and pay rolls published by the Bureau of Labor Statistics were based on the 12-month average of 1926 and were not adjusted to conform to biennial census trends. A short discussion of this revision appeared in the March 1934 Trend of Employment and

a more complete bulletin on this subject is being prepared for publication. The July 1934 group and general indexes of factory employment and pay rolls on the 1926 base are shown in this pamphlet under the heading "Index numbers of employment and pay-roll totals in manufacturing."

The indexes of factory employment and pay rolls are computed from reports made by representative establishments in 90 important manufacturing industries of the country. Reports were received in July from 23,671 establishments employing 3,624,826 wage earners, whose weekly earnings during the pay period ending nearest July 15 totaled \$67,439,057. More than 50 percent of the wage earners in all the manufacturing industries of the country were covered in these reports.

Increases in employment in July were shown in 20 of the 90 manufacturing industries surveyed, while gains in pay rolls were registered in 21. The most pronounced increase in employment was a seasonal rise of 33 percent in canning and preserving. The employment increases of 21.1 percent in the typewriter industry, 14.6 percent in rubber boots and shoes, and 10.7 percent in the cash-register, adding-machine, and calculating-machine industries were due largely to resumption of plant operations in July following the settlement of labor difficulties in certain establishments. The gain of 14.5 percent in the beet-sugar industry was seasonal, while the expansion in the locomotive industry, which began in March, was evidenced by a 9.5 percent rise in employment and reflected the placing of orders for equipment by railroads. Rayon establishments had 8.4 percent more employees on their rolls, while a gain of 8.1 percent in the cottonseed-oil-cake-meal industry marked preliminary activity preparatory to a later pronounced seasonal expansion. The beverage and ice cream industries reported seasonal gains in employment of 3.2 and 4.7 percent, respectively. A number of establishments in the slaughtering and meat packing industry reported increases due to large receipts of cattle purchased by the Government. The increase of 1.5 percent in employment in the baking industry was due primarily to the adoption of the N.R.A. code by the industry on July 9. Among the remaining 8 industries reporting increased employment, small seasonal gains were shown in the boot and shoe, woolen and worsted goods, and tin-can industries.

The most pronounced decline in employment from June to July (29.1 percent) was shown in the hardware industry. Inventories, vacations, and drought, together with a falling off in demand for automobile hardware, accounted to some extent for this sharp decline. The millinery and women's clothing industries reported seasonal losses in employment of 22.5 percent and 21 percent, respectively. The silverware industry reported a decline of 11.5 percent, aircraft

10.9 percent, and shirts and collars 10.4 percent. Employment in shipbuilding declined 9.6 percent and the aluminum-manufactures industry showed a falling off of 9.3 percent. Employment in the blast furnace, steel works, rolling mills industry decreased 8.4 percent over the month interval, and pay rolls showed a decline of 30.5 percent due to reduced plant operations during the July 15 pay period. Among the remaining 61 industries in which employment decreased in July, declines in industries of major importance were automobiles, 7.8 percent; foundry and machine-shop products, 5 percent; saw-mills, 3.8 percent; machine tools, 2.6 percent; cotton goods, 2.1 percent; and newspapers, 2 percent.

A comparison of employment and pay rolls for individual industries in July 1934 with July 1933 shows more workers in 67 industries in July of this year and larger pay rolls in 75 industries.

Dividing the manufacturing industries into "durable" and "non-durable" goods groups, the former group shows decreases in employment and pay rolls of 4.8 percent and 12.5 percent, respectively. The latter group shows a falling off of 1.6 percent in both employment and pay rolls. The "durable" goods group is composed of the following subgroups: IRON AND STEEL, MACHINERY, TRANSPORTATION EQUIPMENT, RAILROAD REPAIR SHOPS, NONFERROUS METALS, LUMBER AND ALLIED PRODUCTS, and STONE-CLAY-GLASS.

Per capita weekly earnings for all manufacturing industries combined decreased 4 percent from June to July, and increased 8.2 percent from July 1933 to July 1934. Gains from June to July were shown in 24 of the 90 individual manufacturing industries surveyed and ranged from less than one-tenth of 1 percent to 17.8 percent.

The per capita earnings shown in the following table must not be confused with full-time weekly rates of wages. They are per capita weekly earnings, computed by dividing the total amount of pay roll for the week by the total number of employees (part-time as well as full-time workers).

Man-hour data supplied by identical establishments in June and July 1934 showed a decrease for all manufacturing industries combined of 4.3 percent in average hours worked per week over the month interval and an increase in average hourly earnings of 0.9 percent. Seventeen of the industries covered showed increases in average hours worked and 60 reported increased hourly earnings. As all reporting establishments do not furnish man-hour information, the Bureau's figures on average hours worked per week and average hourly earnings are necessarily computed from data furnished by a smaller number of establishments than are covered in the monthly survey of manufacturing industries. Average hours worked per week and average hourly earnings are presented for only those manufacturing indus-

tries for which available information covers at least 20 percent of all the employees in the industry.

In table 1, which follows, are shown indexes of employment and pay rolls in July 1934 for each of the 90 manufacturing industries surveyed, for the 14 major groups and 2 subgroups into which these industries are classified, and for manufacturing as a whole, together with percentages of change from June 1934 and July 1933. Per capita weekly earnings in July 1934, together with percentages of change from the previous month and from July of the previous year for each of the 90 manufacturing industries and for manufacturing as a whole, are also presented in this table. Average hours worked per week in July 1934 and average hourly earnings, together with percentages of change from June 1934 and July 1933, are likewise presented for manufacturing as a whole and for those industries for which man-hour data covering at least 20 percent of the total employees in the industry were received.

TABLE 1.—EMPLOYMENT, WEEKLY PAY ROLLS, PER CAPITA WEEKLY EARNINGS, AVERAGE HOURS WORKED PER WEEK, AND AVERAGE HOURLY EARNINGS IN **MANUFACTURING** INDUSTRIES IN JULY 1934 AND COMPARISON WITH JUNE 1934 AND JULY 1933

Industry	Employment			Pay roll			Per capita weekly earnings ¹			Average hours worked per week ¹			Average hourly earnings ¹		
	Index July 1934 (3-year average 1923-25 = 100)	Percentage change from—		Index July 1934 (3-year average 1923-25 = 100)	Percentage change from—		Average in July 1934	Percentage change from—		Average in July 1934	Percentage change from—		Average in July 1934	Percentage change from—	
		June 1934	July 1933		June 1934	July 1933		June 1934	July 1933		June 1934	July 1933		June 1934	July 1933
Total manufacturing ¹	78.6	-3.0	+9.9	60.4	-6.8	+18.9	\$18.60	-4.0	+8.2	33.4	-4.3	-19.5	<i>Cents</i> 55.6	+0.9	+31.4
Iron and steel and their products, not including machinery	70.3	-8.0	+13.8	47.6	-24.0	+15.0									
Blast furnaces, steel works, and rolling mills	72.4	-8.4	+16.6	47.9	-30.5	+15.7	18.06	-24.1	- 8	28.1	-24.3	-30.4	63.5	-1.2	+40.2
Bolts, nuts, washers, and rivets	79.8	-5.9	+2.0	55.4	-14.1	+12.4	17.68	-8.6	+10.3	31.7	-10.5	-20.9	55.6	+ 4	+30.7
Cast-iron pipe	51.9	-3.2	+20.1	27.4	-5.0	+24.0	14.65	-1.9	+3.1	29.2	- 7	-21.6	50.7	-3.1	+29.7
Cutlery (not including silver and plated cutlery), and edge tools	75.4	-5.3	+22.8	53.4	-5.4	+20.3	19.18	- 1	-2.2	35.4	- 8	-17.3	53.7	+ 2	+18.1
Forgings, iron and steel	51.5	-12.7	+24.7	34.3	-19.9	+28.9	19.26	-8.2	+4.0	32.9	-7.6	-19.5	59.1	- 8	+25.0
Hardware	51.8	-29.1	-11.9	34.8	-33.6	-17.9	16.06	-6.2	-6.7	30.0	- 7	-23.5	53.9	-5.1	+20.6
Plumbers' supplies	64.0	- 5	- 8.0	36.4	-4.9	-6.7	16.93	-4.4	+1.9	31.3	-7.1	-18.6	53.7	+3.3	+28.3
Steam and hot-water heating apparatus and steam fittings	48.3	-1.8	-9.4	31.2	-2.0	+3.3	21.07	- 2	+13.8	34.9	- 6	-14.1	60.0	+ 5	+25.2
Stoves	86.6	-8.0	+23.7	56.5	-14.6	+20.7	17.79	-7.2	-1.9	32.8	-8.4	-20.9	54.2	+ 7	+21.5
Structural and ornamental metal work	59.0	-1.1	+29.7	40.6	-4.9	+69.2	19.73	-3.8	+30.0	33.2	-5.1	-1.1	59.5	+1.2	+26.9
Tin cans and other tinware	99.6	+3.0	+21.8	94.5	+ 5	+21.8	19.62	-2.4	- 1	37.0	-3.6	-14.0	52.8	- 8	+13.1
Tools (not including edge tools, machine tools, files, and saws)	59.3	-2.9	+20.0	49.0	-6.9	+27.6	19.10	-4.2	+6.6	35.3	-10.9	-18.8	54.2	+8.4	+31.4
Wirework	123.6	-6.0	+13.0	96.0	-19.5	+7.4	17.25	-14.3	-5.1	32.1	-13.5	-22.4	53.0	-1.5	+40.6
Machinery, not including transportation equipment	78.6	-2.7	+35.3	58.1	-5.7	+48.6									
Agricultural implements	69.3	-5.5	+72.8	70.2	-7.7	+112.7	19.85	-2.4	+23.1	34.9	-3.3	+1.6	57.4	+1.2	+23.4
Cash registers, adding machines, and calculating machines	104.6	+10.7	+30.8	86.3	+14.1	+49.1	27.12	+3.1	+13.7	38.7	(4)	-4.4	71.2	+3.0	+21.4
Electrical machinery, apparatus, and supplies	65.1	-1.7	+26.7	49.8	-3.9	+39.1	21.05	-2.3	+10.0	33.7	-4.0	-8.0	61.3	+1.8	+19.9
Engines, turbines, tractors, and water wheels	71.4	-1.6	+63.4	45.6	-8.1	+78.1	22.68	-6.6	+9.2	35.8	-6.5	-5.7	63.2	- 2	+14.6
Foundry and machine-shop products	69.5	-5.0	+31.4	51.1	-7.9	+44.8	20.35	-3.0	+10.5	34.5	-3.4	-8.0	59.2	+ 3	+22.9
Machine tools	69.1	-2.6	+84.3	51.5	-9.6	+95.8	22.08	-7.2	+6.6	36.1	-7.2	-4.9	61.1	- 5	+12.3
Radios and phonographs	205.0	- 5	+48.6	114.4	-2.6	+80.2	17.78	-2.1	+21.0	31.9	-3.0	-11.7	54.4	- 5	+49.7
Textile machinery and parts	71.3	-2.6	+13.2	56.1	-5.7	+1.4	20.59	-3.2	-10.6	34.7	-2.0	-25.1	61.1	-1.3	+22.0
Typewriters and parts	78.1	+21.1	+41.5	68.9	+28.9	+91.9	21.98	+6.4	+35.7	38.7	+3.5	-1.3	66.7	+2.5	+34.9

Footnotes at end of table.

TABLE 1.—EMPLOYMENT, WEEKLY PAY ROLLS, PER CAPITA WEEKLY EARNINGS, AVERAGE HOURS WORKED PER WEEK, AND AVERAGE HOURLY EARNINGS IN MANUFACTURING INDUSTRIES IN JULY 1934 AND COMPARISON WITH JUNE 1934 AND JULY 1933—Continued

Industry	Employment			Pay roll			Per capita weekly earnings ¹			Average hours worked per week ¹			Average hourly earnings ¹		
	Index July 1934 (3-year average 1923-25 = 100)	Percentage change from—		Index July 1934 (3-year average 1923-25 = 100)	Percentage change from—		Average in July 1934	Percentage change from—		Average in July 1934	Percentage change from—		Average in July 1934	Percentage change from—	
		June 1934	July 1933		June 1934	July 1933		June 1934	July 1933		June 1934	July 1933		June 1934	July 1933
Transportation equipment	87.8	-7.7	+50.6	65.4	-16.3	+50.3							<i>Cents</i>		
Aircraft.....	372.5	-10.9	+14.5	324.9	-11.3	+16.3	\$25.26	-0.6	+1.4	37.6	-10.0	-20.4	66.7	+9.0	+12.3
Automobiles.....	98.4	-7.8	+49.3	70.7	-17.6	+44.9	20.06	-10.6	-2.9	27.8	-13.1	-26.6	72.1	+2.7	+30.8
Cars, electric and steam-railroad.....	51.3	-4.7	+107.7	46.3	-12.9	+155.8	19.18	-8.6	+22.8	33.6	-8.2	+11.0	57.5	-3	+12.0
Locomotives.....	35.5	+9.5	+171.0	16.4	+12.1	+209.4	22.61	+2.4	+14.2	36.3	+2.3	-15.4	62.3	(1)	+19.9
Shipbuilding.....	69.2	-9.6	+32.3	55.6	-7.5	+53.6	23.53	+2.3	+16.4	31.6	+1.6	-7.2	74.1	+3.2	+30.8
Railroad repair shops	58.3	-2.5	+12.8	51.1	-5.0	+47.8									
Electric railroad.....	66.3	-7	+1.7	58.8	-1.4	+11.2	26.30	-7	+9.6	44.0	-2.0	+1.8	59.3	+1.4	+8.6
Steam railroad.....	57.7	-2.6	+13.8	50.6	-5.4	+29.4	24.44	-2.9	+13.7	38.4	-5.4	+13.9	63.4	+2.3	+3.1
Nonferrous metals and their products	73.2	-3.6	+18.6	54.1	-6.6	+25.5									
Aluminum manufactures.....	68.9	-9.3	-4.7	50.4	-14.6	-5.1	18.85	-5.8	-2	34.4	-7.8	-20.3	54.6	+1.9	+37.2
Brass, bronze, and copper products.....	75.0	-4.1	+8.5	54.4	-0.9	+11.5	20.15	-2.9	+2.7	35.2	-3.6	-16.3	57.4	+1.2	+25.6
Clocks and watches and time-recording devices.....	68.2	-1.7	+38.3	50.3	-4.9	+62.0	16.72	-3.2	+9.6	34.2	-4.7	-17.7	48.9	+1.7	+29.5
Jewelry.....	61.8	-4.3	+23.8	45.2	-6.4	+31.0	17.81	-2.2	+6.3	33.0	-9	-13.6	54.2	-1.5	+24.5
Lighting equipment.....	61.7	-4	+22.9	49.2	-1.1	+26.2	18.53	-7	+2.6	36.2	-1.9	-10.7	52.5	+1.5	+13.2
Silverware and plated ware.....	61.3	-11.5	+38.4	43.6	-12.5	+51.4	19.59	-1.2	+9.0	35.1	-2.5	-14.0	56.9	+1.4	+31.4
Smelting and refining—copper, lead, and zinc.....	68.6	+1.9	+45.0	43.2	-6	+43.5	20.41	-2.4	-1.2	38.6	-3	-15.9	52.7	-2.0	+19.7
Stamped and enameled ware.....	90.3	-2.9	+12.9	72.9	-8.9	+35.0	17.01	-6.2	+19.8	33.6	-6.4	-4.7	50.6	+6	+28.8
Lumber and allied products	48.8	-2.4	+4.7	31.6	-6.8	+14.5									
Furniture.....	62.0	-7	-6	39.3	-6.8	+9.2	14.78	-4.2	+9.2	32.3	-5.6	-23.1	45.1	+4	+41.3
Lumber.....															
Millwork.....	37.0	-2.3	-4.4	23.1	-4.1	+1.8	15.14	-1.8	+6.4	33.2	-4.3	-23.8	45.1	+1.6	+35.3
Sawmills.....	33.8	-3.8	+9.7	20.9	-10.0	+22.9	13.60	-6.5	+11.4	32.3	-6.1	-26.0	42.7	-5	+49.8
Turpentine and rosin.....	97.3	-1.3	+16.5	50.3	-1.3	+47.1	12.33	(1)	+26.4						
Stone, clay, and glass products	54.2	-5.1	+9.9	36.1	-7.0	+20.7									
Brick, tile, and terra cotta.....	31.7	-7.9	-4.8	17.0	-11.8	+9.7	14.08	-4.3	+14.7	32.3	-2.7	-14.0	43.5	-1.1	+34.8
Cement.....	58.4	-1.2	+16.3	39.1	-1.9	+40.6	20.20	-8	+20.7	34.7	-2.3	-8.7	57.1	+7	+35.4
Glass.....	89.1	-4.8	+23.8	69.5	-5.3	+29.2	18.35	-5	+4.4	33.2	-2.6	-16.2	55.6	+2.8	+22.5
Marble, granite, slate, and other products.....	33.1	-1.8	-9.6	21.5	-6.0	-8.5	20.35	-4.3	+8	30.5	-4.4	-4.5	66.7	+2	+22.9
Pottery.....	64.1	-7.6	+7.6	38.4	-12.3	+14.6	15.04	-5.2	+6.4	29.9	-4.2	-12.0	49.2	-4	+27.4
Textiles and their products	85.9	-5.5	-10.0	62.5	-5.9	-3.0									
Fabrics.....	87.0	-3.2	-10.0	64.4	-3.7	-6.9									
Carpets and rugs.....	67.4	-1.6	-4	48.4	-14.5	-3.4	16.84	-13.1	-3.9	29.1	-15.9	-33.6	55.8	+4	+44.8
Cotton goods.....	92.2	-2.1	-7.3	66.1	+1.1	-4.2	11.54	+3.2	+3.1	30.1	+4.5	-37.9	37.6	-1.1	+64.5

Cotton small wares.....	76.2	-5.4	-12.5	59.2	-6.4	-14.8	15.24	-1.0	-2.6	33.7	-6	-25.4	45.8	-9	+35.1
Dyeing and finishing textiles.....	99.4	-5.8	-2.8	70.6	-3.1	-13.5	16.20	+2.8	-10.9	30.8	+2.7	-39.2	52.8	+1.3	+46.6
Hats, fur-felt.....	76.9	+2.7	+1	83.2	+21.0	+24.0	23.91	+17.8	+23.7	33.7	+1.9	-3.8	73.6	+10.8	+53.7
Knit goods.....	101.9	-7.9	-4.9	86.0	-14.0	+8.9	14.01	-6.6	+14.2	30.8	-7.5	-29.3	45.6	+1.8	+59.8
Silk and rayon goods.....	73.4	-2.6	-11.4	55.9	-5.3	-1.4	14.34	-2.7	+10.9	32.2	-2.1	-23.9	44.6	-7	+44.2
Woolen and worsted goods ¹	70.1	+1.9	-27.0	50.1	+2.0	-28.5	16.02	+1	-2.1	32.2	+6	-32.4	49.7	-4	+13.7
Wearing apparel.....	79.8	-10.6	-9.6	55.3	-10.4	-8.6									
Clothing, men's.....	81.4	-3	-6.3	54.5	-2	+6.2	15.76	+1	+13.4	28.3	-3.1	-28.5	56.2	+2.9	+64.3
Clothing, women's.....	89.6	-21.0	-8.7	60.9	-16.1	+17.3	17.48	+6.3	+28.9						
Corsets and allied garments.....	86.8	-8	-1.6	69.4	-9.1	+1.2	13.94	-8.3	+3.4	31.3	-9.8	-20.5	47.0	-6	+28.9
Men's furnishings.....	89.5	-6.9	-17.4	56.7	-15.0	-8.3	12.27	-8.6	+11.3	28.4	-9.6	-23.8	41.3	+1.7	+83.6
Millinery.....	50.1	-22.5	-23.3	37.7	-26.8	-16.4	17.37	-5.4	+9.3						
Shirts and collars.....	93.7	-10.4	-14.4	82.2	-12.6	+14.0	12.41	-2.4	+33.2	31.6	-2.2	-8.7	39.4	+2.1	+54.1
Leather and its manufactures.....	89.4	+1.9	-1	77.2	+5.9	+6.6									
Boots and shoes.....	89.0	+2.5	-1.4	76.2	+8.0	+6.7	18.44	+5.3	+7.7	36.9	+2.2	-30.9	50.7	+2	+42.1
Leather.....	91.5	-1	+6.0	79.2	-8	+5.9	19.84	-7	+1	36.3	-2.4	-19.1	52.5	+1.0	+27.9
Food and kindred products.....	110.1	+4.8	+16.5	95.6	+4.0	+24.5									
Baking.....	116.3	+1.5	+16.9	98.2	+1.7	+20.0	22.11	+2	+2.9	40.9	-2.2	-12.3	54.0	+3.1	+19.3
Beverages.....	188.9	+3.2	+13.4	193.5	+6.0	+20.3	31.12	+2.7	+6.0	40.0	-5	-17.5	78.0	+2.9	+31.9
Butter.....	86.9	-2.1	+9.2	66.6	-2.1	+9.0	21.42	(9)	+1						
Canning and preserving.....	120.6	+33.0	+25.4	103.6	+23.0	+47.6	11.19	-7.6	+36.2	26.8	-13.3	-17.8	39.2	(9)	+30.4
Confectionery.....	66.4	-3.7	-3.6	55.4	-4.6	+16.4	14.98	-1.0	+20.3	34.2	-6.3	+1.4	43.1	+4.4	+24.8
Flour.....	77.5	+3.6	+13.5	65.0	+3.6	+15.7	21.21	(9)	+2.0	38.5	-3	-17.8	54.5	+1.5	+29.1
Ice cream.....	90.8	+4.7	+28.2	72.6	+5.3	+32.7	24.81	+6	+3.9	46.9	+2	-11.0	52.9	+6	+12.5
Slaughtering and meat packing.....	103.5	+2.1	+21.5	91.4	+4.9	+37.4	22.46	+2.8	+13.2	42.3	+5.0	-13.4	53.1	(9)	+31.2
Sugar, beet.....	54.5	+14.5	+14.3	40.7	+4.8	+8.0	20.19	-8.4	-5.7	34.2	-11.9	-18.5	59.9	+5	+14.4
Sugar refining, cane.....	82.3	-8.0	+5.4	65.9	-14.8	-10.2	21.37	-7.3	-15.0	35.6	-9.2	-27.8	57.9	+1.4	+20.0
Tobacco manufactures.....	61.1	-2.1	+1.3	47.3	-4	-8.5									
Chewing and smoking tobacco and snuff.....	72.9	-4	+1.3	67.0	+6	+9.8	13.84	+9	+8.5	34.5	+1.2	-11.7	38.8	+3	+22.6
Cigars and cigarettes.....	59.6	-2.3	+1.4	44.8	-8	-8.2	13.53	+1.5	+6.6	36.2	+2.5	-13.5	37.7	+3	+24.3
Paper and printing.....	93.4	-1.4	+11.1	77.3	-2.0	+13.8									
Boxes, paper.....	83.1	-1.0	+7.8	71.6	-3.0	+9.6	17.70	-1.9	+2.1	35.7	-1.4	-21.3	50.0	+1.0	+31.6
Paper and pulp.....	104.8	-1.1	+16.6	77.1	-1.8	+12.9	18.27	-7	-3.0	35.7	-8	-23.1	51.4	+8	+27.9
Printing and publishing:															
Book and job.....	83.7	-1.3	+10.9	70.3	-1.0	+18.2	26.11	+3	+6.3	35.6	-3	-4.5	73.2	+7	+9.3
News papers and periodicals.....	96.8	-2.0	+7.4	84.8	-3.1	+12.3	31.97	-1.1	+4.7	36.5	-1.6	-6.9	83.9	+2	+12.1
Chemicals and allied products, and petroleum refining.....	105.3	+8	+14.1	88.7	+7	+19.7									
Other than petroleum refining.....	103.8	+9	+13.9	86.6	(9)	+20.4									
Chemicals.....	112.3	+6	+27.8	96.6	+5	+29.8	23.88	-1	+2.2	39.0	+8	-10.5	61.4	+7	+15.2
Cottonseed—oil, cake, and meal.....	54.8	+8.1	-18.6	53.7	+11.9	-12.3	11.35	+3.5	+7.8	40.9	+2.3	-33.1	28.2	+2.9	+63.8
Druggists' preparations.....	93.8	-3.1	+8.6	86.1	-4.7	+14.2	19.80	-1.7	+5.0	37.2	-2.6	-4.5	49.2	+6	+10.6
Explosives.....	92.0	-3.9	+26.4	71.0	-3.4	+36.3	22.18	+5	+8.2	33.7	(9)	-12.5	62.3	+4.9	+18.1
Fertilizers.....	71.0	-4.6	+21.2	56.9	-1.0	+34.2	13.92	+3.8	+10.8	33.7	+1.8	-29.7	41.2	+1.5	+55.3
Paints and varnishes.....	101.2	-4.6	+10.0	78.8	-8.7	+10.7	20.73	-4.3	+4	35.7	-6.3	-16.9	57.7	+2.5	+21.9
Rayon and allied products.....	296.8	+8.4	+5.5	208.6	+4.3	+17.7	18.56	-3.8	+11.5	36.4	-2.9	-10.7	51.0	-8	+29.6
Soap.....	97.7	-2.2	+10.5	84.3	-2.0	+13.5	20.72	+1	+2.4	37.4	-1.1	-18.1	55.3	+9	+21.0
Petroleum refining.....	111.7	+3	+15.3	95.7	+2.8	+17.6	27.55	+2.6	+2.1	35.2	+9	-12.3	76.2	+1.7	+23.7

Footnotes at end of table.

TABLE 1.—EMPLOYMENT, WEEKLY PAY ROLLS, PER CAPITA WEEKLY EARNINGS, AVERAGE HOURS WORKED PER WEEK, AND AVERAGE HOURLY EARNINGS IN MANUFACTURING INDUSTRIES IN JULY 1934 AND COMPARISON WITH JUNE 1934 AND JULY 1933—Continued

Industry	Employment			Pay roll			Per capita weekly earnings ¹			Average hours worked per week ¹			Average hourly earnings ¹		
	Index July 1934 (3-year average 1923-25 =100)	Percentage change from—		July 1934 (3-year average 1923-25 =100)	Percentage change from—		Average in July 1934	Percentage change from—		Average in July 1934	Percentage change from—		Average in July 1934	Percentage change from—	
		June 1934	July 1933		June 1934	July 1933		June 1934	July 1933		June 1934	July 1933		June 1934	July 1933
Rubber products	83.9	-2.0	+8.4	61.9	-6.9	+2.5									
Rubber boots and shoes.....	53.4	+14.6	+17.4	49.4	+20.1	+17.3	\$17.56	+4.8	+2.7	36.8	+3.4	-11.3	47.3	+1.9	+20.5
Rubber goods, other than boots, shoes, tires, and inner tubes.....	122.1	-1.7	+10.2	87.5	-12.0	+2.2	16.70	-10.4	-7.3	31.5	-13.2	-25.4	51.0	-.4	+18.5
Rubber tires and inner tubes.....	77.4	-5.2	+5.7	55.9	-8.5	(⁴)	22.70	-3.4	-5.5	29.1	-4.0	-25.3	77.4	+1.3	+27.5

¹ Per capita weekly earnings are computed from figures furnished by all reporting establishments. Average hours and average hourly earnings are computed from data furnished by a smaller number of establishments as some firms do not report man-hour information. Figures for groups not computed. Percentages of change over year on per capita weekly earnings, average hours worked per week, and average hourly earnings computed from indexes. Percentage change over month on per capita weekly earnings for total manufacturing also computed from indexes.

² More complete data have made a revision of the June indexes, averages, and percentage changes necessary for total manufacturing, textiles and their products, fabrics, and woolen and worsted goods. The revised figures follow:

Industry	Employment			Pay roll			Per capita weekly earnings			Average hours worked per week			Average hourly earnings		
	Index June 1934	Percentage change from—		Index June 1934	Percentage change from—		Average in June 1934	Percentage change from—		Average in June 1934	Percentage change from—		Average in June 1934	Percentage change from—	
		May 1934	June 1933		May 1934	June 1933		May 1934	June 1933		May 1934	June 1933		May 1934	June 1933
All industries.....	81.0	-1.7	+21.1	64.8	-3.4	+37.3	\$19.48	-1.7	+13.3	34.8	-2.5	-16.1			
Textiles and their products.....	90.9	-5.4	+1.3	66.4	-10.4	+12.0									
Fabrics.....	89.9	-5.3	+1.7	66.9	-10.7	+7.0									
Woolen and worsted goods.....	68.8	-8.6	-19.0	49.1	-9.2	-20.2	16.07	-.7	-1.5	32.1	-2.7	-31.9	50.0	+2.0	+15.4

³ Weighted.

⁴ No change.

⁵ Less than $\frac{1}{10}$ of 1 percent.

Estimated Total Number of Wage Earners and Weekly Pay Rolls in Manufacturing Industries

IN THE following table are presented the estimated number of wage earners and weekly pay rolls in all manufacturing industries combined and in the 14 groups into which these manufacturing industries have been classified, for the years from 1919 to 1933, inclusive, and for the first 7 months of 1934. These estimates have been computed by multiplying the weighting factor of the several groups of industries (number employed or weekly pay roll in the index base period 1923-25) by the Bureau's index numbers of employment or pay rolls (which have been adjusted to conform with census trends over the period 1919-31) and dividing by 100. Data are not available for all groups over the entire period shown. The totals for all manufacturing industries combined, however, have been adjusted to include all groups. The estimated total employment and weekly pay rolls for all manufacturing industries combined do not include the manufactured-gas industry (which is included in the Bureau's electric light and power and manufactured-gas industry) or the motion-picture industry.

TABLE 2.—ESTIMATED NUMBER OF WAGE EARNERS AND WEEKLY WAGES IN ALL MANUFACTURING INDUSTRIES COMBINED AND IN INDUSTRY GROUPS—YEARLY AVERAGES 1919 TO 1933, INCLUSIVE, AND MONTHS, JANUARY TO JULY 1934, INCLUSIVE

Year and month	Total manufacturing	Iron and steel and their products	Machinery, not including transportation equipment	Transportation equipment	Railroad repair shops	Nonferrous metals and their products
Employment						
1919 average.....	8,983,900	858,600	1,026,800	(1)	(1)	(1)
1920.....	9,065,600	926,300	1,131,700	(1)	(1)	(1)
1921.....	6,899,700	572,400	680,700	(1)	(1)	(1)
1922.....	7,592,700	722,560	717,400	(1)	(1)	(1)
1923.....	8,724,900	892,400	928,600	606,200	523,700	(1)
1924.....	8,083,700	833,700	835,400	524,500	464,900	(1)
1925.....	8,328,200	851,200	870,500	559,600	458,100	(1)
1926.....	8,484,400	880,200	946,700	558,600	460,700	(1)
1927.....	8,288,400	834,900	897,800	495,100	428,900	(1)
1928.....	8,285,800	829,800	922,500	541,900	404,000	(1)
1929.....	8,785,600	881,000	1,105,700	583,200	398,200	(1)
1930.....	7,668,400	766,200	918,700	451,800	353,800	(1)
1931.....	6,484,300	598,400	687,000	373,800	309,000	209,000
1932.....	5,374,200	458,100	494,600	315,700	257,400	164,200
1933.....	5,778,400	503,400	517,100	305,600	250,600	175,200
1934: January.....	6,146,000	545,500	614,700	401,200	254,500	190,200
February.....	6,514,200	572,200	640,100	477,300	257,400	200,400
March.....	6,770,100	601,400	674,400	526,300	267,600	212,200
April.....	6,897,800	623,700	705,100	558,400	278,700	217,300
May.....	6,904,300	646,000	713,900	560,100	287,300	219,900
June.....	² 6,791,700	656,400	709,500	535,900	288,300	214,500
July.....	6,585,000	603,900	690,200	494,800	281,100	206,900
Weekly pay rolls						
1919 average.....	\$198,145,000	\$23,937,000	\$24,534,000	(1)	(1)	(1)
1920.....	238,300,000	30,531,000	31,982,000	(1)	(1)	(1)
1921.....	155,008,000	14,049,000	16,450,000	(1)	(1)	(1)
1922.....	165,406,000	17,400,000	16,982,000	(1)	(1)	(1)
1923.....	210,065,000	25,442,000	24,618,000	\$18,532,000	\$14,856,000	(1)
1924.....	195,376,000	23,834,000	22,531,000	15,636,000	12,972,000	(1)
1925.....	204,665,000	21,680,000	23,843,000	17,478,000	12,847,000	(1)
1926.....	211,061,000	25,875,000	26,310,000	17,126,000	13,025,000	(1)
1927.....	206,980,000	24,289,000	25,095,000	15,450,000	12,475,000	(1)

¹ Comparable data not available.

² Revised.

TABLE 2.—ESTIMATED NUMBER OF WAGE EARNERS AND WEEKLY WAGES IN ALL MANUFACTURING INDUSTRIES COMBINED AND IN INDUSTRY GROUPS—YEARLY AVERAGES 1919 TO 1933, INCLUSIVE, AND MONTHS, JANUARY TO JULY 1934, INCLUSIVE—Continued

Year and month	Total manu- facturing	Iron and steel and their products	Machinery, not includ- ing trans- portation equipment	Transporta- tion equipment	Railroad repair shops	Nonferrous metals and their prod- ucts
	Weekly pay rolls—Continued					
1928.....	\$208,334,000	\$24,740,000	\$26,334,000	\$17,494,000	\$11,817,000	(¹)
1929.....	221,937,000	26,568,000	31,761,000	18,136,000	12,255,000	(¹)
1930.....	180,507,000	21,126,000	24,197,000	12,076,000	10,316,000	(¹)
1931.....	137,256,000	13,562,000	15,135,000	9,008,000	8,366,000	\$4,622,000
1932.....	93,757,000	7,164,000	8,546,000	7,012,000	5,793,000	2,865,000
1933.....	98,623,000	8,925,000	8,975,000	6,799,000	5,652,000	3,039,000
1934: January.....	109,806,000	10,134,000	11,260,000	9,072,000	5,710,000	3,452,000
February.....	123,395,000	11,269,000	12,253,000	12,394,000	6,185,000	3,826,000
March.....	131,852,000	12,650,000	13,199,000	14,546,000	6,577,000	4,163,000
April.....	136,962,000	14,006,000	14,311,000	15,871,000	7,188,000	4,317,000
May.....	136,575,000	15,115,000	14,713,000	15,148,000	7,297,000	4,441,000
June.....	² 131,839,000	15,436,000	14,571,000	13,444,000	7,297,000	4,243,000
July.....	122,806,000	11,737,000	13,744,000	11,268,000	6,931,000	3,965,000

Year and month	Lumber and allied products	Stone, clay, and glass products	Textiles and their products			Leather and its manu- factures
			Fabrics	Wearing apparel	Total	
Employment						
1919 average.....	863,800	302,700	1,052,600	507,800	1,609,400	349,600
1920.....	821,200	314,500	1,045,300	519,400	1,612,400	318,600
1921.....	703,000	293,000	994,300	473,900	1,509,400	280,100
1922.....	894,300	299,600	1,054,900	487,800	1,585,500	314,600
1923.....	932,100	351,400	1,164,400	499,300	1,714,300	344,800
1924.....	901,300	346,400	1,041,900	455,800	1,545,500	311,700
1925.....	921,600	352,700	1,109,500	466,500	1,627,400	314,200
1926.....	922,300	363,500	1,095,700	472,800	1,628,000	312,700
1927.....	864,100	349,800	1,119,200	501,400	1,694,400	316,000
1928.....	848,100	334,900	1,062,400	513,100	1,651,300	309,400
1929.....	876,500	328,500	1,095,900	536,700	1,706,900	318,600
1930.....	699,400	280,800	950,400	497,700	1,513,000	295,100
1931.....	516,900	222,800	886,700	472,000	1,421,000	272,800
1932.....	377,800	156,000	794,100	401,800	1,250,300	255,500
1933.....	406,100	157,500	952,600	418,100	1,432,700	269,400
1934: January.....	418,800	165,700	988,400	385,900	1,437,100	268,200
February.....	432,600	174,400	1,065,800	442,800	1,577,300	292,100
March.....	445,400	182,500	1,087,900	471,300	1,629,400	299,900
April.....	453,700	193,700	1,070,200	474,100	1,614,700	298,600
May.....	468,400	202,100	1,049,200	440,000	1,565,900	295,700
June.....	459,200	200,000	995,000	423,400	1,482,800	283,700
July.....	448,200	189,900	961,900	378,300	1,399,700	289,200

Weekly pay rolls						
1919 average.....	\$16,549,000	\$6,397,000	\$17,494,000	\$10,121,000	\$28,440,000	\$6,978,000
1920.....	20,358,000	8,239,000	21,005,000	12,124,000	34,115,000	7,437,000
1921.....	13,161,000	5,907,000	17,235,000	10,266,000	28,284,000	6,040,000
1922.....	15,234,000	6,442,000	17,747,000	10,438,000	28,962,000	6,711,000
1923.....	18,526,000	8,726,000	21,590,000	10,919,000	33,511,000	7,472,000
1924.....	18,228,000	8,926,000	19,014,000	9,804,000	29,712,000	6,654,000
1925.....	18,824,000	8,985,000	20,497,000	10,284,000	31,795,000	6,831,000
1926.....	18,997,000	9,257,000	20,241,000	10,297,000	31,731,000	6,909,000
1927.....	17,916,000	8,929,000	21,135,000	11,123,000	33,817,000	7,009,000
1928.....	17,454,000	8,541,000	19,510,000	11,114,000	32,199,000	6,696,000
1929.....	18,062,000	8,323,000	20,251,000	11,476,000	33,321,000	6,915,000
1930.....	13,464,000	6,828,000	16,167,000	9,680,000	27,115,000	5,748,000
1931.....	8,641,000	4,786,000	14,308,000	8,338,000	23,799,000	5,035,000
1932.....	4,656,000	2,588,000	10,367,000	5,733,000	16,947,000	4,060,000
1933.....	4,900,000	2,455,000	12,664,000	5,757,000	19,394,000	4,394,000
1934: January.....	5,075,000	2,655,000	13,647,000	5,850,000	20,526,000	4,716,000
February.....	5,650,000	2,956,000	15,948,000	7,473,000	24,676,000	5,708,000
March.....	5,909,000	3,081,000	16,457,000	8,414,000	26,164,000	5,896,000
April.....	6,168,000	3,445,000	16,152,000	7,866,000	25,277,000	5,736,000
May.....	6,409,000	3,507,000	15,256,000	7,039,000	23,472,000	5,512,000
June.....	6,279,000	3,445,000	13,647,000	6,377,000	21,065,000	5,093,000
July.....	5,853,000	3,205,000	13,117,000	5,716,000	19,798,000	5,393,000

¹ Comparable data not available.

² Revised.

TABLE 2.—ESTIMATED NUMBER OF WAGE EARNERS AND WEEKLY WAGES IN ALL MANUFACTURING INDUSTRIES COMBINED AND IN INDUSTRY GROUPS—YEARLY AVERAGES 1919 TO 1933, INCLUSIVE, AND MONTHS, JANUARY TO JULY 1934, INCLUSIVE—Continued

Year and month	Foods and kindred products	Tobacco manufactures	Paper and printing	Chemicals and allied products	Rubber products
	Employment				
1919 average.....	733,600	157,000	510,100	(1)	(1)
1920.....	713,000	154,000	549,100	(1)	(1)
1921.....	626,400	149,900	467,100	(1)	(1)
1922.....	651,400	146,400	489,400	(1)	(1)
1923.....	681,900	146,300	527,400	342,700	137,800
1924.....	657,800	136,700	529,200	322,200	123,200
1925.....	664,400	132,100	537,100	334,200	141,800
1926.....	664,400	125,700	553,600	355,100	141,200
1927.....	679,400	129,300	553,500	346,700	142,000
1928.....	707,100	125,600	558,300	342,500	149,200
1929.....	753,500	116,100	591,500	384,800	149,100
1930.....	731,100	108,300	574,100	364,700	115,500
1931.....	650,500	99,700	511,800	316,800	99,200
1932.....	577,100	88,600	451,000	279,700	87,800
1933.....	631,000	82,700	458,400	315,400	99,300
1934: January.....	628,700	75,400	490,700	359,200	110,100
February.....	627,800	85,900	494,500	368,300	113,600
March.....	643,100	89,100	497,600	375,600	117,000
April.....	649,500	89,500	505,100	377,400	120,900
May.....	665,400	84,800	509,300	353,500	119,700
June.....	702,600	86,400	503,000	348,100	115,000
July.....	735,800	84,600	496,000	350,800	112,700
Year and month	Weekly pay rolls				
1919.....	\$14,879,000	\$2,386,000	\$10,873,000	(1)	(1)
1920.....	16,698,000	2,772,000	14,729,000	(1)	(1)
1921.....	14,333,000	2,325,000	12,259,000	(1)	(1)
1922.....	14,142,000	2,206,000	12,762,000	(1)	(1)
1923.....	15,296,000	2,317,000	14,304,000	\$8,499,000	\$3,500,000
1924.....	15,155,000	2,213,000	14,797,000	8,013,000	3,223,000
1925.....	15,268,000	2,147,000	15,506,000	8,444,000	3,676,000
1926.....	15,503,000	2,049,000	16,478,000	9,055,000	3,707,000
1927.....	15,838,000	2,025,000	16,501,000	8,978,000	3,810,000
1928.....	16,388,000	1,916,000	16,691,000	8,997,000	4,069,000
1929.....	17,344,000	1,819,000	17,771,000	10,068,000	3,986,000
1930.....	16,593,000	1,617,000	17,036,000	9,334,000	2,934,000
1931.....	14,173,000	1,336,000	14,461,000	7,643,000	2,165,000
1932.....	11,308,000	1,052,000	11,126,000	5,861,000	1,555,000
1933.....	11,604,000	944,000	10,299,000	6,179,000	1,740,000
1934: January.....	12,301,000	886,000	11,045,000	7,035,000	2,036,000
February.....	12,352,000	1,012,000	11,297,000	7,257,000	2,261,000
March.....	12,522,000	1,019,000	11,550,000	7,417,000	2,445,000
April.....	12,663,000	1,028,000	11,847,000	7,683,000	2,546,000
May.....	13,296,000	1,030,000	11,981,000	7,352,000	2,438,000
June.....	14,008,000	1,057,000	11,728,000	7,333,000	2,306,000
July.....	14,571,000	1,052,000	11,491,000	7,381,000	2,147,000

¹ Comparable data not available.

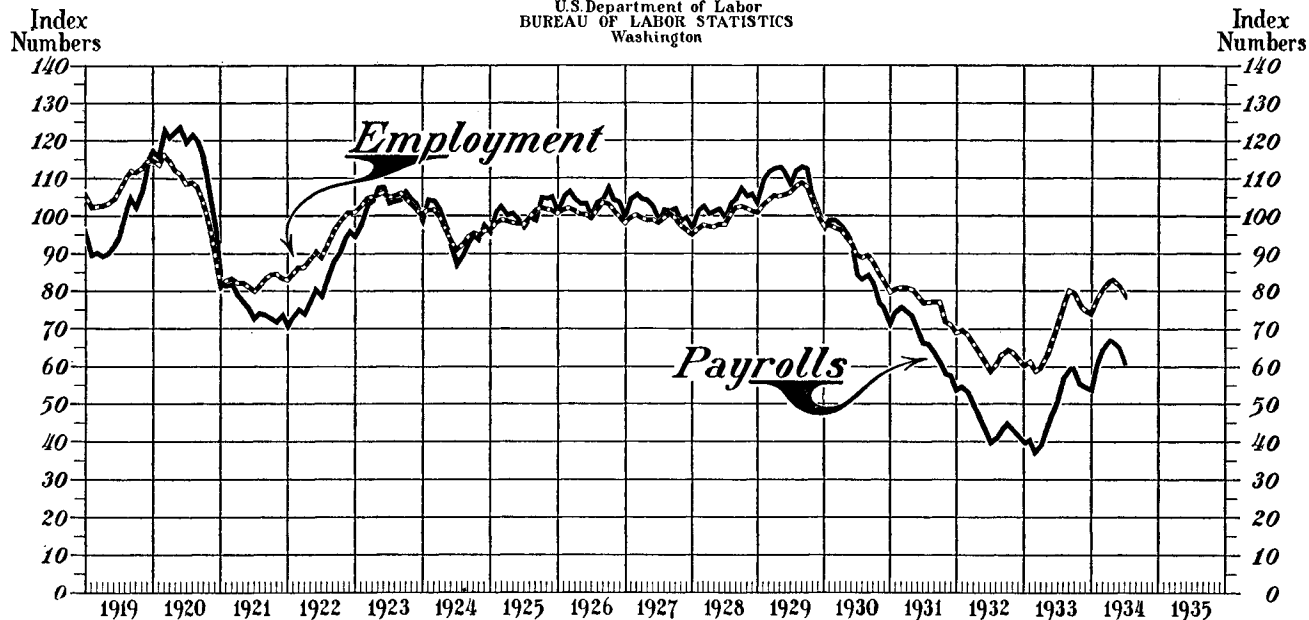
Index Numbers of Employment and Pay-Roll Totals in Manufacturing Industries

GENERAL index numbers of factory employment and pay rolls by months, from January 1919 to July 1934, inclusive, together with average indexes for each of the years from 1919 to 1933, inclusive, and for the 7-month period, January to July 1934, inclusive, based on the 3-year average, 1923–25, as 100, are shown in the following table. A chart of these indexes also follows.

EMPLOYMENT & PAYROLLS in the MANUFACTURING INDUSTRIES

3 year average 1923-1925=100

U.S. Department of Labor
BUREAU OF LABOR STATISTICS
Washington



Jack Brandt, Jr.

TABLE 3.—GENERAL INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES BY MONTHS—JANUARY 1919 TO JULY 1934, INCLUSIVE

[3-year average, 1923-25=100]

Month	Employment															
	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934
January.....	105.3	114.9	81.0	82.5	100.7	100.2	96.3	100.5	98.2	95.0	100.8	97.3	79.6	68.7	60.2	73.3
February.....	102.0	113.7	82.6	84.6	102.5	101.5	98.1	101.5	99.7	96.5	102.9	97.4	80.3	69.5	61.1	77.7
March.....	102.4	116.0	83.2	85.9	104.6	101.7	98.8	102.1	100.2	97.6	104.1	96.9	80.7	68.4	58.8	80.8
April.....	102.5	114.5	82.1	85.8	105.0	99.9	98.7	101.4	99.6	97.1	105.3	96.3	80.7	66.1	59.9	82.3
May.....	103.1	112.0	81.9	87.9	105.3	96.8	98.1	100.4	99.1	97.0	105.3	94.8	80.1	63.4	62.0	82.4
June.....	104.3	111.1	81.0	89.8	106.0	93.8	98.0	100.3	99.1	97.8	105.6	92.9	78.4	61.2	66.9	81.0
July.....	106.9	108.5	79.8	88.2	104.9	91.0	97.8	99.4	98.1	97.7	106.1	89.5	77.0	58.9	71.5	78.6
August.....	109.7	108.8	81.2	91.4	105.2	92.1	99.5	101.4	98.1	100.1	107.9	88.8	77.1	60.1	76.4	.....
September.....	111.7	107.5	83.4	94.5	105.7	94.4	101.5	103.4	100.5	102.2	109.0	89.6	77.4	63.4	80.0	.....
October.....	111.3	103.7	84.1	97.0	104.5	95.3	102.2	103.1	99.6	102.6	107.7	87.7	74.4	64.4	79.6	.....
November.....	112.6	97.4	84.2	96.0	103.2	94.8	101.8	101.4	97.4	101.7	103.6	84.9	71.8	63.4	76.2	.....
December.....	114.4	89.7	83.3	100.5	101.4	96.1	101.5	100.0	96.1	101.2	99.8	82.3	71.0	62.1	74.4	.....
Average.....	107.2	108.2	82.3	90.6	104.1	96.5	99.4	101.2	98.9	98.9	104.8	91.5	77.4	64.1	69.0	79.4
Month	Pay rolls															
	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934
January.....	95.3	117.2	82.8	69.6	94.6	98.8	95.4	100.9	98.4	96.0	102.3	95.9	70.0	53.5	39.5	54.0
February.....	89.6	115.5	81.3	72.4	97.9	104.1	100.8	105.0	104.4	101.2	109.3	98.8	74.3	54.6	40.2	60.6
March.....	90.0	123.7	81.7	74.9	102.5	104.1	102.4	106.5	105.7	102.5	111.6	98.8	75.6	53.1	37.1	64.8
April.....	89.2	120.9	79.0	73.8	103.8	101.8	100.0	104.4	104.5	100.5	112.6	97.7	74.4	49.5	38.8	67.3
May.....	90.0	122.4	77.3	77.2	107.3	97.5	100.7	103.1	104.0	101.3	112.9	95.4	73.4	46.8	42.7	67.1
June.....	92.0	124.2	75.4	80.5	107.5	92.4	98.7	103.3	102.4	101.7	111.2	92.3	69.7	43.4	47.2	64.8
July.....	94.8	119.3	71.7	78.5	103.3	85.7	96.8	99.0	98.5	99.0	107.2	84.3	66.2	39.8	50.8	60.4
August.....	99.9	121.6	73.9	83.0	103.8	89.3	99.3	103.4	101.9	103.3	112.0	83.3	65.9	40.6	56.8	.....
September.....	104.7	119.8	73.4	87.0	104.3	92.5	98.8	104.4	101.4	104.7	112.9	84.1	63.4	42.9	59.1	.....
October.....	102.2	115.8	72.6	89.5	106.6	95.1	104.6	107.6	102.1	108.2	112.4	82.2	61.3	44.7	59.4	.....
November.....	106.7	107.0	71.7	93.4	104.5	93.7	104.6	104.1	98.5	105.0	104.1	76.8	58.1	42.9	55.5	.....
December.....	114.0	98.0	73.3	95.7	102.9	97.6	105.2	103.5	99.5	105.6	100.7	75.2	57.6	41.5	54.5	.....
Average.....	97.4	117.1	76.2	81.3	103.3	96.1	100.6	103.8	101.8	102.4	109.1	88.7	67.5	46.1	48.5	62.7

¹ Revised.² Average for 7 months.

For comparative purposes the Bureau has computed the group and general index numbers of employment and pay rolls for July 1934 based on the 12-month average for 1926 as 100. These are a continuation of the former series of indexes covering 89 industries and show some slight differences in percentage changes from the previous month when compared with these shown by the revised series. These differences are due to changes in method of construction and weighting factors and to the inclusion of the canning and preserving industry in the revised series of indexes. These indexes on the 1926 base are presented in table 4, which follows:

TABLE 4.—INDEXES OF EMPLOYMENT AND PAY ROLLS (BASED ON THE 12-MONTH AVERAGE FOR 1926=100) IN 14 MAJOR MANUFACTURING GROUPS, 2 SUBGROUPS, AND ALL MANUFACTURING COMBINED, FOR JULY 1934

Group	Employment index	Pay-roll index
All manufacturing.....	73.7	55.0
Iron and steel and their products, not including machinery.....	73.9	47.4
Machinery, not including transportation equipment.....	69.4	51.1
Transportation equipment.....	83.8	61.7
Railroad repair shops.....	54.1	46.7
Nonferrous metals and their products.....	71.1	51.8
Lumber and allied products.....	46.4	28.2
Stone, clay, and glass products.....	54.0	34.9
Textiles and their products.....	77.6	54.9
Fabrics.....	84.0	61.4
Wearing apparel.....	62.1	41.9
Leather and its manufactures.....	84.6	66.1
Food and kindred products.....	101.3	88.7
Tobacco manufactures.....	68.4	54.5
Paper and printing.....	89.4	71.7
Chemicals and allied products.....	96.2	80.7
Rubber products.....	85.2	63.1

Employment in Nonmanufacturing Industries in July 1934

INCREASED employment was shown in 9 of the 17 nonmanufacturing industries surveyed by the United States Bureau of Labor Statistics and gains in pay rolls were reported in 7. Data for the building-construction industry are not presented here, but are shown in detail under the section "Building construction."

The largest percentage gains in both items from June to July (2 percent in employment and 5.4 percent in pay rolls) appeared in the crude-petroleum-producing industry. The electric light and power and manufactured gas, the telephone and telegraph, and the laundry industries reported gains in employment of 1.2 percent, 0.8 percent, and 0.7 percent, respectively. The gains in the remaining five industries in which increases in employment were reported (banks, bituminous-coal mining, hotels, insurance, and real estate) were 0.4 percent or less. While employment showed a slight gain in bituminous-coal mining, pay rolls in this industry decreased 9.8 percent, reflecting the sharply reduced production in the industry during the July 15 pay period.

In the eight nonmanufacturing industries in which decreased employment was reported from June to July, the largest percentage decline (6.8 percent) was a seasonal decrease in anthracite mining. Pay rolls in this industry showed a drop of 20.6 percent due to decreased production and the effects of the July 4 holiday period.

Employment in retail trade, based on reports received from 36,722 establishments, showed a decrease of 5.6 percent from June to July. This decrease, which is partially seasonal and reflects summer inactivity, was accentuated by the effect of strikes and the drought in certain localities. The general merchandise group (department stores, variety stores, general merchandise stores, and mail-order houses) showed a decrease of 8.4 percent. The remaining retail groups showed a net decrease in employment of 3.2 percent from June to July. The dyeing and cleaning industry also reported a seasonal decline of 5.1 percent in employment over the month interval. Brokerage firms continued to show recessions in employment due to small stock turnover, the July tabulation showing a decline of 4.2 percent. Employment in the metalliferous mining industry decreased 2.8 percent from June to July and the quarrying and nonmetallic mining industry reported a decrease of 1.9 percent in employment. The decreases (0.1 percent) in employment in the remaining two industries, electric-railroad and motor-bus operation and maintenance, and wholesale trade, were practically negligible.

In table 1, which follows, are shown indexes of employment and pay rolls, per capita weekly earnings, average hours worked per week, and average hourly earnings in July 1934 for 13 of the nonmanufac-

turing industries surveyed monthly by the Bureau of Labor Statistics, together with percentages of change from June 1934 and July 1933. Similar percentages of change in employment, pay rolls, and per capita weekly earnings, as well as average per capita weekly earnings, are likewise presented for banks, brokerage, insurance, and real estate. Indexes of employment and pay rolls for these last-named industries are not available.

TABLE 1.—EMPLOYMENT, WEEKLY PAY ROLLS, PER CAPITA WEEKLY EARNINGS, AVERAGE HOURS WORKED PER WEEK, AND AVERAGE HOURLY EARNINGS IN **NONMANUFACTURING** INDUSTRIES IN JULY 1934 AND COMPARISON WITH JUNE 1934 AND JULY 1933

Industry	Employment			Pay roll			Per capita weekly earnings ¹			Average hours worked per week ¹			Average hourly earnings ¹		
	Index July 1934 (average 1929 =100)	Percentage change from—		Index July 1934 (average 1929 =100)	Percentage change from—		Average in July 1934	Percentage change from—		Average in July 1934	Percentage change from—		Average in July 1934	Percentage change from—	
		June 1934	July 1933		June 1934	July 1933		June 1934	July 1933		June 1934	July 1933		June 1934	July 1933
Coal mining:													<i>Cents</i>		
Anthracite.....	53.6	-6.8	+22.4	42.3	-20.6	+10.7	\$22.97	-14.9	-9.5	27.5	-15.1	-15.4	83.4	+1.1	+3.0
Bituminous.....	77.0	+3	+21.8	49.7	-9.8	+47.9	16.57	-10.1	+21.2	23.2	-11.8	-24.8	71.7	+8	+54.8
Metaliferous mining.....	39.9	-2.8	+20.9	25.1	-5.8	+32.1	20.43	-3.1	+9.2	35.8	-3.8	-8.5	56.1	(?)	+18.3
Quarrying and nonmetallic mining.....	55.6	-1.9	+12.3	35.0	-5.4	+23.2	16.32	-3.6	+9.6	34.0	-5.0	-17.0	48.6	+1.3	+32.4
Crude-petroleum producing.....	81.6	+2.0	+37.1	60.0	+5.4	+42.2	28.30	+3.3	+3.7	35.0	+1.7	-20.4	82.6	+1.6	+26.3
Public utilities:															
Telephone and telegraph.....	71.0	+8	+3.6	72.3	+1.4	+8.4	27.01	+6	+4.5	38.1	-5	+6	71.9	+8	+4.1
Electric light and power and manufactured gas.....	85.0	+1.2	+9.7	81.1	+4.2	+15.9	29.64	+3.0	+5.6	39.3	-5	-6.3	75.2	+3.7	+13.6
Electric-railroad and motor-bus operation and maintenance.....	73.1	-1	+5.3	63.8	+9	+11.1	27.82	+1.0	+5.6	45.6	-7	-1.5	60.4	+1.4	+11.7
Trade:															
Wholesale.....	84.0	-1	+9.2	67.6	+1.7	+14.4	26.90	+1.7	+4.7	41.2	+5	-9.0	64.9	+9	+15.4
Retail.....	83.3	-5.6	+11.7	69.5	-2.9	+19.6	20.31	+2.8	+7.1	40.4	+1.3	-11.0	51.8	+1.2	+20.0
Hotels (cash payments only) ³	86.3	+1	+14.2	65.6	-9	+23.1	13.11	-1.1	+7.8	46.7	+4	-7.2	27.4	-1.4	+16.5
Laundries.....	84.6	+7	+6.4	68.2	-1	+16.2	15.32	-8	+9.2	40.0	-5	-3.5	37.8	-1.3	+13.0
Dyeing and cleaning.....	80.5	-5.1	+5.1	58.9	-8.1	+17.8	17.92	-3.2	+12.1	40.2	-2.4	-14.4	44.4	-9	+29.0
Banks.....	(5)	+4	+4.4	(5)	+3	+4.4	31.22	-1	(2)	(5)	(5)	(5)	(5)	(5)	(5)
Brokerage.....	(5)	-4.2	-20.2	(5)	-6.0	-18.1	35.26	-1.9	+2.7	(5)	(5)	(5)	(5)	(5)	(5)
Insurance.....	(5)	+6	+1.6	(5)	+5	+3.8	35.21	+5	+2.1	(5)	(5)	(5)	(5)	(5)	(5)
Real estate.....	(5)	+6	+6.4	(5)	-1.1	+9.3	22.62	-1.1	+2.7	(5)	(5)	(5)	(5)	(5)	(5)

¹ Per capita weekly earnings are computed from figures furnished by all reporting establishments. Average hours and average hourly earnings are computed from data furnished by a smaller number of establishments as some firms do not report man-hour information. Percentage changes over year computed from indexes.

² No change.

³ The additional value of board, room, and tips cannot be computed.

⁴ Revised to conform with average shown by 1931 Census of Manufactures.

⁵ Not available.

⁶ Less than $\frac{1}{10}$ of 1 percent.

Indexes of Employment and Pay-Roll Totals for Nonmanufacturing Industries

INDEX numbers of employment and pay-roll totals for 13 nonmanufacturing industries are presented in table 2. These index numbers show the variation in employment and pay rolls in these industries, by months, from January 1931 through July 1934.

A revision of the indexes, similar to that made for the manufacturing industries, was made for the laundry and the dyeing and cleaning industries in March 1934. The indexes of employment and pay rolls in these industries were adjusted to conform with the trends shown by the 1929 and 1931 census reports and this new series will be continued until further adjustments, if necessary, are made when 1933 census data become available.

TABLE 2.—INDEXES OF EMPLOYMENT AND PAY ROLLS FOR **NONMANUFACTURING** INDUSTRIES, JANUARY 1931 TO JULY 1934

[12-month average, 1929=100]

Month	Anthracite mining								Bituminous-coal mining							
	Employment				Pay rolls				Employment				Pay rolls			
	1931	1932	1933	1934	1931	1932	1933	1934	1931	1932	1933	1934	1931	1932	1933	1934
January.....	90.6	76.2	52.5	64.1	89.3	61.5	43.2	73.2	93.9	80.8	69.8	75.8	73.3	47.0	36.1	51.3
February.....	89.5	71.2	58.7	63.2	101.9	57.3	56.8	65.8	91.5	77.4	69.3	76.1	68.3	47.0	37.2	54.6
March.....	82.0	73.7	54.6	67.5	71.3	61.2	48.8	82.4	88.8	75.2	67.6	77.8	65.2	46.8	30.7	58.9
April.....	85.2	70.1	51.6	58.2	75.2	72.0	37.4	51.7	85.9	65.5	63.7	72.2	58.6	33.9	26.6	51.4
May.....	80.3	66.9	43.2	63.8	76.1	58.0	30.0	64.0	82.4	62.6	61.2	76.7	54.4	30.7	26.9	54.4
June.....	76.1	53.0	39.5	57.5	66.7	37.4	34.3	53.3	78.4	60.5	61.3	76.7	52.4	27.3	29.2	55.1
July.....	65.1	44.5	43.8	53.6	53.7	34.5	38.2	42.3	76.4	58.6	63.2	77.0	50.4	24.4	33.6	49.7
August.....	67.3	49.2	47.7	---	56.4	41.4	46.6	---	77.0	59.4	68.6	---	50.6	26.4	43.3	---
September.....	80.0	55.8	56.8	---	64.9	47.0	60.7	---	80.4	62.4	71.8	---	53.6	30.2	44.1	---
October.....	86.8	63.9	56.9	---	91.1	66.7	61.6	---	81.3	67.0	68.0	---	56.2	37.8	44.1	---
November.....	83.5	62.7	61.0	---	79.5	51.0	47.8	---	81.1	69.4	74.8	---	54.6	38.0	50.7	---
December.....	79.8	62.3	54.5	---	78.4	56.2	44.3	---	81.2	70.0	75.4	---	52.3	37.7	50.8	---
Average.....	80.5	62.5	51.7	67.1	75.4	53.7	45.8	61.8	83.2	67.4	67.9	76.0	57.5	35.6	37.8	53.6
Month	Metalliferous mining								Quarrying and nonmetallic mining							
	Employment				Pay rolls				Employment				Pay rolls			
	1931	1932	1933	1934	1931	1932	1933	1934	1931	1932	1933	1934	1931	1932	1933	1934
January.....	68.3	49.3	32.4	39.6	55.0	29.7	18.1	25.4	64.4	48.9	35.1	39.7	50.4	30.2	18.1	21.3
February.....	65.3	46.9	31.5	40.3	54.6	27.8	17.8	26.0	66.6	47.4	34.8	38.8	54.4	29.6	17.4	21.0
March.....	63.5	45.0	30.0	39.8	52.8	26.5	17.4	25.9	70.0	46.0	35.1	42.0	58.2	28.7	17.8	24.1
April.....	63.9	43.3	29.4	41.7	51.4	25.0	16.4	27.2	76.1	48.6	39.3	48.0	62.6	30.0	20.2	29.9
May.....	62.4	38.3	30.0	40.8	49.3	23.8	17.0	25.6	75.0	50.6	43.4	54.3	62.3	32.3	23.8	35.0
June.....	60.0	32.2	31.5	41.0	46.1	20.1	18.3	26.7	72.3	49.5	47.3	56.6	60.1	30.0	27.5	37.0
July.....	56.2	29.5	33.0	39.9	41.3	16.9	19.0	25.1	71.0	49.5	49.5	55.6	57.3	29.1	28.4	35.0
August.....	55.8	28.6	36.8	---	40.2	16.5	21.9	---	68.9	51.1	51.6	---	55.1	29.7	29.9	---
September.....	55.5	29.3	38.9	---	40.0	17.0	23.9	---	66.6	52.4	52.6	---	51.2	30.5	29.3	---
October.....	53.8	30.5	40.7	---	37.4	18.0	25.9	---	64.5	52.4	53.2	---	48.7	30.1	31.2	---
November.....	52.8	31.9	40.6	---	35.1	18.7	25.6	---	59.3	49.4	51.1	---	43.3	27.1	28.3	---
December.....	51.2	33.3	40.6	---	34.3	18.7	26.2	---	53.9	42.3	45.3	---	36.9	22.1	24.4	---
Average.....	59.1	36.5	34.6	40.4	44.8	21.6	20.6	26.0	67.4	49.0	44.9	48.0	53.4	29.1	24.7	29.0
Month	Crude-petroleum producing								Telephone and telegraph							
	Employment				Pay rolls				Employment				Pay rolls			
	1931	1932	1933	1934	1931	1932	1933	1934	1931	1932	1933	1934	1931	1932	1933	1934
January.....	74.8	54.9	57.2	73.2	71.5	46.5	39.9	53.0	90.5	83.0	74.6	70.2	96.3	89.1	71.7	69.0
February.....	73.2	54.4	57.0	72.4	70.0	46.9	41.7	50.5	89.2	82.0	73.9	69.8	94.8	89.6	71.9	67.9
March.....	72.2	51.4	56.5	72.8	73.2	43.2	42.5	52.5	88.6	81.7	73.2	70.0	97.9	88.2	71.6	70.4
April.....	69.8	54.9	56.8	74.0	66.3	44.5	40.1	53.4	88.1	81.2	72.3	70.2	95.0	83.4	67.8	68.8
May.....	67.8	54.5	56.9	76.7	64.7	47.1	41.6	56.4	87.4	80.6	69.1	70.2	94.1	82.8	68.5	71.4
June.....	65.0	54.2	58.0	80.0	62.7	44.8	40.6	56.9	86.9	79.9	69.2	70.4	95.0	82.1	66.6	71.3
July.....	65.3	55.4	59.5	81.6	59.2	44.6	42.5	60.0	86.6	79.1	68.5	71.0	93.3	79.6	66.7	72.3
August.....	62.4	57.4	60.8	---	56.3	42.9	42.5	---	85.9	78.1	68.1	---	92.3	79.1	66.1	---
September.....	61.2	56.2	66.2	---	55.2	41.9	44.4	---	85.0	77.4	68.3	---	92.1	75.9	64.6	---
October.....	60.4	56.8	70.6	---	54.4	42.5	50.1	---	84.1	76.2	68.7	---	91.6	74.7	67.0	---
November.....	57.6	56.5	72.2	---	52.0	42.4	50.3	---	83.5	75.5	68.9	---	89.7	73.3	67.7	---
December.....	58.2	57.2	75.0	---	54.9	41.7	53.2	---	83.1	74.8	69.4	---	92.7	73.5	67.7	---
Average.....	65.7	55.3	62.2	75.8	61.7	44.1	44.1	54.7	86.6	79.1	70.4	70.3	93.7	81.1	68.2	70.2

¹ Average for 7 months.

TABLE 2.—INDEXES OF EMPLOYMENT AND PAY ROLLS FOR NONMANUFACTURING INDUSTRIES, JANUARY 1931 TO JULY 1934

Month	Electric light and power and manu- factured gas								Electric-railroad and motor-bus operation and maintenance ²							
	Employment				Pay rolls				Employment				Pay rolls			
	1931	1932	1933	1934	1931	1932	1933	1934	1931	1932	1933	1934	1931	1932	1933	1934
January.....	99.2	89.3	77.7	82.2	98.6	88.4	73.0	73.8	86.9	79.5	70.6	70.5	85.6	75.4	60.9	59.2
February.....	97.8	87.2	77.4	81.2	99.7	86.0	71.6	74.4	86.6	78.9	70.4	71.0	87.1	74.8	60.6	60.1
March.....	96.7	85.5	76.9	81.7	102.4	85.4	71.9	75.6	86.4	77.6	69.8	71.7	88.1	73.6	59.4	62.2
April.....	97.1	84.8	76.9	82.4	97.6	82.4	69.4	76.8	88.8	78.0	69.5	72.2	86.6	71.8	58.1	62.9
May.....	97.6	84.0	76.9	83.1	98.7	84.2	69.9	77.6	85.9	76.9	69.1	72.6	85.1	72.2	58.2	63.0
June.....	97.2	83.2	77.3	84.0	98.3	80.5	69.9	77.8	85.3	76.5	69.3	73.2	84.8	70.2	58.0	63.2
July.....	96.7	82.3	77.5	85.0	97.4	78.7	70.0	81.1	85.6	75.6	69.4	73.1	83.3	66.4	57.4	63.8
August.....	95.9	81.5	78.1	-----	96.2	76.7	70.9	-----	84.8	74.1	69.5	-----	81.9	63.8	58.2	-----
September.....	94.7	81.0	80.3	-----	94.3	74.7	71.8	-----	84.0	73.5	69.7	-----	81.2	62.5	57.8	-----
October.....	92.7	79.9	82.2	-----	93.2	74.4	76.2	-----	82.7	72.3	70.6	-----	79.0	61.5	59.8	-----
November.....	91.3	79.1	82.6	-----	93.3	73.2	74.5	-----	81.5	71.8	71.0	-----	79.7	61.7	59.4	-----
December.....	90.3	78.4	81.8	-----	91.2	73.2	74.4	-----	79.9	71.4	70.8	-----	77.8	61.9	59.6	-----
Average.....	95.6	83.0	78.8	82.8	96.7	79.8	72.0	76.7	84.7	75.5	70.0	72.0	83.4	68.0	58.9	62.1
	Wholesale trade								Retail trade							
	1931	1932	1933	1934	1931	1932	1933	1934	1931	1932	1933	1934	1931	1932	1933	1934
January.....	89.5	81.8	75.3	82.4	87.5	74.1	61.7	63.9	90.0	84.3	76.9	84.6	89.4	78.0	62.7	68.8
February.....	88.2	80.9	74.1	83.0	88.4	72.5	58.6	64.6	87.1	80.5	73.4	83.8	86.7	73.7	58.4	67.7
March.....	87.4	79.8	73.1	83.6	89.1	71.3	57.1	65.7	87.8	81.4	71.4	87.2	87.5	73.4	55.1	69.5
April.....	87.4	78.9	73.3	83.9	85.2	68.9	56.0	66.8	90.1	81.6	78.6	88.2	88.3	72.7	60.4	71.5
May.....	87.1	77.9	74.0	84.6	84.7	69.7	57.4	66.3	89.9	80.9	77.0	88.8	88.0	71.1	59.5	71.8
June.....	87.1	77.0	75.7	84.1	84.1	66.2	57.3	66.5	89.1	79.4	78.3	88.2	87.6	68.2	60.5	71.6
July.....	86.8	76.6	76.9	84.0	83.3	64.7	59.1	67.6	83.9	74.6	74.6	83.3	83.3	63.3	58.1	69.5
August.....	86.5	76.4	79.7	-----	82.1	63.2	60.8	-----	81.8	72.6	78.1	-----	80.3	60.7	62.7	-----
September.....	86.1	77.1	82.1	-----	81.4	63.1	62.3	-----	86.6	77.8	88.0	-----	83.5	64.6	69.2	-----
October.....	85.2	77.8	83.5	-----	79.9	63.9	66.0	-----	89.8	81.3	89.6	-----	84.6	67.1	72.3	-----
November.....	84.1	77.6	83.4	-----	79.7	63.3	64.1	-----	90.9	81.7	91.6	-----	85.4	66.9	72.6	-----
December.....	83.7	77.0	83.3	-----	77.8	62.6	64.5	-----	106.2	95.2	105.4	-----	94.1	73.6	80.3	-----
Average.....	86.6	78.2	77.9	83.7	83.6	67.0	60.4	65.9	89.4	80.9	81.7	86.3	86.6	69.4	64.3	70.1
	Laundries ³								Dyeing and cleaning ³							
	1931	1932	1933	1934	1931	1932	1933	1934	1931	1932	1933	1934	1931	1932	1933	1934
January.....	94.3	88.2	78.6	78.5	90.7	80.0	60.7	61.7	82.1	75.8	67.4	68.1	73.7	62.4	44.2	46.8
February.....	93.7	86.3	77.5	78.4	89.6	76.7	58.1	61.7	80.7	74.4	65.6	68.1	71.2	59.0	40.2	46.3
March.....	93.2	85.4	76.1	79.2	89.6	75.0	55.4	62.7	81.3	74.4	65.8	72.4	71.7	58.5	38.9	51.7
April.....	94.3	85.4	76.5	80.5	90.9	74.7	56.6	64.4	88.4	76.9	74.9	79.9	81.9	62.5	51.7	60.8
May.....	94.1	84.8	76.6	82.1	90.5	73.9	57.1	66.9	89.3	78.0	75.7	84.3	82.1	63.8	51.0	65.1
June.....	94.8	84.4	79.2	84.0	91.2	71.8	59.4	68.3	91.4	78.6	79.1	84.9	84.5	62.4	53.7	64.1
July.....	95.6	83.6	79.5	84.6	91.5	69.4	58.7	68.2	91.1	76.1	76.6	80.5	81.8	56.9	50.0	53.9
August.....	94.0	82.2	81.1	-----	88.6	66.9	60.3	-----	86.4	73.4	76.8	-----	75.9	53.4	50.0	-----
September.....	93.0	81.9	82.6	-----	88.0	65.8	63.5	-----	83.0	76.9	81.9	-----	78.3	57.9	57.1	-----
October.....	91.8	80.7	81.3	-----	85.6	64.1	62.5	-----	87.0	76.0	81.6	-----	77.2	55.8	57.4	-----
November.....	89.8	79.4	78.4	-----	82.6	61.9	60.7	-----	83.2	72.0	76.1	-----	70.8	49.6	52.5	-----
December.....	88.8	79.1	78.4	-----	81.0	61.4	61.1	-----	78.4	69.5	70.5	-----	64.4	45.9	47.3	-----
Average.....	93.1	83.5	78.8	81.0	88.3	70.1	59.5	64.8	85.6	75.2	74.3	76.9	76.1	57.3	49.5	56.2
	Hotels															
	1931	1932	1933	1934	1931	1932	1933	1934								
January.....	95.0	83.2	73.8	81.5	91.0	73.9	55.7	60.8								
February.....	96.8	84.3	73.8	84.8	93.7	73.9	55.9	65.2								
March.....	96.8	84.0	72.4	86.4	93.4	72.4	53.5	66.6								
April.....	95.9	82.7	71.9	86.6	89.9	69.6	51.7	66.5								
May.....	92.5	80.1	71.9	85.7	87.7	67.0	51.8	65.9								
June.....	91.6	78.0	73.6	86.2	85.4	63.8	52.3	66.2								
July.....	93.3	78.4	75.6	86.3	85.2	61.8	53.3	65.6								
August.....	92.8	77.6	77.1	-----	83.8	59.6	54.0	-----								
September.....	90.6	77.0	78.7	-----	81.9	59.1	55.6	-----								
October.....	87.4	75.4	77.0	-----	79.7	58.6	56.2	-----								
November.....	84.9	74.3	75.8	-----	77.1	57.5	55.2	-----								
December.....	83.1	73.2	77.6	-----	75.4	56.6	57.6	-----								
Average.....	91.7	79.0	74.9	85.4	85.4	64.5	54.4	65.3								

¹ Average for 7 months.² Not including electric-railroad car building and repairing; see transportation equipment and railroad repair-shop groups, manufacturing industries, table 1.³ Revised to conform with average shown by 1931 Census of Manufactures.

Employment in Building Construction in July 1934

THE percentages of change in employment, pay rolls, and man-hours in building construction in July as compared with June, were as follows:

	Percent
Total employment.....	+1. 6
Total pay rolls.....	+2. 4
Total man-hours worked.....	+ . 7
Average weekly earnings.....	+ . 8
Average hours per week per man.....	No change.
Average hourly earnings.....	+1. 2

The following table is based on returns made by 11,232 firms engaged in public and private building-construction projects not aided by Public Works Administration funds. These reports include all trades, from excavation through painting and interior decoration, which are engaged in erecting, altering, or repairing buildings. Work on roads, bridges, docks, etc., is omitted. The reports cover building operations in various localities in 34 States and the District of Columbia.

For purposes of comparison in this study, all reports were reduced to a 1-week basis if not originally so reported.

In July the weekly pay roll for 81,409 workers amounted to \$1,903,792 as compared with \$1,858,817 earned by 80,134 workers employed by the identical firms in June.

In July the average weekly earnings were \$23.39 as compared with \$23.20 for June. These are per capita weekly earnings, computed by dividing the total amount of the weekly pay roll by the total number of employees—part time as well as full time.

Reports from 10,725 firms—95.5 percent of the 11,232 cooperating firms—gave the man-hours worked by the employees, namely, 2,221,019 in July as compared with 2,205,851 in June.

The average hours per week per man—29.7 in July and 29.7 in June—were computed by dividing the number of man-hours by the number of workers employed by those firms which reported man-hours.

The average hourly earnings—78.8 cents in July and 77.9 cents in June—were computed by dividing the pay roll of those firms which reported man-hours, by the number of man-hours.

EMPLOYMENT, PAY ROLLS, AVERAGE WEEKLY EARNINGS, AVERAGE HOURS PER WEEK PER MAN, AND AVERAGE HOURLY EARNINGS IN THE BUILDING-CONSTRUCTION INDUSTRY IN JULY 1934, AND PERCENTAGES OF CHANGE FROM JUNE 1934

Locality	Number of firms reporting	Employment		Pay rolls		Average weekly earnings		Average hours per week per man ¹		Average hourly earnings ¹	
		Number on pay roll July 1934	Percentage of change from June 1934	Amount July 1934	Percentage of change from June 1934	Amount July 1934	Percentage of change from June 1934	Number July 1934	Percentage of change from June 1934	July 1934	Percentage of change from June 1934
All localities.....	11, 232	81, 409	+1.6	\$1,903,792	+2.4	23.39	+0.8	29.7	(?)	Ct. 78.8	+1.2
Alabama: Birmingham.....	87	368	+8.6	6,481	+20.4	17.61	+10.9	26.7	+3.9	65.7	+6.0
California:											
Los Angeles ²	19	781	-16.2	18,298	-17.4	23.43	-1.5	33.7	-5.6	69.5	+4.4
San Francisco-Oakland ²	28	1,245	+30.0	28,102	+38.7	22.57	+6.7	28.7	+2.9	78.6	+3.7
Other localities ²	28	410	-2.4	8,189	-5.6	19.97	-3.3	28.2	-8.4	70.8	+5.5
The State ²	75	2,436	+5.5	54,589	+6.8	22.41	+1.3	30.2	-4.4	74.1	+5.9
Colorado: Denver.....	225	547	-10.5	10,491	-19.8	19.18	-10.4	23.6	-10.9	81.4	-1
Connecticut:											
Bridgeport.....	119	558	-6.5	12,871	-1.6	23.07	+5.3	31.4	-3	74.1	+5.7
Hartford.....	280	1,148	+1.4	26,303	+6.1	22.91	+4.6	32.8	+1.2	69.6	+3.6
New Haven.....	167	882	-8.3	22,205	-3.9	25.18	+4.9	34.9	+4.2	72.2	+6
The State.....	566	2,588	-3.8	61,379	+7	23.72	+4.7	33.3	+2.1	71.4	+2.7
Delaware: Wilmington.....	109	925	+1	18,638	-1.7	20.15	-1.8	30.9	-5.5	65.2	+4.0
District of Columbia.....	405	4,271	+7.9	114,904	+13.2	26.90	+4.9	31.5	+1.6	84.3	+2.6
Florida:											
Jacksonville.....	50	194	-6.7	3,258	-9.3	16.79	-2.7	27.4	+4.6	61.3	-7.0
Miami.....	75	1,071	+14.4	19,352	+2.6	18.07	-10.3	28.1	-7.3	63.8	-3.5
The State.....	125	1,265	+10.1	22,610	+7	17.87	-8.9	28.0	-5.4	63.4	-3.9
Georgia: Atlanta.....	143	961	+6.5	15,133	+5	15.75	-5.6	27.9	+7	56.2	-6.3
Illinois:											
Chicago ²	134	2,443	+45.0	64,806	+25.5	26.53	-13.4	(⁴)	(⁴)	(⁴)	(⁴)
Other localities ²	100	1,820	+8.1	37,498	-4	20.60	-7.9	(⁴)	(⁴)	(⁴)	(⁴)
The State ²	234	4,263	+26.6	102,304	+14.6	24.00	-9.5	(⁴)	(⁴)	(⁴)	(⁴)
Indiana:											
Evansville.....	63	264	-5.4	4,645	-11.2	17.59	-6.1	23.7	+13.2	74.0	+8.0
Fort Wayne.....	91	222	-12.6	4,460	-14.6	20.09	-2.3	26.6	(²)	76.0	-2.2
Indianapolis.....	171	937	+2.5	19,671	+5.8	20.99	+3.2	29.5	+8.5	71.3	-4.7
South Bend.....	38	224	-21.1	4,348	-32.9	19.41	-14.9	26.2	-10.9	75.0	-3.7
The State.....	363	1,647	-4.9	33,124	-6.7	20.11	-2.0	27.7	+7	72.8	-2.5
Iowa: Des Moines.....	97	718	+40.0	19,445	+75.1	27.08	+25.1	32.1	+21.6	85.9	+2.6
Kansas: Wichita.....	67	241	-24.9	4,190	-13.5	17.39	+15.3	28.2	+11.4	61.9	+1.5
Kentucky: Louisville.....	145	784	-6.3	15,476	(⁴)	19.74	+6.7	30.8	-6	64.2	+5.9
Louisiana: New Orleans.....	109	794	+17.8	13,970	+15.3	17.59	-2.1	29.3	-3	60.5	-1.8
Maine: Portland.....	93	409	-12.2	8,793	-14.5	21.50	-2.5	30.6	-5.3	70.3	+2.8
Maryland: Baltimore ²	114	1,241	-2.4	26,446	-2.0	21.31	+5	32.0	-6.4	66.2	+4.7
Massachusetts: All localities ²	685	4,946	+9	128,376	+3.5	25.96	+2.6	32.5	(²)	79.8	+2.6
Michigan:											
Detroit.....	486	3,525	-1.8	82,564	-4.6	23.42	-2.8	31.2	-1.6	75.2	-1.3
Flint.....	54	246	-24.1	5,300	-18.3	21.54	+7.5	31.7	+2.3	68.1	+4.6
Grand Rapids.....	99	368	+9.9	6,530	+7.0	17.74	-2.6	28.9	-2.0	61.4	-1.0
The State.....	639	4,139	-2.6	94,394	+4.8	22.81	-2.2	31.1	-1.3	73.6	-1.9

¹ Averages computed from reports furnished by 10,725 firms.

² No change.

³ Data supplied by cooperating State bureaus.

⁴ Data not available.

⁵ Less than $\frac{1}{10}$ of 1 percent decrease.

EMPLOYMENT, PAY ROLLS, AVERAGE WEEKLY EARNINGS, AVERAGE HOURS PER WEEK PER MAN, AND AVERAGE HOURLY EARNINGS IN THE **BUILDING-CONSTRUCTION** INDUSTRY IN JULY 1934, AND PERCENTAGES OF CHANGE FROM JUNE 1934—Continued

Locality	Number of firms reporting	Employment		Pay rolls		Average weekly earnings		Average hours per week per man ¹		Average hourly earnings ¹	
		Number on pay roll July 1934	Percentage of change from June 1934	Amount July 1934	Percentage of change from June 1934	Amount July 1934	Percentage of change from June 1934	Number July 1934	Percentage of change from June 1934	July 1934	Percentage of change from June 1934
Minnesota:										Ct.	
Duluth.....	53	148	-27.5	2,756	-31.8	18.62	-6.1	25.3	-1.9	73.0	-3.6
Minneapolis.....	216	1,705	-14.2	40,451	-15.8	23.72	-1.9	31.9	-1.8	74.6	+5.5
St. Paul.....	157	634	-9	13,631	-8.6	21.50	-7.8	28.8	-5.0	74.7	-3.0
The State.....	426	2,487	-12.2	56,838	-15.2	22.85	-3.5	30.7	-2.5	74.6	-4
Missouri:											
Kansas City ⁶	287	1,547	+8.6	38,787	+6.9	25.07	-1.5	28.3	-4.1	89.0	+2.1
St. Louis.....	591	2,504	-7.5	65,872	-11.0	26.31	-3.7	26.1	-2.6	100.9	-6
The State.....	878	4,051	-2.0	104,659	-5.1	25.84	-3.1	26.9	-2.9	96.2	-2
Nebraska: Omaha.....	159	961	-14.2	20,107	-12.6	20.92	+1.9	29.8	-2.0	70.1	+3.9
New York:											
New York City ³	468	7,487	+5.7	232,489	+7.2	31.05	+1.5	28.5	(²)	108.8	+1.2
Other localities ³	344	8,082	+6.4	187,625	+11.4	23.22	+4.7	30.3	+3.4	76.6	+1.1
The State ³	812	15,569	+6.1	420,114	+9.1	26.98	+2.8	29.5	+2.1	91.6	+1.8
North Carolina: Charlotte.....	56	361	+1.4	6,683	+9.0	18.51	+7.5	32.0	+3.9	57.4	+2.7
Ohio:											
Akron.....	93	299	-18.1	6,721	-17.2	22.48	+1.1	29.7	-7	75.8	+2.0
Cincinnati ⁷	444	1,590	-5.7	36,731	-6.0	23.10	-3	28.1	+1.1	82.2	-1.2
Cleveland.....	644	2,390	-7.1	65,529	-9.7	27.42	-2.7	27.9	(²)	98.7	-2.6
Dayton.....	144	453	-18.8	9,308	-23.5	20.55	-5.7	27.7	-8.9	74.2	+3.3
Youngstown.....	85	339	-11.9	7,550	-18.2	22.27	-7.2	25.8	-4.8	86.4	-2.4
The State.....	1,410	5,071	-8.9	125,839	-10.8	24.82	-2.1	27.9	-1.1	89.0	-7
Oklahoma:											
Oklahoma City.....	95	420	-14.5	8,347	-11.1	19.87	+4.0	28.4	+8.4	69.8	-4.4
Tulsa.....	58	312	+17.7	6,221	+22.7	19.94	+4.2	29.7	+3.8	67.6	-9
The State.....	153	732	-3.2	14,568	+8	19.90	+4.1	29.0	+7.4	68.8	-3.5
Oregon: Portland.....	193	897	-9.7	18,016	-6.7	20.08	+3.3	25.0	(²)	80.7	+3.3
Pennsylvania: ⁸											
Erie area ³	24	356	+20.7	4,180	+26.2	11.74	+4.6	16.5	+12.2	67.9	+1.0
Philadelphia area ³	399	3,341	-3.2	70,861	-7.3	21.21	-4.3	28.3	-5.0	76.7	+8
Pittsburgh area ³	225	1,723	+1.2	47,757	+10.0	27.72	+8.7	31.6	+6.8	89.4	+1.0
Reading area ³	43	270	+4.7	5,309	-2.2	19.66	-6.6	29.8	-8.6	66.1	+2.5
Scranton area ³	28	197	+7.1	4,269	-2	21.67	-6.8	30.2	-6.8	72.7	-4
Other areas ³	298	2,398	+2.8	48,811	+4.3	20.35	+1.3	31.5	+1.6	64.1	+1.2
The State ³	1,017	8,285	+8	181,187	+8	21.87	(⁹)	29.6	-7	74.9	+1.8
Rhode Island: Providence.....	241	2,294	+22.5	50,234	+21.7	21.90	-6	33.8	+1.2	64.9	-2.1
Tennessee:											
Chattanooga.....	39	174	-15.5	2,601	-31.3	14.95	-18.7	25.8	-22.8	55.2	+6.2
Knoxville.....	40	273	-13.1	3,897	-18.4	14.27	-6.1	23.6	-2.5	60.4	-3.8
Memphis.....	77	354	-7.8	6,438	+7	18.19	+9.2	25.8	-4.1	70.3	+13.6
Nashville.....	83	610	+1.3	10,845	+12.5	17.78	+12.1	28.1	-1.4	61.8	+14.4
The State.....	239	1,411	-6.7	23,781	-3.3	16.85	+3.6	26.3	-5.4	63.2	+9.5

¹ Averages computed from reports furnished by 10,725 firms.

² No change.

³ Data supplied by cooperating State bureaus.

⁶ Includes both Kansas City, Mo., and Kansas City, Kans.

⁷ Includes Covington and Newport, Ky.

⁸ Each separate area includes from 2 to 8 counties.

⁹ Less than $\frac{1}{10}$ of 1 percent increase.

EMPLOYMENT, PAY ROLLS, AVERAGE WEEKLY EARNINGS, AVERAGE HOURS PER WEEK PER MAN, AND AVERAGE HOURLY EARNINGS IN THE **BUILDING-CONSTRUCTION** INDUSTRY IN JULY 1934, AND PERCENTAGES OF CHANGE FROM JUNE 1934—Continued

Locality	Number of firms reporting	Employment		Pay rolls		Average weekly earnings		Average hours per week per man ¹		Average hourly earnings ¹	
		Number on pay roll July 1934	Percentage of change from June 1934	Amount July 1934	Percentage of change from June 1934	Amount July 1934	Percentage of change from June 1934	Number July 1934	Percentage of change from June 1934	July 1934	Percentage of change from June 1934
Texas:										<i>Ct.</i>	
Dallas.....	200	731	-7.9	11,083	-14.9	15.16	-7.6	25.5	-10.5	59.6	+2.8
El Paso.....	28	123	+35.2	2,378	+34.7	19.33	-4	29.0	-3.7	63.4	-1.4
Houston.....	192	948	-12.1	17,660	-3.3	18.63	+10.0	26.9	+5.9	70.0	+7.5
San Antonio.....	112	292	-10.2	4,383	-4.6	15.01	+6.2	26.2	+6.1	57.2	+9
The State.....	532	2,094	-8.5	35,504	-5.7	16.96	+3.1	26.4	-8	63.9	+4.8
Utah: Salt Lake City...	91	208	-5.5	4,294	-1.5	20.64	+4.2	25.1	+5.0	82.0	-2
Virginia:											
Norfolk-Portsmouth...	82	450	-16.5	8,131	-17.8	18.07	-1.5	28.7	-2.4	62.7	+6
Richmond.....	125	811	-1	16,939	+3.7	20.89	+3.8	31.0	-3	66.0	+1.1
The State.....	207	1,261	-6.7	25,070	-4.4	19.88	+2.4	30.1	-7	64.8	+1.3
Washington:											
Seattle.....	185	949	+13.4	20,629	+20.0	21.74	+5.8	23.9	+2.6	90.9	+2.9
Spokane.....	50	189	+4.4	4,910	+17.2	25.98	+12.2	32.7	+21.6	79.5	-7.6
Tacoma.....	93	168	-1.2	4,123	+24.8	24.54	+26.2	27.9	+30.4	88.0	-3.1
The State.....	328	1,306	+9.9	29,662	+20.2	22.71	+9.3	25.7	+8.9	88.4	+1
West Virginia: Wheeling...	49	160	-13.0	3,376	-10.1	21.10	+3.4	28.9	-7	73.0	+4.1
Wisconsin: All localities²	160	1,718	+4.5	33,117	+1.2	19.28	-3.1	31.5	-2.8	60.0	-1.6

¹ Averages computed from reports furnished by 10,725 firms.

² Data supplied by cooperating State bureaus.

Trend of Employment in July 1934, by States

FLUCTUATIONS in employment and pay-roll totals, in July 1934, as compared with June 1934, in certain industrial groups are shown by States in the following table. These tabulations have been prepared from data secured directly from reporting establishments and from information supplied by cooperating State agencies. The combined total of all groups does not include building-construction data, which are shown by city and State totals in the section "Building construction." In addition to the combined total of all groups, the trend of employment and pay rolls in the manufacturing, public utility, hotel, wholesale trade, retail trade, bituminous-coal mining, crude-petroleum producing, quarrying and nonmetallic mining, metalliferous mining, laundry, dyeing and cleaning, and banks-brokerage-insurance-real-estate groups is presented. In this State compilation, the totals of the telephone and telegraph, power and light, and electric-railroad operation groups have been combined and are presented as one group—public utilities.

The percentages of change shown in the accompanying table, unless otherwise noted, are unweighted; that is, the industries included in the groups, and the groups comprising the total of all groups, have not been weighted according to their relative importance in the combined totals.

The anthracite-mining industry, which is confined entirely to the State of Pennsylvania, showed decreases from June to July of 6.8 percent in employment and 20.6 percent in pay rolls. These percentages are based on reports received from 160 mines which employed in July 74,497 workers whose earnings in 1 week ending nearest the 15th were \$1,711,286.

When the identity of any reporting company would be disclosed by the publication of a State total for any industrial group, figures for the group do not appear in the separate industrial-group tabulation, but are included in the State totals for "all groups." Data are not presented for any industrial group when the representation in the State covers less than three establishments.

COMPARISON OF EMPLOYMENT AND PAY ROLLS IN IDENTICAL ESTABLISHMENTS
IN JUNE AND JULY 1934, BY STATES

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

State	Total—all groups					Manufacturing				
	Number of establishments	Number on pay roll, July 1934	Percentage change from June 1934	Amount of pay roll (1 week) July 1934	Percentage change from June 1934	Number of establishments	Number on pay roll, July 1934	Percentage change from June 1934	Amount of pay roll (1 week) July 1934	Percentage change from June 1934
Alabama.....	837	72,507	-2.1	\$966,987	-4.8	242	49,201	-3.1	\$619,722	-5.7
Arizona.....	501	12,004	+4	246,624	+2.5	51	2,390	-5.2	44,123	-2.6
Arkansas.....	<i>1,649</i>	<i>23,124</i>	-1.5	<i>350,890</i>	-4	<i>256</i>	<i>8,053</i>	-1.4	<i>151,732</i>	+7
California.....	<i>2,1,852</i>	<i>266,504</i>	+2.6	<i>6,139,210</i>	-2.1	<i>1,058</i>	<i>153,536</i>	+5.0	<i>3,210,776</i>	-3.8
Colorado.....	1,183	40,029	+1.4	848,007	+2.9	176	15,471	+5.0	312,778	+4.7
Connecticut.....	2,027	166,677	-4.7	3,265,231	-7.4	712	134,437	-5.8	2,477,121	-9.3
Delaware.....	183	12,037	-3.3	241,254	-4.8	67	8,695	-4.1	158,418	-7.1
Dist. of Columbia.....	898	32,353	-2.4	774,379	-1.2	49	3,504	+7	110,139	-1.0
Florida.....	1,054	35,053	-2.6	593,474	+1.7	220	19,304	+1.7	278,183	+5.7
Georgia.....	1,477	97,822	-9	1,300,622	-1	382	75,775	-4	868,000	-7
Idaho.....	396	8,842	+3.5	163,626	-3.8	52	3,459	+9.4	60,561	-4.2
Illinois.....	<i>3,4,466</i>	<i>446,583</i>	-1.2	<i>9,701,636</i>	-2.0	<i>2,078</i>	<i>273,265</i>	-1.7	<i>5,605,486</i>	-3.9
Indiana.....	2,419	163,905	-4.1	3,095,300	-9.7	693	121,161	-4.6	2,227,109	-13.2
Iowa.....	2,175	56,226	-5.4	1,108,948	-3.3	430	28,779	-7.4	543,257	-9.4
Kansas.....	<i>1,859</i>	<i>57,398</i>	-1.9	<i>1,170,375</i>	+2	<i>455</i>	<i>30,249</i>	+6	<i>661,389</i>	+3.3
Kentucky.....	1,670	84,055	-8	1,389,516	-5.9	308	32,552	-1.1	518,820	-9.5
Louisiana.....	904	42,045	-1.2	705,842	+1.6	215	23,103	-2.5	324,695	+6
Maine.....	829	49,982	+1.0	842,541	+2.9	289	41,182	+6	657,893	+3.2
Maryland.....	<i>1,472</i>	<i>105,939</i>	-1.8	<i>2,171,362</i>	-3.0	<i>652</i>	<i>73,584</i>	-2.4	<i>1,438,434</i>	-4.6
Massachusetts.....	<i>8,863</i>	<i>420,058</i>	-1.7	<i>8,847,163</i>	-4	<i>1,555</i>	<i>223,934</i>	-2.5	<i>4,255,324</i>	-1.3
Michigan.....	3,461	424,892	-8.3	8,702,670	-15.5	<i>1,074</i>	<i>380,443</i>	-6.8	<i>7,616,227</i>	-15.9
Minnesota.....	2,017	82,068	-8	1,784,055	+3	376	37,476	-2	755,982	-8
Mississippi.....	554	14,168	-5.0	206,023	+1.0	106	8,418	-9.0	108,693	-1.9
Missouri.....	3,771	157,249	-2.0	3,337,780	-1.1	846	78,092	-1.6	1,533,206	-2.2
Montana.....	717	11,003	+9	253,114	-4.0	90	3,365	+2.4	72,371	-2.6
Nebraska.....	1,546	31,797	-2.4	676,104	+6	162	12,941	-1.4	274,661	-3
Nevada.....	207	3,163	+7	78,281	+4.7	28	802	+5	20,752	+1.8
New Hampshire.....	745	44,433	+1.2	778,351	+3.5	212	37,039	-4	619,613	+2.6
New Jersey.....	3,550	256,052	-1.3	5,621,484	-2.3	<i>6,728</i>	<i>212,414</i>	-5	<i>4,461,990</i>	-2.5
New Mexico.....	313	6,197	+1.2	105,440	+2.4	27	533	(?)	8,874	+1.7
New York.....	9,935	615,077	-1.5	15,456,373	-1.2	<i>1,888</i>	<i>366,557</i>	-1.9	<i>8,470,704</i>	-2.4
North Carolina.....	1,200	133,676	-1.5	1,603,093	-2.1	572	123,785	-1.6	1,445,478	-2.5
North Dakota.....	495	4,720	-1.9	98,057	+1.3	43	831	-2.9	19,742	+9
Ohio.....	8,223	505,213	-5.7	10,284,834	-12.1	2,490	362,456	-7.0	7,116,199	-16.3
Oklahoma.....	1,304	34,863	-2.5	714,492	+1.7	170	10,473	+1.7	200,726	+3.8
Oregon.....	1,306	39,755	-5.2	792,885	-5.5	240	20,786	-10.3	353,194	-12.8
Pennsylvania.....	7,923	694,856	-2.4	14,083,764	-9.0	<i>1,962</i>	<i>409,090</i>	-1.5	<i>7,380,294</i>	-9.8
Rhode Island.....	1,201	74,743	-2.4	1,407,987	-2.1	391	56,105	-3.1	967,348	-2.8
South Carolina.....	601	62,860	-6.1	743,697	-8	223	56,940	-6.3	644,519	-8
South Dakota.....	527	8,225	+3	187,538	+2.7	47	2,369	+9	49,006	+3.4
Tennessee.....	1,231	81,205	-1.1	1,242,438	-5.1	316	57,632	-2.5	821,609	-7.5
Texas.....	<i>1,898</i>	<i>89,001</i>	-2	<i>1,932,522</i>	-1.4	<i>552</i>	<i>46,368</i>	-1.7	<i>967,757</i>	-6
Utah.....	509	16,303	+2.4	330,881	+5.2	107	6,186	+12.1	116,220	+10.7
Vermont.....	534	13,613	-1.8	267,743	+3	144	7,330	-4.0	142,523	-7
Virginia.....	2,038	95,505	-6	1,591,140	-7	475	65,661	-7	1,035,753	-5
Washington.....	2,624	68,990	-2.0	1,479,370	-1.9	440	31,813	-4.6	592,747	-8.6
West Virginia.....	1,175	139,288	-2.1	2,576,467	-11.8	245	55,481	-5.8	1,012,807	-15.3
Wisconsin.....	<i>1,045</i>	<i>158,801</i>	-2.2	<i>2,980,486</i>	-5.3	<i>771</i>	<i>127,655</i>	+5.5	<i>2,325,111</i>	-3.9
Wyoming.....	331	6,753	+3.4	156,305	+9.4	45	1,585	+3.0	39,814	+17.4

¹ Includes automobile dealers and garages, and sand, gravel, and building stone.² Includes banks, insurance, and office employment.³ Includes building and contracting.⁴ Includes construction, municipal, agricultural, and office employment, amusement and recreation, professional, and transportation services.⁵ Weighted percent of change.⁶ Includes laundries.⁷ No change.⁸ Includes laundering and cleaning, but does not include food, canning, and preserving.⁹ Includes construction, but does not include hotels and restaurants, and public works.

COMPARISON OF EMPLOYMENT AND PAY ROLLS IN IDENTICAL ESTABLISHMENTS
IN JUNE AND JULY 1934, BY STATES—Continued

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

State	Wholesale trade					Retail trade				
	Number of establishments	Number on pay roll, July 1934	Percentage change from June 1934	Amount of pay roll (1 week) July 1934	Percentage change from June 1934	Number of establishments	Number on pay roll, July 1934	Percentage change from June 1934	Amount of pay roll (1 week) July 1934	Percentage change from June 1934
Alabama.....	105	2,056	-0.5	\$47,165	-1.5	255	4,090	-5.4	\$69,274	-1.7
Arizona.....	59	927	-1.2	19,425	+8.7	256	2,735	-3.6	52,309	+2.7
Arkansas.....	51	1,032	(¹⁰)	26,418	-2	211	2,666	-1.9	47,896	-2.1
California.....	103	5,888	+2	161,349	+1.1	112	22,186	-1.0	453,532	-3.7
Colorado.....	135	3,211	-9	84,669	+5.3	462	7,167	-4.1	138,251	+1.5
Connecticut.....	193	4,219	+7.7	93,840	+3.8	817	12,949	-2.8	274,247	-2.0
Delaware.....	13	239	-1.6	5,423	-2.1	72	1,105	-4.6	24,008	-3.0
Dist. of Columbia.....	51	1,075	+1.7	33,402	-2.1	672	9,809	-6.9	204,169	-4.7
Florida.....	187	2,792	-32.8	58,589	-18.6	332	4,365	+1.0	79,067	-2.9
Georgia.....	88	1,200	-1.4	29,335	+7	674	7,162	-4.3	113,863	-2.5
Idaho.....	37	321	-5.3	9,335	+6.5	191	1,457	+9	25,767	+4.0
Illinois.....	390	12,971	-1.4	353,528	+2	1,260	55,122	-3.5	1,113,464	-4.0
Indiana.....	304	5,865	-1.7	139,882	+7	975	13,705	-8.2	247,497	-3.5
Iowa.....	180	3,054	-9	78,591	+2.9	986	8,818	-9.3	167,279	-1
Kansas.....	168	2,808	+8.4	63,375	+5.1	777	8,992	-2.9	151,638	-2.6
Kentucky.....	139	1,966	-2.3	41,160	-3.1	651	7,783	-4.9	150,798	-3.8
Louisiana.....	194	3,050	-9	70,874	+4.0	274	5,775	-2.4	95,490	+8
Maine.....	83	1,371	+1.6	32,828	+2.4	205	2,245	-4.8	41,149	-3.9
Maryland.....	174	2,532	+1.2	64,111	-4	470	12,753	-8.0	251,504	-3.0
Massachusetts.....	865	18,253	-1.4	486,832	+2.3	4,623	69,340	+4.4	1,395,807	-2.7
Michigan.....	290	5,760	-4	150,520	+3.4	1,375	24,494	-8.3	509,203	-5.2
Minnesota.....	288	7,623	+1.5	208,455	+6.0	892	11,971	-5.9	223,714	-4.2
Mississippi.....	61	1,093	-4.1	21,797	+7.2	141	1,878	-1.1	24,166	+1.7
Missouri.....	646	13,934	-9	370,545	+1.9	1,674	25,265	-6.5	532,224	-4.5
Montana.....	84	802	+5.7	22,375	+8.6	326	2,513	+1.7	52,920	+3.5
Nebraska.....	424	3,100	-5	82,041	+3.6	561	6,306	-6.3	109,643	-4.8
Nevada.....	44	296	+3	10,268	+6.4	56	674	+6.5	13,893	+11.2
New Hampshire.....	35	386	-5	10,399	+1.4	271	2,682	+6	51,226	+8
New Jersey.....	201	3,457	+1.6	102,390	+3.4	1,716	16,044	-8.3	373,408	-5.8
New Mexico.....	23	173	-6	4,114	-1.2	141	1,135	-1.3	19,918	+2.1
New York.....	2,406	46,164	-6	1,438,519	-8	3,779	81,953	-6.3	1,996,586	-3.2
North Carolina.....	50	707	+5.5	17,293	+4.7	380	3,726	-3.3	52,612	+8
North Dakota.....	127	449	-1.8	11,211	+5.8	80	939	-8	14,052	+3
Ohio.....	1,025	14,965	+3	388,508	+1.9	3,489	50,936	-6.8	995,864	-4.2
Oklahoma.....	134	2,093	-1.1	52,500	+3.2	539	6,367	-6.1	112,387	-2
Oregon.....	274	3,628	+8.8	93,221	+4.0	483	6,473	-1.9	125,911	+1
Pennsylvania.....	1,066	17,638	-4	492,675	+5	2,499	49,093	-9.0	1,001,520	-7.1
Rhode Island.....	82	1,536	-3.6	40,056	-2.1	573	8,778	-2.0	166,040	-1.1
South Carolina.....	57	680	(¹)	15,909	+3.2	205	2,456	-5.0	34,385	-5
South Dakota.....	54	534	+1.7	13,023	+3.1	229	1,267	-3.7	21,443	+1.1
Tennessee.....	196	2,973	+4	66,471	+4.7	328	6,258	+7	111,713	+1.2
Texas.....	278	6,113	(¹⁰)	280,167	-11.0	605	15,584	-2.7	280,167	-11.0
Utah.....	64	935	-2.3	25,652	-8	187	2,171	-10.6	42,491	+3.7
Vermont.....	16	338	+1.2	7,414	+4.5	146	1,410	-2.2	26,631	-5
Virginia.....	184	3,643	+11.3	69,915	+5.8	1,003	9,022	-3.8	159,463	-1.7
Washington.....	707	9,694	+1.8	266,354	+6.5	1,086	10,875	-2.9	213,126	+4
West Virginia.....	91	1,479	-3	39,232	+4	230	2,869	(¹)	54,090	-2.8
Wisconsin.....	45	657	+1.2	23,046	+6.0	63	10,196	-4.6	143,160	-3.3
Wyoming.....	21	168	+1.2	4,955	+7.3	144	947	+1	19,163	+3.8

¹ No change.

¹⁰ Less than 1/10 of 1 percent.

COMPARISON OF EMPLOYMENT AND PAY ROLLS IN **IDENTICAL** ESTABLISHMENTS
IN JUNE AND JULY 1934, BY STATES—Continued

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

State	Quarrying and nonmetallic mining					Metalliferous mining				
	Number of establishments	Number on pay roll, July 1934	Percentage change from June 1934	Amount of pay roll (1 week) July 1934	Percentage change from June 1934	Number of establishments	Number on pay roll, July 1934	Percentage change from June 1934	Amount of pay roll (1 week) July 1934	Percentage change from June 1934
Alabama.....	10	544	-2.5	\$6,349	-5.0	10	1,115	+63.0	\$9,646	+165.6
Arizona.....	3	30	-25.0	503	-14.7	17	3,533	+6.3	78,577	+2.2
Arkansas.....	4	124	(⁷)	1,522	+9.1	3	453	+11.0	6,360	+13.3
California.....	37	1,018	-5.3	19,239	-14.3	<i>36</i>	<i>3,136</i>	- <i>5</i>	<i>75,679</i>	- <i>6.9</i>
Colorado.....	4	49	+75.0	489	+6	13	1,180	+7.8	31,101	+8.2
Connecticut.....	25	358	+25.6	6,501	+12.5	-----	-----	-----	-----	-----
Delaware.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Dist. of Columbia.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Florida.....	16	899	+1.1	10,934	-6	-----	-----	-----	-----	-----
Georgia.....	23	1,201	+2.2	12,448	+8.1	-----	-----	-----	-----	-----
Idaho.....	-----	-----	-----	-----	-----	8	1,946	-1	38,736	-13.7
Illinois.....	17	562	-4.9	10,331	-14.9	-----	-----	-----	-----	-----
Indiana.....	67	1,936	+3.5	33,126	+3.1	-----	-----	-----	-----	-----
Iowa.....	23	353	-8.3	5,220	-26.4	-----	-----	-----	-----	-----
Kansas.....	<i>36</i>	<i>1,337</i>	- <i>1.8</i>	<i>26,787</i>	- <i>10.1</i>	<i>12</i>	<i>636</i>	- <i>49.7</i>	<i>7,046</i>	- <i>62.4</i>
Kentucky.....	40	1,300	+11.4	13,423	-4.3	-----	-----	-----	-----	-----
Louisiana.....	7	721	-1.5	9,859	+6.3	-----	-----	-----	-----	-----
Maine.....	10	468	-2.5	11,293	+5.3	-----	-----	-----	-----	-----
Maryland.....	<i>9</i>	<i>251</i>	- <i>10.0</i>	<i>3,675</i>	- <i>16.6</i>	-----	-----	-----	-----	-----
Massachusetts.....	16	385	+4.6	8,055	-1	-----	-----	-----	-----	-----
Michigan.....	41	1,600	+1.2	29,410	-(¹⁰)	38	4,888	+2	81,376	-1.7
Minnesota.....	21	286	+2.5	4,358	+3.4	30	1,673	-4	37,315	-1.1
Mississippi.....	8	199	+26.8	1,597	-18.4	-----	-----	-----	-----	-----
Missouri.....	48	980	-17.9	14,422	-13.2	13	1,803	-2.2	20,559	+7
Montana.....	6	134	+100.0	3,508	+235.1	16	200	-55.9	4,597	-80.8
Nebraska.....	9	235	-42.5	3,707	-26.0	-----	-----	-----	-----	-----
Nevada.....	-----	-----	-----	-----	-----	15	609	-7.4	15,860	+3.6
New Hampshire.....	10	308	-3	8,501	+16.0	-----	-----	-----	-----	-----
New Jersey.....	33	705	+9.6	13,365	+9.6	3	15	-11.8	290	-14.5
New Mexico.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
New York.....	82	2,784	-3.2	54,953	-11.5	-----	-----	-----	-----	-----
North Carolina.....	13	358	+5.6	4,876	+5.2	-----	-----	-----	-----	-----
North Dakota.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Ohio.....	135	3,788	-2	61,985	-7.1	-----	-----	-----	-----	-----
Oklahoma.....	16	175	-11.6	1,647	-19.0	28	262	-70.4	4,244	-69.5
Oregon.....	4	72	-29.4	1,165	-36.4	5	85	-4.5	1,616	-2.2
Pennsylvania.....	147	5,671	-1.3	88,505	-13.1	-----	-----	-----	-----	-----
Rhode Island.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
South Carolina.....	4	125	+4.2	1,429	+3.7	-----	-----	-----	-----	-----
South Dakota.....	6	79	-3.7	1,072	-15.9	-----	-----	-----	-----	-----
Tennessee.....	24	759	-3.1	9,320	+6.1	4	316	+1.3	6,587	-2
Texas.....	<i>21</i>	<i>1,376</i>	- <i>10.9</i>	<i>23,638</i>	- <i>4.3</i>	-----	-----	-----	-----	-----
Utah.....	5	85	+26.9	1,658	+30.1	12	2,152	-3	44,034	-3
Vermont.....	37	1,981	-5.8	39,765	-2.3	-----	-----	-----	-----	-----
Virginia.....	30	1,078	-10.2	14,664	+5	-----	-----	-----	-----	-----
Washington.....	14	333	-23.4	7,744	+2.4	-----	-----	-----	-----	-----
West Virginia.....	19	935	-8.5	12,643	-15.7	-----	-----	-----	-----	-----
Wisconsin.....	14	<i>342</i>	- <i>11.4</i>	<i>5,586</i>	- <i>9.1</i>	(¹¹)	<i>661</i>	+ <i>2.2</i>	<i>10,985</i>	- <i>21.1</i>
Wyoming.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

⁷ No change.

¹⁰ Less than 1/10 of 1 percent.

¹¹ Not available.

COMPARISON OF EMPLOYMENT AND PAY ROLLS IN **IDENTICAL** ESTABLISHMENTS
IN JUNE AND JULY 1934, BY STATES—Continued

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

State	Bituminous-coal mining					Crude-petroleum producing				
	Number of establishments	Number on pay roll, July 1934	Percentage change from June 1934	Amount of pay roll (1 week) July 1934	Percentage change from June 1934	Number of establishments	Number on pay roll, July 1934	Percentage change from June 1934	Amount of pay roll (1 week) July 1934	Percentage change from June 1934
Alabama.....	55	10,883	-1.3	\$138,865	-9.9					
Arizona.....										
Arkansas.....						6	350	-10.0	\$8,278	+1.3
California.....						46	12,741	+3.4	397,092	+6.6
Colorado.....	46	2,797	-4.6	37,304	-22.9					
Connecticut.....										
Delaware.....										
Dist. of Columbia.....										
Florida.....										
Georgia.....										
Idaho.....										
Illinois.....	34	6,518	+6.1	113,670	+20.7	8	210	+3.4	4,346	+3.5
Indiana.....	50	5,119	+4.3	90,120	+2.5	5	41	+7.9	720	+4.8
Iowa.....	22	1,424	+19.9	20,797	+45.5					
Kansas.....	18	696	-5.7	13,100	+11.0	26	1,692	+8	40,739	+3.7
Kentucky.....	141	29,314	-1	445,191	-6.4	5	265	+5.2	3,888	+10.9
Louisiana.....						7	240	-11.4	7,153	-3.2
Maine.....										
Maryland.....	17	1,436	-3.0	15,796	-3.2					
Massachusetts.....										
Michigan.....	3	417	+13.6	4,970	-19.3					
Minnesota.....										
Mississippi.....										
Missouri.....	19	1,059	+61.2	15,189	+38.2					
Montana.....	10	678	+28.4	13,307	+11.9	3	39	+5.4	887	-6.3
Nebraska.....										
Nevada.....										
New Hampshire.....										
New Jersey.....										
New Mexico.....	14	1,769	+8	28,302	+2.5	5	129	+17.3	2,965	+12.7
New York.....						3	186	-35.9	3,909	-36.5
North Carolina.....										
North Dakota.....	9	424	-14.3	7,547	-20.4					
Ohio.....	76	14,267	+7	236,684	-5.7	5	56	+9.8	757	+18.5
Oklahoma.....	16	265	+5.6	5,476	+39.1	50	5,465	-1.9	133,708	+3.5
Oregon.....										
Pennsylvania.....	451	74,771	-1.7	1,232,630	-13.4	17	973	+9.0	21,933	+2.4
Rhode Island.....										
South Carolina.....										
South Dakota.....										
Tennessee.....	17	3,130	+15.4	39,410	-14.8					
Texas.....	5	350	+3	6,031	-4.0	5	7,376	+6.6	234,463	+1.0
Utah.....	15	1,133	-6	22,630	+4.9					
Vermont.....										
Virginia.....	22	4,610	+2.3	66,558	-15.1					
Washington.....	12	1,000	+4.5	23,774	+8.8					
West Virginia.....	357	68,873	+4	1,230,909	-12.4	9	528	+6.9	10,510	+18.0
Wisconsin.....										
Wyoming.....	31	2,945	+6.2	65,912	+8.8	7	224	(?)	6,256	+3.3

¹ No change.

COMPARISON OF EMPLOYMENT AND PAY ROLLS IN IDENTICAL ESTABLISHMENTS
IN JUNE AND JULY 1934, BY STATES—Continued

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

State	Public utilities					Hotels				
	Number of establishments	Number on pay roll, July 1934	Percentage change from June 1934	Amount of pay roll (1 week) July 1934	Percentage change from June 1934	Number of establishments	Number on pay roll, July 1934	Percentage change from June 1934	Amount of pay roll (1 week) July 1934	Percentage change from June 1934
Alabama.....	88	1,813	+1.2	\$39,367	+2.6	22	1,227	-3.0	\$10,198	-6.9
Arizona.....	67	1,461	+9.2	35,488	+9.0	20	367	-5.4	5,605	-2.9
Arkansas.....	36	2,063	-2	44,744	-5.6	26	819	-8.5	7,234	-5.8
California.....	48	44,545	-6	1,248,248	+1.4	173	9,236	-9	141,554	-2.5
Colorado.....	202	5,883	-1.9	156,149	+3.9	59	1,514	+18.5	20,999	+29.7
Connecticut.....	132	9,847	+2	300,384	-1.0	31	1,304	+1.5	17,453	+5.1
Delaware.....	6	751	+1.9	21,655	+2.9	3	260	-4	3,483	-1.8
Dist. of Columbia.....	22	9,760	+1.8	272,071	+2.2	44	4,113	-7.2	64,211	-6.0
Florida.....	185	4,827	+9	122,010	+5.6	68	1,289	+1.5	11,912	-7.6
Georgia.....	186	7,249	+5	199,737	+6.9	39	1,535	-4.2	12,463	-4.6
Idaho.....	57	822	+1.6	16,807	+5.9	20	400	-1.0	4,788	+1.6
Illinois.....	87	73,614	+3	2,052,872	+1.6	12 239	16,436	-5	253,448	+3.3
Indiana.....	136	9,773	+1.6	252,790	+6.2	66	2,912	-7.4	31,128	-3.9
Iowa.....	422	9,366	+9	223,162	+5.8	57	2,288	-11.0	22,426	-8.1
Kansas.....	13 186	7,391	+5	173,608	-4	31	695	-4.5	7,219	-2.9
Kentucky.....	289	6,365	+1.3	149,988	+3.9	36	1,980	-4.9	19,965	-4.0
Louisiana.....	152	6,083	+1.4	152,604	+4.8	22	2,076	-3.2	22,972	-6.4
Maine.....	169	2,677	+9	68,331	-3	23	895	+27.9	10,369	+22.2
Maryland.....	94	12,547	+9	354,370	-2.1	19	663	-1.8	8,368	-2.2
Massachusetts.....	128	47,739	+1.2	1,362,944	+1.9	66	5,137	-4.0	73,069	-1.4
Michigan.....	412	24,930	+2	763,684	-5	98	5,479	-3.4	69,428	-2.0
Minnesota.....	226	12,730	+1.6	345,711	+6.0	73	3,349	+2	39,386	-3.0
Mississippi.....	191	1,899	+4.3	38,820	+7.3	20	553	+4.5	4,093	-1.6
Missouri.....	208	21,204	+3	573,806	+3.4	97	5,172	-2.4	61,739	-3.2
Montana.....	105	2,083	-2.5	61,814	+5.3	36	583	+2.8	8,301	+2.2
Nebraska.....	302	5,935	+1.4	153,308	+6.0	43	1,566	-5.5	16,309	-4.8
Nevada.....	38	413	-3.5	12,077	+1.0	20	328	+13.5	4,431	+9.1
New Hampshire.....	141	2,295	+1.2	60,580	+5	20	876	+242.2	9,672	+240.7
New Jersey.....	266	21,893	+6	637,086	+1.2	97	5,277	+21.6	62,375	+16.3
New Mexico.....	51	596	+3	12,651	+7.7	24	717	+4.2	7,050	-6
New York.....	868	92,930	+4	2,869,493	+4	221	28,819	-1.2	450,729	-3.2
North Carolina.....	97	2,009	-4	43,650	+3.4	39	1,604	+3.0	13,728	-4.4
North Dakota.....	171	1,319	+1.7	32,995	+7.4	18	287	-2.0	3,033	+8
Ohio.....	430	35,718	+1.1	996,964	+4.2	138	8,795	-1.5	113,069	-5.5
Oklahoma.....	248	6,515	+2.2	152,640	+4.2	52	1,520	-3.2	16,104	-2.5
Oregon.....	182	5,720	+2.0	155,328	+2.4	68	1,415	+4	17,833	+1.3
Pennsylvania.....	711	54,939	+2	1,577,297	+1.4	164	10,005	+1.6	126,909	-3.1
Rhode Island.....	45	4,763	+5	135,139	-6	16	398	+48.5	4,579	+33.3
South Carolina.....	73	1,812	+5	37,222	+9	14	299	-36.0	2,739	-34.8
South Dakota.....	130	1,140	-7	27,888	+7.7	21	328	-4.4	3,959	-1
Tennessee.....	246	5,038	+1.3	113,945	+1.2	40	2,452	+2.2	20,997	-9
Texas.....	399	9,286	+3.0	242,289	+1.3	40	2,898	+2.6	40,272	+21.4
Utah.....	65	1,832	-9	40,656	+4.9	14	497	(?)	6,648	+4.4
Vermont.....	126	1,508	+9	36,049	+6	25	674	+35.1	6,888	+36.6
Virginia.....	180	6,219	-2	152,234	+4.1	41	2,318	-2.9	24,590	-2.0
Washington.....	197	10,065	+9	280,489	+2.0	91	2,973	+5.5	34,313	+2.6
West Virginia.....	119	6,399	+2.7	172,279	+6.3	40	1,299	-1.7	13,756	-8
Wisconsin.....	14 41	10,854	-3	336,572	+6.2	43	1,464	-3.0	(11)	-----
Wyoming.....	48	456	+7	11,605	+7.9	15	148	+2.1	1,928	+2.1

⁷ No change.

¹¹ Not available.

¹² Includes restaurants.

¹³ Includes steam railways.

¹⁴ Includes railways and express.

COMPARISON OF EMPLOYMENT AND PAY ROLLS IN IDENTICAL ESTABLISHMENTS
IN JUNE AND JULY 1934, BY STATES—Continued

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

State	Laundries					Dyeing and cleaning				
	Number of establishments	Number on pay roll, July 1934	Percentage change from June 1934	Amount of pay roll (1 week) July 1934	Percentage change from June 1934	Number of establishments	Number on pay roll, July 1934	Percentage change from June 1934	Amount of pay roll (1 week) July 1934	Percentage change from June 1934
Alabama.....	17	960	+1.5	\$9,498	-1.6	4	68	-10.5	\$939	-4.0
Arizona.....	10	342	- .3	5,050	+1.2					
Arkansas.....	22	639	(⁷)	6,612	-(¹⁰)					
California.....	15 69	5,298	+ .3	96,852	+1.4					
Colorado.....	27	1,133	+3.8	15,970	+6.5	14	208	-4.6	3,801	-7.7
Connecticut.....	39	1,323	+3.5	21,473	+2.9	13	301	+2.4	6,320	-1.5
Delaware.....	4	320	+2.9	5,674	+5.3					
Dist. of Columbia.....	17	2,677	+ .3	40,854	-1.9	4	124	+14.8	2,214	+5.2
Florida.....	19	726	+ .7	6,718	-2.8	7	78	-1.3	1,141	-5.1
Georgia.....	21	2,217	-0.1	24,506	-18.8	9	194	-9.3	2,465	-12.5
Idaho.....	15	292	- .7	4,235	-4.0					
Illinois.....	15 72	3,492	-(¹⁰)	67,672	+ .3					
Indiana.....	34	1,566	+1.1	22,141	+2.7	38	568		9,510	-5.5
Iowa.....	28	1,016	- .0	13,567	-1.3	9	132	-12.0	2,407	-6.3
Kansas.....	15 43	937	- .3	12,566	-2.9					
Kentucky.....	33	1,640	+ .6	21,186	- .2	9	284	-2.7	4,284	-7.6
Louisiana.....	6	450	-3.8	4,956	-7.9	7	143	+2.9	1,880	-3.3
Maine.....	25	698	+22.7	9,929	+21.3	6	171	+ .6	3,240	-2.1
Maryland.....	26	1,047	+ .3	30,702	+ .6	11	226	+8.1	4,442	+21.4
Massachusetts.....	123	5,380	-1.6	90,448	-1.1	79	2,186	-3.3	41,148	-6.8
Michigan.....	41	3,313	-1.3	49,121	-2.1	27	993	-6.6	19,543	-11.7
Minnesota.....	60	1,677	-1.9	26,160	-2.6	16	515	-3.5	8,603	-11.2
Mississippi.....	5	160	+4.6	1,436	-1.4	5	57	-6.6	873	- .3
Missouri.....	46	2,819	- .7	37,345	-2.5	27	1,193	-5.3	19,559	-10.6
Montana.....	12	323	+ .3	5,471	+1.2	4	30	(⁷)	592	+2.2
Nebraska.....	14	934	+6.3	13,556	+0.8	9	201	-8.6	3,381	-11.7
Nevada.....										
New Hampshire.....	18	350	+12.2	5,151	+14.3	3	50	-27.5	835	-22.8
New Jersey.....	45	5,591	+5.3	102,535	+3.1	19	423	-1.2	9,769	-5.0
New Mexico.....	3	149	+2.8	2,129	- .4					
New York.....	76	7,344	+ .6	127,676	- .8	11	438	-2.7	8,805	-1.5
North Carolina.....	13	783	+3.3	8,679	- .8	8	128	-4.5	1,739	-8.7
North Dakota.....	10	203	+3.0	3,055	+1.1					
Ohio.....	73	3,868	- .5	61,685	-1.4	73	2,207	-8.6	40,530	-12.3
Oklahoma.....	21	953	+1.6	12,303	-4.4	8	151	-6.2	2,026	-11.1
Oregon.....	10	348	-1.4	5,477	-1.2	4	49	-2.0	1,017	+5.6
Pennsylvania.....	38	2,735	+ .4	42,241	-1.7	40	1,771	-6.7	32,439	-10.3
Rhode Island.....	16	942	+4.6	16,320	+ .8	7	430	-3.8	7,927	-4.5
South Carolina.....	8	398	+1.8	3,625	-6.3	6	32	+10.3	459	+16.5
South Dakota.....	7	143	+4.4	1,714	+3.8	3	35	-16.7	641	-13.6
Tennessee.....	13	1,384	+2.5	13,882	- .1	12	202	-4.3	2,564	-2.7
Texas.....	25	1,593	+1.3	21,274	+ .9	23	527	-2.9	8,988	-3.7
Utah.....	10	610	- .5	8,954	+2.3	9	115	- .9	1,943	- .2
Vermont.....	8	118	+9.3	1,454	+10.5	4	31	-3.1	542	-8.9
Virginia.....	19	1,066	+3.6	13,417	+4.7	29	362	-2.4	5,903	-8.6
Washington.....	16	628	- .5	10,708	+ .5	10	103	+1.0	1,956	+1.6
West Virginia.....	15	580	+1.0	821	+6.8	7	200	(⁷)	3,169	-4.8
Wisconsin.....	15 28	955	-5.5	13,092	-6.4					
Wyoming.....	4	98	-1.0	1,746	+ .5					

⁷ No change.

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

¹⁵ Includes dyeing and cleaning.

COMPARISON OF EMPLOYMENT AND PAY ROLLS IN **IDENTICAL** ESTABLISHMENTS
IN JUNE AND JULY 1934, BY STATES—Continued

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

State	Banks, brokerage, insurance, and real estate				
	Number of establish- ments	Number on pay roll July 1934	Percent- age change from June 1934	Amount of pay roll (1 week) July 1934	Percentage change from June 1934
Alabama.....	29	550	+0.2	\$15,964	+1.0
Arizona.....	17	203	-3.8	5,158	-2.4
Arkansas.....	20	250	+2.0	6,060	+3.3
California.....	1,169	22,696	-2	750,325	-3
Colorado.....	45	1,416	+1.5	46,496	+2.3
Connecticut.....	65	1,939	-1.2	67,892	-1.2
Delaware.....	14	556	(?)	20,249	-1.0
District of Columbia.....	39	1,291	+1.3	47,319	+2.8
Florida.....	20	773	+1	24,920	+2.9
Georgia.....	55	1,289	-1.2	37,805	+1.7
Idaho.....	14	126	+4.1	3,072	+(10)
Illinois.....	104	10,923	+9	377,666	-(10)
Indiana.....	51	1,259	-1	41,277	+1.9
Iowa.....	18	996	+1.1	32,242	+3.7
Kansas.....	16 88	863	-6	27,628	+1.7
Kentucky.....	19	606	+5	20,813	+1.6
Louisiana.....	20	404	+2.0	15,359	+2.5
Maine.....	19	275	+1.1	7,509	+3.9
Maryland.....	34	1,162	+1.4	39,508	-4
Massachusetts.....	16 226	7,698	-4	226,548	+1.2
Michigan.....	198	6,529	+7	199,564	+1.0
Minnesota.....	55	4,768	-2.9	134,371	-4.6
Mississippi.....	17	211	+1.0	4,548	+1.9
Missouri.....	147	5,728	-8	159,186	-1.3
Montana.....	25	253	+2.0	6,971	-4
Nebraska.....	22	579	-3	19,498	+1.2
Nevada.....			-7		
New Hampshire.....	35	447	-7	12,374	+13.4
New Jersey.....	136	13,317	+1.1	379,051	-1.2
New Mexico.....	20	131	+1.6	3,492	+2
New York.....	744	54,865	-3	1,917,643	-(10)
North Carolina.....	28	576	-7	15,038	+1
North Dakota.....	34	241	+1.3	5,953	+2.7
Ohio.....	289	8,157	+9	272,589	+1.3
Oklahoma.....	22	634	+4.4	20,731	+12.1
Oregon.....	36	1,179	-4.2	38,123	-4.4
Pennsylvania.....	16 739	22,702	-1	705,324	-7
Rhode Island.....	69	1,756	+1.9	69,894	+8
South Carolina.....	11	118	+2.6	3,410	+(10)
South Dakota.....	29	239	+3.0	5,987	+1.4
Tennessee.....	35	1,061	+3	35,940	+1.5
Texas.....	49	1,580	-1	41,778	-2
Utah.....	21	587	+7	19,995	-(10)
Vermont.....	28	223	+4.7	6,477	+3.8
Virginia.....	55	1,526	+1	48,643	-2
Washington.....	49	1,476	+3.4	47,661	+1.6
West Virginia.....	43	645	+3	18,862	+8
Wisconsin.....	32	1,007	-2.1	34,079	-1.2
Wyoming.....	12	115	-1.7	3,536	+8

⁷ No change.

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

¹⁶ Does not include brokerage and real estate.

Employment and Pay Rolls in July 1934 in Cities of Over 500,000 Population

FLUCTUATIONS in employment and pay-roll totals in July 1934 as compared with June 1934 in 13 cities of the United States having a population of 500,000 or over are presented in the following table. These changes are computed from reports received from identical establishments in each of the months considered.

In addition to reports received from establishments in the several industrial groups regularly covered in the survey of the Bureau, excluding building construction, reports have also been secured from other establishments in these cities for inclusion in these totals. Information concerning employment in building construction is not available for all cities at this time and therefore has not been included.

FLUCTUATIONS IN EMPLOYMENT AND PAY ROLLS IN JULY 1934 AS COMPARED WITH JUNE 1934

Cities	Number of establishments reporting in both months	Number on pay roll		Percentage change from June 1934	Amount of pay roll (1 week)		Percentage change from June 1934
		June 1934	July 1934		June 1934	July 1934	
New York City.....	6, 870	448, 019	435, 543	-2. 8	\$11, 668, 223	\$11, 428, 779	-2. 1
Chicago, Ill.....	2, 405	283, 467	282, 455	- .4	6, 910, 178	6, 944, 640	+ .5
Philadelphia, Pa.....	2, 285	169, 787	168, 781	- .6	3, 847, 377	3, 790, 255	-1. 5
Detroit, Mich.....	1, 597	314, 938	282, 542	-10. 3	7, 198, 794	5, 842, 998	-18. 8
Los Angeles, Calif.....	1, 700	91, 657	90, 185	-1. 6	2, 140, 596	2, 123, 422	- .8
Cleveland, Ohio.....	2, 000	127, 178	120, 409	-5. 3	2, 935, 105	2, 655, 860	-9. 5
St. Louis, Mo.....	2, 003	116, 338	114, 055	-2. 0	2, 515, 734	2, 444, 395	-2. 8
Baltimore, Md.....	1, 112	80, 910	79, 300	-2. 0	1, 742, 811	1, 693, 734	-2. 8
Boston, Mass.....	2, 206	135, 051	132, 335	-2. 0	3, 033, 888	3, 004, 780	-1. 0
Pittsburgh, Pa.....	1, 032	114, 952	109, 040	-5. 1	2, 565, 893	2, 250, 716	-12. 3
San Francisco, Calif.....	1, 671	70, 423	68, 414	-2. 9	1, 720, 815	1, 641, 119	-4. 6
Buffalo, N.Y.....	674	58, 232	56, 463	-3. 0	1, 303, 986	1, 281, 158	-1. 8
Milwaukee, Wis.....	567	46, 060	44, 870	-2. 6	1, 015, 854	990, 566	-2. 5

Employment on Class I Steam Railroads in the United States

REPORTS of the Interstate Commerce Commission for class I railroads show that the number of employees, exclusive of executives and officials, decreased from 1,042,371 on June 15, 1934, to 1,035,909 (preliminary) on July 15, 1934, or —0.6 percent. Data are not yet available concerning total compensation of employees for July 1934. The latest pay-roll information available shows a decrease from \$124,953,597 in May 1934 to \$124,435,273 in June 1934, or 0.4 percent.

The monthly trend of employment from January 1923 to July 1934 on class I railroads—that is, all roads having operating revenues of \$1,000,000 or over—is shown by index numbers published in the following table. These index numbers, constructed by the Interstate Commerce Commission, are based on the 3-year average, 1923–25 as 100.

INDEXES OF EMPLOYMENT ON CLASS I STEAM RAILROADS IN THE UNITED STATES, JANUARY 1923 TO JULY 1934

[3-year average, 1923-25=100]

Month	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934
January.....	98.4	96.7	95.5	95.6	95.2	89.1	88.0	86.1	73.5	61.1	53.0	54.1
February.....	98.6	96.9	95.3	95.8	95.0	88.7	88.6	85.2	72.6	60.2	52.7	54.6
March.....	100.4	97.3	95.1	96.5	95.6	89.7	89.8	85.3	72.7	60.5	51.5	55.9
April.....	101.9	98.8	96.5	98.6	97.1	91.5	91.9	86.7	73.4	59.9	51.8	56.9
May.....	104.8	99.1	97.7	100.0	99.1	94.4	94.6	88.3	73.8	59.6	52.5	58.5
June.....	107.1	97.9	98.5	101.3	100.7	95.8	95.8	86.3	72.7	57.7	53.6	59.0
July.....	108.2	98.0	99.3	102.6	100.7	95.4	96.3	84.5	72.3	56.3	55.4	58.7
August.....	109.2	98.9	99.5	102.4	99.2	95.5	97.1	83.5	71.0	54.9	56.8	-----
September.....	107.7	99.6	99.7	102.5	98.8	95.1	96.5	82.0	69.2	55.7	57.7	-----
October.....	107.1	100.7	100.4	103.1	98.5	95.2	96.6	80.2	67.6	56.9	57.4	-----
November.....	105.0	98.9	98.9	101.0	95.5	92.7	92.8	76.9	64.4	55.8	55.8	-----
December.....	99.1	96.0	96.9	98.0	91.7	89.5	88.5	74.8	62.5	54.7	54.0	-----
Average.....	104.0	98.2	97.8	99.8	97.3	92.7	93.1	83.3	70.6	57.8	54.4	56.8

¹ Preliminary.

² Average for 7 months.

Source: Interstate Commerce Commission.

Employment and Pay Rolls in the Federal Service, July 1934

THE number of employees in the executive departments of the United States increased by 5,518, comparing July 1934 with June 1934; comparing July with the same month of the previous year there was an increase of 110,012.

Data concerning employment in the executive departments are collected by the Civil Service Commission from the various departments and offices of the United States Government. The figures are tabulated by the Bureau of Labor Statistics. Employment data for the legislative, judicial, and military services are collected and compiled by the Bureau of Labor Statistics, United States Department of Labor.

Table 1 shows the number of employees in the executive departments of the Federal Government. Data for employees working in the District of Columbia are shown separately. Approximately 13 percent of the employees in the executive departments of the United States Government worked in the city of Washington.

TABLE 1.—EMPLOYEES IN THE EXECUTIVE SERVICE OF THE UNITED STATES JULY 1933 AND JUNE AND JULY 1934

Item	District of Columbia			Outside the District			Entire service		
	Perma- nent	Tempo- rary ¹	Total	Perma- nent	Tempo- rary ¹	Total	Perma- nent	Tempo- rary ¹	Total
Number of employees:									
July 1933.....	62,793	3,787	66,580	460,400	29,620	490,020	523,193	33,407	556,600
June 1934.....	78,302	8,894	87,196	495,686	78,212	573,898	573,988	87,109	661,094
July 1934.....	79,552	8,396	87,978	496,529	82,105	578,634	576,111	90,501	666,612
Gain or loss:									
July 1933-July 1934.....	+16,769	+4,609	+21,398	+36,129	+52,485	+88,614	+52,918	+57,094	+110,012
June 1934-July 1934.....	+1,280	-498	+782	+843	+3,893	+4,736	+2,123	+3,395	+5,518
Percent of change:									
July 1933-July 1934.....	+26.7	+121.7	+32.1	+7.8	+177.2	+18.1	+10.1	+170.9	+19.8
June 1934-July 1934.....	+1.6	-5.6	+0.9	+0.2	+5.0	+0.8	+0.4	+3.9	+0.8
Labor turn-over July 1934:									
Additions ²	3,071	1,674	4,745	9,106	23,158	32,264	12,177	24,832	37,009
Separations ²	1,784	2,165	3,949	8,277	19,265	27,542	10,061	21,430	31,491
Turn-over rate per 100.....	2.26	19.36	4.51	1.67	24.03	4.78	1.75	24.13	4.74

¹ Not including field employees of the Post Office Department.

² Not including employees transferred within the Government service as such transfers should not be regarded as labor turn-over.

During the month ending July 31 there were 79,582 permanent employees on the pay rolls of the executive departments in the District of Columbia. This is an increase of 1,280, or 1.6 percent, as compared with June, and an increase of 16,789, or 26.7 percent, as compared with July 1933. The number of temporary employees decreased 5.6 percent, comparing July with June, but increased 121.7 percent comparing July with the corresponding month of the previous year.

The turn-over rates for the month of July for employees in the District of Columbia were as follows: Permanent, 2.26; temporary, 19.36; and total employment, 4.51.

Employment in the executive departments outside of the city of Washington increased 0.8 percent, comparing July with June 1934. Comparing July 1934 with July 1933, there was an increase of 18.1 percent in total employment outside of the District of Columbia.

Table 2 shows employment in the executive departments of the United States Government by months, January to July 1934, inclusive.

TABLE 2.—EMPLOYMENT IN THE EXECUTIVE DEPARTMENTS OF THE UNITED STATES BY MONTHS, 1934, FOR DISTRICT OF COLUMBIA, OUTSIDE DISTRICT OF COLUMBIA, AND TOTALS

Month	District of Columbia	Outside District of Columbia	Total	Month	District of Columbia	Outside District of Columbia	Total
January.....	78,045	¹ 530,094	¹ 608,139	May.....	85,939	573,147	659,086
February.....	79,913	¹ 531,839	¹ 611,752	June.....	87,196	573,898	661,094
March.....	81,560	541,990	623,559	July.....	87,978	578,634	666,612
April.....	83,850	560,258	644,108				

¹ Revised.

The number of executive employees in the District of Columbia has increased by more than 9,000, comparing July with January 1934, while outside the District of Columbia the number of employees over this 7-month period increased more than 40,000.

Table 3 shows the number of employees and the amounts of pay rolls in the various branches of the United States Government during June and July 1934.

TABLE 3.—NUMBER OF EMPLOYEES AND AMOUNTS OF PAY ROLLS IN THE VARIOUS BRANCHES OF THE UNITED STATES GOVERNMENT, JUNE AND JULY 1934

Branch of service	Number of employees		Amount of pay roll	
	June	July	June	July
Executive service.....	661,094	666,612	\$91,540,629	\$94,158,132
Military service.....	267,038	268,257	10,539,020	20,391,629
Judicial service.....	1,881	1,750	439,170	434,736
Legislative service.....	3,878	3,713	944,758	978,908
Total.....	933,891	940,332	112,463,577	115,963,405

Employees in the executive service and in the military service of the United States Government showed slight increases, comparing July with June. There were decreases, however, in both the judicial and legislative services.

Table 4 shows the number of employees and amounts of pay rolls for all branches of the United States Government for the months of December 1933 to July 1934, inclusive.

TABLE 4.—NUMBER OF EMPLOYEES AND AMOUNTS OF PAY ROLLS FOR ALL BRANCHES OF THE UNITED STATES GOVERNMENT BY MONTHS, DECEMBER 1933 TO JULY 1934, INCLUSIVE

Month	Executive service		Military service		Judicial service		Legislative service	
	Number of employees	Amount of pay roll	Number of employees	Amount of pay roll	Number of employees	Amount of pay roll	Number of employees	Amount of pay roll
1933								
December.....	608, 670	\$82, 011, 601	263, 622	\$17, 656, 909	1, 872	\$432, 435	3, 864	\$886, 781
1934								
January.....	608, 139	77, 450, 498	262, 942	18, 499, 516	1, 780	417, 000	3, 845	871, 753
February.....	611, 752	83, 524, 296	263, 464	19, 532, 832	1, 742	430, 843	3, 852	926, 363
March.....	623, 559	84, 837, 493	266, 285	19, 050, 158	1, 854	443, 505	3, 867	928, 368
April.....	644, 108	85, 090, 283	266, 923	18, 816, 636	1, 904	432, 401	3, 865	926, 484
May.....	659, 086	89, 577, 479	266, 864	19, 216, 150	1, 915	442, 896	3, 862	940, 666
June.....	661, 094	91, 540, 629	267, 038	19, 539, 020	1, 881	439, 170	3, 878	944, 758
July.....	666, 612	94, 158, 132	268, 257	20, 391, 629	1, 750	434, 736	3, 713	978, 908

Employment Created by the Public Works Administration Fund, July 1934

THERE was an increase of nearly 30,000 employees working on Public Works Administration construction projects comparing July with June. During the month ending July 15 more than 612,000 people were working at the site of Public Works Administration construction projects which are financed either wholly or partly from the Public Works Administration fund. These workers were paid nearly \$33,000,000 for their month's work.

Employment on Construction Projects, by Type of Project

Table 1 shows, by type of project, employment, pay rolls, and man-hours worked during the month of July ¹ 1934 on Federal projects financed from the Public Works Administration fund.

¹ Whenever the month of July is spoken of in this study, it is assumed to mean the month ending July 15.

TABLE 1.—EMPLOYMENT, PAY ROLLS, AND MAN-HOURS WORKED ON FEDERAL PROJECTS FINANCED FROM THE PUBLIC WORKS ADMINISTRATION FUND, DURING JULY 1934, BY TYPE OF PROJECT

[Subject to revision]

Type of project	Number of wage earners	Amount of pay rolls	Number of man-hours worked	Average earnings per hour	Value of material orders placed
Building construction.....	36,601	\$2,164,932	2,912,428	\$0.743	\$3,578,486
Public roads.....	319,345	14,187,908	28,372,857	.500	20,100,000
River, harbor, and flood control.....	46,472	2,993,560	4,865,972	.615	4,872,616
Streets and roads ¹	11,922	553,683	1,068,064	.518	558,205
Naval vessels.....	16,513	1,859,199	2,240,040	.830	1,957,811
Reclamation.....	13,992	1,392,972	2,186,946	.637	2,574,158
Forestry.....	26,186	1,711,196	3,052,844	.561	460,650
Water and sewerage.....	1,460	78,597	112,761	.697	153,069
Miscellaneous.....	17,123	1,413,982	2,335,850	.605	3,826,412
Total.....	489,614	26,356,029	47,147,762	.559	38,081,407

¹ Other than those reported by the Bureau of Public Roads.

Federal projects are financed entirely by allotments made by the Public Works Administration to various departments and agencies of the Federal Government. The construction work is done either by commercial firms to whom contracts are awarded by the Federal agencies or by day labor hired directly by such agencies.

Nearly 490,000 people were working on Federal projects during the month ending July 15. More than 65 percent of these workers were engaged in building roads. Over 45,000 were working on river, harbor, and flood-control projects, and more than 36,000 on building construction. The workers were paid over \$26,000,000 for their month's work. The number of man-hours worked during the month totaled over 47,000,000. These workers averaged 56 cents an hour for their month's pay, the average earnings per hour ranging from 50 cents in the case of road workers to 83 cents for employees working on the construction of naval vessels.

Material orders valued at over \$38,000,000 were placed during the month ending July 15.

Table 2 shows, by type of project, employment, pay rolls, and man-hours worked during the month of July on non-Federal construction projects financed from the Public Works Administration fund.

TABLE 2.—EMPLOYMENT, PAY ROLLS, AND MAN-HOURS WORKED ON NONFEDERAL PROJECTS FINANCED FROM THE PUBLIC WORKS ADMINISTRATION FUND DURING JULY 1934, BY TYPE OF PROJECT

[Subject to revision]

Type of project	Number of wage earners	Amount of pay rolls	Number of man-hours worked	Average earnings per hour	Value of material orders placed
Building construction.....	28,044	\$1,617,853	2,011,839	\$0.804	\$3,439,137
Streets and roads.....	15,732	760,880	1,200,074	.634	1,178,979
Water and sewerage.....	21,621	1,096,857	1,609,542	.681	2,157,939
Railroad construction.....	35,902	1,528,986	3,311,292	.462	1,174,049
Miscellaneous.....	703	38,717	60,083	.644	218,940
Total.....	102,002	5,043,293	8,192,830	.616	8,169,044

Non-Federal projects are financed by allotments made from the Public Works Administration fund to a State or political subdivision thereof or, in some cases, to commercial firms. In the case of allotments to States and their political subdivisions, the Public Works Administration makes a direct grant of 30 percent of the total cost of the construction project and the public agency to whom the loan is made finances the other 70 percent. In some cases, this 70 percent is obtained as a loan from the Public Works Administration. The loan bears interest and must be repaid within a given period.

No grants are made to commercial firms. The commercial allotment consists entirely of a loan. Practically all commercial allotments to date have been to railroads. Railroad work falls under the following headings: First, construction, such as electrification, laying of rails and ties, repairs to railroad buildings, etc.; second, the building or repairing of locomotives and passenger and freight cars in railroad shops.

Data concerning employment created by railroad construction is shown in table 2. Employment in railroad shops is shown in table 5, page 38.

There were more than 100,000 workers employed on non-Federal construction projects during the month ending July 15. Of these, nearly 36,000 were railroad workers and more than 28,000 were working on building construction. The total amount of non-Federal pay rolls was over \$5,000,000. The men worked over 8,000,000 man-hours, and the earnings averaged nearly 62 cents per hour. The lowest average earnings, 46 cents per hour, occurred in railroad construction and the highest, 80 cents, in building construction. Material orders totaled over \$8,000,000.

Employment on Construction Projects, by Geographic Divisions

TABLE 3 shows employment, pay rolls, and man-hours worked during July 1934 on Federal construction projects financed from the Public Works Administration fund, by geographic divisions.

TABLE 3.—EMPLOYMENT, PAY ROLLS, AND MAN-HOURS WORKED ON FEDERAL PROJECTS FINANCED FROM THE PUBLIC WORKS ADMINISTRATION FUND DURING JULY 1934, BY GEOGRAPHIC DIVISION

[Subject to revision]

Geographic division	Wage earners		Amount of pay rolls	Number of man-hours worked	Average earnings per hour	Value of material orders placed
	Number employed	Weekly average				
New England.....	24,331	23,681	\$1,590,588	2,673,056	\$0.595	\$578,010
Middle Atlantic.....	51,131	49,878	2,824,749	5,050,334	.559	1,294,505
East North Central.....	73,477	72,114	3,838,726	6,311,399	.608	3,971,622
West North Central.....	73,714	71,509	3,127,628	5,897,936	.530	1,585,753
South Atlantic.....	65,143	62,126	3,362,009	6,184,972	.544	3,298,653
East South Central.....	42,020	40,929	1,955,633	4,238,171	.461	845,718
West South Central.....	58,832	56,428	2,359,987	5,297,913	.445	1,139,548
Mountain.....	58,739	57,708	4,358,687	6,993,607	.623	3,781,809
Pacific.....	33,540	32,557	2,523,581	3,666,438	.688	1,066,873
Total continental United States ¹	481,192	467,195	25,951,393	46,325,884	.560	² 37,671,463
Outside continental United States.....	8,422	7,768	404,636	821,878	.492	409,944
Grand total.....	489,614	474,963	26,356,029	47,147,762	.559	38,081,407

¹ Includes data for 265 wage earners which cannot be charged to any specific geographic division.

² Includes \$20,100,000 estimated value of material orders placed for public-road projects which cannot be charged to any specific geographic division.

More than 70,000 construction workers were employed in the East North Central and the West North Central States during July. More than 60,000 were working in the South Atlantic States. There was a considerable difference in the average earnings per hour comparing the different geographic divisions. In the West South Central States the workers averaged 44.5 cents per hour, while in the Pacific States the average hourly earnings were nearly 69 cents.

Table 4 shows employment, pay rolls, and man-hours worked during July 1934 on non-Federal projects financed from the Public Works Administration fund, by geographic divisions.

TABLE 4.—EMPLOYMENT, PAY ROLLS, AND MAN-HOURS WORKED ON NONFEDERAL PROJECTS FINANCED FROM THE PUBLIC WORKS ADMINISTRATION FUND DURING JULY 1934, BY GEOGRAPHIC DIVISION

[Subject to revision]

Geographic division	Wage earners		Amount of pay rolls	Number of man-hours worked	Average earnings per hour	Value of material orders placed
	Number employed	Weekly average				
New England.....	12,430	10,012	\$679,476	1,128,774	\$0.602	\$951,970
Middle Atlantic.....	15,255	13,520	814,722	1,240,599	.657	1,609,709
East North Central.....	17,319	15,180	991,409	1,405,405	.705	1,371,133
West North Central.....	15,598	13,451	625,206	1,010,820	.619	1,311,562
South Atlantic.....	18,566	16,436	1,061,702	1,791,991	.592	1,274,491
East South Central.....	4,690	4,010	200,312	373,722	.536	383,104
West South Central.....	2,745	2,363	123,582	255,260	.484	587,149
Mountain.....	7,136	5,857	236,246	463,328	.509	316,865
Pacific.....	7,683	6,471	277,599	462,794	.600	303,712
Total continental United States ¹	101,519	87,397	5,013,901	8,137,312	.616	8,117,343
Outside continental United States.....	483	418	29,392	55,518	.529	51,701
Grand total.....	102,002	87,815	5,043,293	8,192,830	.616	8,169,044

¹ Includes data for 97 wage earners which cannot be charged to any specific geographic division.

The South Atlantic States gave employment to more non-Federal workers than any other geographic division. Average hourly earnings ranged from slightly more than 48 cents in the West South Central States to 70.5 cents in the East North Central States.

Table 5 shows employment, pay rolls, and man-hours worked in railroad shops on work financed from the Public Works Administration fund during July 1932, by geographic divisions.

TABLE 5.—EMPLOYMENT, PAY ROLLS, AND MAN-HOURS WORKED IN RAILROAD SHOPS ON WORK FINANCED FROM THE PUBLIC WORKS ADMINISTRATION FUND DURING JULY 1932, BY GEOGRAPHIC DIVISION

[Subject to revision]

Geographic division	Number of wage earners	Amount of pay rolls	Number of man-hours worked	Average earnings per hour	Value of material orders placed
New England.....	967	\$94, 483	147, 166	\$0. 642	\$105, 664
Middle Atlantic.....	5, 753	399, 685	619, 476	. 645	1, 049, 327
East North Central.....	3, 491	248, 881	395, 593	. 629	346, 745
West North Central.....	1, 139	55, 875	86, 000	. 650	145, 954
South Atlantic.....	96	6, 230	12, 221	. 510	48, 981
East South Central.....	2, 475	242, 530	397, 307	. 610	299, 138
West South Central.....	2, 307	119, 669	201, 526	. 594	147, 268
Mountain.....	899	35, 488	61, 332	. 579	27, 698
Pacific.....	3, 406	199, 097	321, 688	. 619	77, 948
Total.....	20, 533	1, 401, 938	2, 242, 309	. 625	2, 248, 723

Over 5,000 of the railroad-shop workers were employed in the Middle Atlantic States. The East North Central States and the Pacific States each employed over 15 percent. Average earnings per hour amounted to more than 60 cents in 6 of the 9 geographic divisions. In the three remaining divisions, the average earnings ranged between 55 and 60 cents in the West South Central and Mountain States, and between 50 and 55 cents per hour in the South Atlantic States.

Table 6 shows expenditures for materials purchased during the month of July, by type of material.

TABLE 6.—MATERIALS PURCHASED DURING MONTH ENDING JULY 15, 1934, FOR PUBLIC WORKS ADMINISTRATION PROJECTS, BY TYPE OF MATERIAL

[Subject to revision]

Type of material	Value of material orders placed
Aircraft (new).....	\$2, 722, 050
Airplane parts.....	44, 538
Ammunition and related products.....	17, 807
Boat building, steel and wooden (small).....	66, 528
Bolts, nuts, washers, etc.....	112, 617
Carpets and rugs.....	10, 944
Cast-iron pipe and fittings.....	1, 081, 089
Cement.....	1, 492, 182
Chemicals.....	11, 617
Clay products.....	742, 762
Coal.....	49, 865
Compressed and liquefied gases.....	16, 709
Concrete products.....	622, 334
Copper products.....	45, 492
Cordage and twine.....	11, 093
Cotton goods.....	17, 983
Crushed stone.....	139, 756
Doors, shutters, and window sash and frames, molding and trim (metal).....	97, 941

TABLE 6.—MATERIALS PURCHASED DURING MONTH ENDING JULY 15, 1934, FOR PUBLIC WORKS ADMINISTRATION PROJECTS, BY TYPE OF MATERIAL—Contd.

Type of material	Value of material orders placed
Electrical machinery, apparatus, and supplies.....	\$1,684,464
Engines, turbines, tractors, waterwheels, and windmills.....	159,687
Explosives.....	142,255
Felt goods.....	28,013
Forgings, iron and steel.....	117,278
Foundry and machine-shop products, not elsewhere classified.....	2,703,314
Fuel oil.....	210,663
Furniture, including store and office fixtures.....	94,594
Gasoline.....	307,155
Glass.....	35,977
Hardware, miscellaneous.....	204,327
Instruments, professional and scientific.....	198,006
Lighting equipment.....	92,686
Lime.....	16,802
Lubricating oils and greases.....	104,135
Lumber and timber products.....	2,067,291
Machine tools.....	96,832
Marble, granite, slate, and other products.....	622,248
Meters (gas, water, etc.) and gas generators.....	32,302
Minerals and earths, ground or otherwise treated.....	15,535
Motor vehicles, passenger.....	11,685
Motor vehicles, trucks.....	37,098
Nails and spikes.....	18,956
Nonferrous-metal alloys, nonferrous-metal products, except aluminum, not elsewhere classified.....	56,974
Paints and varnishes.....	113,346
Paving materials and mixtures.....	301,495
Planing-mill products.....	328,546
Plumbing supplies.....	876,911
Pumps and pumping equipment.....	140,863
Radio apparatus and supplies.....	55,862
Rail fastenings.....	86,719
Rails, steel.....	83,402
Railway cars, freight.....	235,973
Railway cars, passenger.....	568,000
Refrigerators and refrigerator cabinets, including mechanical refrigerators.....	109,579
Roofing, built-up and roll; asphalt shingles; roof coatings, other than paint.....	159,254
Rubber goods.....	27,515
Sand and gravel.....	800,430
Sheet-metal work.....	285,175
Springs, steel.....	106,389
Steam and hot-water heating apparatus.....	314,820
Steam and other packing, pipe and boiler covering, and gaskets.....	118,889
Steel-works and rolling-mill products, other than steel rails, including structural and ornamental metal work.....	4,658,577
Stoves and ranges (other than electric) and warm-air furnaces.....	13,361
Tools, other than machine tools.....	65,688
Wall plaster, wall board, insulating board, and floor composition.....	148,188
Window and door screens and weatherstrip.....	19,124
Wire, drawn from purchased rods.....	87,414
Wirework, not elsewhere classified.....	41,184
Wrought pipe, welded and heavy riveted.....	38,997
Other.....	3,051,889
Public road projects ¹	20,100,000
Total.....	49,299,174

¹ Not available by type of material.

During the month of July orders were placed for materials valued at over \$49,000,000. It is estimated that the fabrication of this material will create approximately 150,000 man-months of labor.

Table 7 shows employment, pay rolls, and man-hours worked by months since the inception of the Public Works Administration program in August 1933 to July 1934, inclusive.

TABLE 7.—EMPLOYMENT, PAY ROLLS, AND MAN-HOURS WORKED DURING AUGUST 1933 TO JULY 1934, ON PROJECTS FINANCED FROM THE PUBLIC WORKS ADMINISTRATION FUND, BY MONTH

[Subject to revision]

Month	Number of wage earners	Amount of pay rolls	Number of man-hours worked	Average earnings per hour	Value of material orders placed
1933					
August.....	4,699	\$280,040	539,454	\$0.519	\$202,100
September.....	33,836	1,961,496	3,920,009	.500	1,622,365
October.....	114,098	7,006,680	14,077,752	.498	22,005,920
November.....	254,784	14,458,364	28,168,280	.513	24,605,055
December.....	270,808	15,724,700	29,866,297	.527	24,839,098
1934					
January.....	273,583	14,574,960	27,658,591	.527	23,522,929
February.....	295,722	15,245,381	28,938,177	.527	24,562,311
March.....	292,696	15,636,545	29,171,634	.536	69,334,754
April.....	369,234	17,732,234	31,247,248	.567	66,639,862
May.....	486,166	24,637,889	44,130,618	.558	49,720,378
June.....	582,690	31,947,223	² 56,867,194	.562	57,589,895
July.....	612,149	32,801,260	57,582,901	.570	49,299,174
Total.....		192,006,772	352,168,155	.545	413,943,841

¹ Includes orders placed for naval vessels prior to October.

² Revised.

The total earnings over the 12-month period amounted to over \$192,000,000. The Public Works Administration program has provided over 350,000,000 man-hours of labor.

Orders have been placed for material to cost over \$413,000,000. It is estimated that the manufacture of this material will require nearly 1,100,000 man-months of labor.

Wage Rates, Public Roads Projects

TABLE 8 shows average hourly rates for work on highway projects financed from the Public Works Administration fund during July, by occupations.

TABLE 8.—AVERAGE HOURLY RATES PAID FOR WORK ON HIGHWAY PROJECTS FINANCED FROM PUBLIC WORKS FUNDS, FOR MONTH OF JULY 1934, BY OCCUPATION AND GEOGRAPHIC DIVISION¹

[From Bureau of Public Roads]

Occupation	Geographic division									
	New England		Middle Atlantic		East North Central		West North Central		South Atlantic	
	Em- ploy- ment	Aver- age hour- ly rate	Em- ploy- ment	Aver- age hour- ly rate	Em- ploy- ment	Aver- age hour- ly rate	Em- ploy- ment	Aver- age hour- ly rate	Em- ploy- ment	Aver- age hour- ly rate
Superintendents.....	193	\$0.88	368	\$0.93	742	\$0.94	657	\$0.77	545	\$0.70
Foremen.....	850	.60	2,112	.61	2,054	.71	2,501	.60	1,940	.48
Shovel elevating grader and crane operators.....	441	.92	1,071	.86	1,510	.88	1,379	.73	703	.69
Other operators.....	562	.56	1,860	.59	2,051	.70	1,973	.60	1,190	.46
Truck and tractor drivers.....	2,514	.48	5,309	.51	8,044	.61	7,858	.52	4,168	.38
Teamsters.....	23	.43	113	.42	871	.48	3,450	.44	556	.32
Skilled labor, carpenters, blacksmiths, and steel erectors.....	1,286	.59	3,268	.67	5,026	.70	3,511	.61	2,633	.45
Unskilled labor.....	7,870	.43	25,416	.41	27,319	.50	22,855	.43	22,918	.32
Total.....	13,739	.49	39,517	.48	47,617	.58	44,184	.49	34,653	.36

¹ Rates shown are based on 97 percent of total employment for the month.

TABLE 8.—AVERAGE HOURLY RATES PAID FOR WORK ON HIGHWAY PROJECTS FINANCED FROM PUBLIC WORKS FUNDS, FOR MONTH OF JULY 1934, BY OCCUPATION AND GEOGRAPHIC DIVISION—Continued

Occupation	Geographic division								United States	
	East South Central		West South Central		Mountain		Pacific			
	Em- plov- ment	Average hourly rate	Em- plov- ment	Average hourly rate	Em- plov- ment	Average hourly rate	Em- plov- ment	Average hourly rate	Em- plov- ment	Average hourly rate
Superintendents.....	347	\$0.68	578	\$0.72	452	\$1.00	261	\$1.15	4,143	\$0.85
Foremen.....	1,501	.47	2,102	.51	1,835	.76	930	.82	15,825	.61
Shovel elevating grader and crane operators.....	524	.72	774	.72	737	1.06	553	1.18	7,692	.84
Other operators.....	804	.45	1,394	.49	1,493	.79	923	.79	12,250	.61
Truck and tractor drivers.....	2,710	.37	4,454	.40	5,620	.67	3,125	.72	43,802	.53
Teamsters.....	1,041	.31	3,395	.35	2,676	.56	165	.60	12,290	.43
Skilled labor, carpenters, blacksmiths, and steel erec- tors.....	2,045	.41	2,453	.54	2,529	.80	2,440	.79	25,191	.63
Unskilled labor.....	16,340	.30	19,063	.34	10,463	.56	6,214	.58	158,458	.42
Total.....	25,312	.35	34,213	.40	25,805	.66	14,611	.71	279,651	.50

Men employed on the construction of public roads under the jurisdiction of the Bureau of Public Roads, Department of Agriculture, averaged 50 cents per hour for work performed during July. These wage rates ranged from 35 cents in the East South Central States to 71 cents in the Pacific States. The unskilled labor rate for the country as a whole was 42 cents. The highest rate was paid to the superintendents, who averaged 85 cents.

Emergency Work Relief Program

COMPARING July with June, there was an increase of over 200,000 workers on the emergency work program of the Federal Emergency Relief Administration. During the week ending July 26, nearly 1,200,000 people were given employment by this program. They drew nearly \$12,000,000 for their week's work.

Table 1 shows the number of employees and the amounts of pay rolls for workers on the emergency work relief program for the weeks ending June 28 and July 26.

TABLE 1.—NUMBER OF EMPLOYEES AND AMOUNTS OF PAY ROLLS FOR WORKERS ON EMERGENCY WORK RELIEF PROGRAM JUNE 28 AND JULY 26, 1934

[Subject to revision]

Geographic division	Number of employees week ending—		Amount of pay roll week ending—	
	June 28	July 26	June 28	July 26
New England.....	92,287	95,836	\$1,129,025	\$1,173,810
Middle Atlantic.....	243,564	232,549	3,954,740	3,746,204
East North Central.....	162,933	205,812	1,589,340	2,014,773
West North Central.....	127,171	179,238	976,466	1,247,098
South Atlantic.....	126,928	148,468	867,841	954,964
East South Central.....	62,200	99,170	351,061	538,185
West South Central.....	69,375	110,287	522,629	806,752
Mountain.....	53,368	62,665	586,031	688,640
Pacific.....	33,358	60,415	423,429	723,011
Total.....	971,184	1,194,440	10,400,562	11,893,437
Percent of change.....		+23.0		+14.4

Table 2 shows the monthly averages of employees working on the emergency work relief program from the inception of the program in March to July 1934, inclusive.

TABLE 2.—NUMBER OF EMPLOYEES AND AMOUNTS OF PAY ROLLS FOR WORKERS ON EMERGENCY WORK RELIEF PROGRAM, BY MONTHS, 1934

Month	Number of employees	Amount of pay roll	Month	Number of employees	Amount of pay roll
March.....	22, 934	\$842, 000	June.....	969, 466	\$42, 438, 091
April.....	786, 829	42, 558, 711	July.....	1, 136, 964	46, 489, 318
May.....	866, 779	39, 967, 337			

¹ Subject to revision.

Emergency Conservation Work

FOR the month ending July 31, there were nearly 390,000 men working on the Emergency Conservation Work. Most of these were in Civilian Conservation Corps camps throughout the United States. Of this total, 346,637, or more than 89.1 percent, were enrolled men.

Table 1 shows employment and pay rolls in the Emergency Conservation Work for the months of June and July 1934, by type of work.

TABLE 1.—EMPLOYMENT AND PAY ROLLS IN THE EMERGENCY CONSERVATION WORK, JUNE AND JULY 1934

Group	Number of employees		Amount of pay rolls	
	June	July	June	July
Enrolled personnel.....	246, 498	346, 637	\$7, 698, 133	\$10, 825, 476
Reserve officers.....	5, 640	6, 034	1, 411, 132	1, 509, 157
Educational advisers.....	1, 104	1, 102	167, 760	176, 765
Supervisory and technical.....	¹ 27, 029	² 35, 341	3, 364, 376	3, 521, 336
Total.....	280, 271	389, 114	12, 641, 401	16, 032, 734

¹ 24,432 are included in the table for the executive service.

² 26,543 are included in the table for the executive service.

There was an increase of over 100,000 employees, comparing July with June, for the Emergency Conservation Work. Pay-roll expenditures during July were \$16,032,734, or over \$3,000,000 greater than during June.

Information concerning employment and pay rolls in the Emergency Conservation Work is collected by the Bureau of Labor Statistics from the War Department, the Department of Agriculture, Treasury Department, and the Interior Department.

The pay of the enlisted personnel is figured as follows: 5 percent are paid \$45 per month; 8 percent, \$36 per month; and the remaining 87 percent, \$30 per month. In addition to their monthly pay these workers receive board, clothing, and medical attention free.

Table 2 shows employment and pay rolls in the Emergency Conservation Work from the inception of the program in May 1933 to July 1934, inclusive.

TABLE 2.—MONTHLY TOTALS OF EMPLOYEES AND PAY ROLLS IN THE EMERGENCY CONSERVATION WORK FROM MAY 1933 TO JULY 1934

Month	Number of employees	Amount of pay roll	Month	Number of employees	Amount of pay roll
1933			1934		
May.....	191, 380	\$6, 388, 760	January.....	¹ 331, 594	¹ \$13, 581, 506
June.....	283, 481	9, 876, 780	February.....	¹ 321, 829	¹ 13, 081, 393
July.....	316, 109	11, 482, 262	March.....	¹ 247, 591	¹ 10, 792, 319
August.....	307, 100	11, 604, 401	April.....	¹ 314, 664	¹ 13, 214, 018
September.....	242, 968	9, 759, 628	May.....	¹ 335, 871	¹ 14, 047, 512
October.....	294, 861	12, 311, 033	June.....	280, 271	12, 641, 401
November.....	344, 273	14, 554, 695	July.....	389, 114	16, 032, 734
December.....	321, 701	12, 951, 042			

¹ Revised.

More people were in Civilian Conservation Corps camps in July 1934 than in any month since their start. The July figures are more than 40,000 greater than the previous high in November 1933.

Employment on Public Roads Other Than P.W.A. Projects

FEDERAL road building financed from carry-over appropriations has been practically completed. By far the largest part of the Federal road building, and most of the State, is now being carried on wholly or partially from Public Works Administration funds. A great deal of the maintenance work financed wholly by local funds is now being done by the various State governments from Public Works Administration funds.

Table 1 shows the number of employees, exclusive of those paid from the Public Works Administration fund, engaged in the building and maintaining of Federal and State public roads during the months of June and July 1934.

TABLE 1.—NUMBER OF EMPLOYEES ENGAGED IN THE CONSTRUCTION AND MAINTENANCE OF PUBLIC ROADS, STATE AND FEDERAL, DURING JUNE AND JULY 1934, BY GEOGRAPHIC DIVISIONS¹

Geographic division	Federal				State			
	Number of employees		Amount of pay rolls		Number of employees		Amount of pay rolls	
	June	July	June	July	June	July	June	July
New England.....	13	33	\$738	\$1, 579	14, 969	18, 392	\$1, 025, 807	\$1, 024, 839
Middle Atlantic.....	1, 098	997	66, 566	62, 168	62, 648	56, 168	3, 079, 118	2, 984, 237
East North Central.....	455	599	39, 683	39, 061	35, 717	35, 678	1, 783, 164	1, 914, 210
West North Central.....	184	115	7, 142	5, 444	16, 692	18, 812	892, 335	909, 195
South Atlantic.....	155	120	5, 950	5, 525	37, 305	38, 829	1, 487, 812	1, 525, 805
East South Central.....	59	43	2, 187	3, 141	11, 087	8, 980	686, 554	463, 894
West South Central.....	808	1, 050	30, 319	40, 179	13, 963	18, 051	939, 616	1, 036, 181
Mountain.....	1, 066	1, 269	64, 161	81, 286	5, 811	8, 131	506, 360	558, 279
Pacific.....	840	612	60, 430	50, 455	10, 329	10, 865	820, 533	839, 045
Total.....	4, 678	4, 838	277, 176	288, 838	208, 521	213, 906	11, 221, 299	11, 255, 685
Percent of change.....		+3.4		+4.2		+2.6		0.3
Outside continental United States.....		155		8, 958				

¹ Excluding employment furnished by projects financed from public-works fund.

The various State governments employed over 210,000 men on road work during the month of July. Of these workers 79 percent were employed in the maintaining of existing roads, while 21 percent were building new roads. More than 25 percent of the State road employees were working in the Middle Atlantic States, Pennsylvania employing a larger number than any other State.

Table 2 shows the number of employees engaged in the construction and maintenance of Federal and State roads, by months, January to July 1934.

TABLE 2.—NUMBER OF EMPLOYEES ENGAGED IN THE CONSTRUCTION AND MAINTENANCE OF PUBLIC ROADS, STATE AND FEDERAL, JANUARY TO JULY 1934, INCLUSIVE¹

Month	Number of employees working on—			
	Federal roads	State roads		
		New	Maintenance	Total
January.....	7,633	25,345	136,440	161,785
February.....	2,382	22,311	126,904	149,215
March.....	1,396	19,985	132,144	152,129
April.....	1,932	21,510	136,038	157,548
May.....	3,941	27,161	167,274	194,435
June.....	4,678	37,642	170,879	208,521
July.....	4,838	45,478	168,428	213,906

¹ Excluding employment furnished by projects financed from the public-works fund.

Employment on Construction Projects Financed by Reconstruction Finance Corporation

DURING the month ending July 15, there were 17,509 employees working on construction projects financed by the Self-Liquidating Division of the Reconstruction Finance Corporation. Loans made by the Reconstruction Finance Corporation for construction projects totaled over \$207,000,000. These loans must be paid in full.

Table 1 shows employment, pay rolls, and man-hours worked on construction projects financed by the Self-Liquidating Division of the Reconstruction Finance Corporation, by type of project.

TABLE 1.—EMPLOYMENT, PAY ROLLS, AND MAN-HOURS WORKED ON PROJECTS FINANCED BY THE SELF-LIQUIDATING DIVISION OF THE RECONSTRUCTION FINANCE CORPORATION DURING JULY 1934, BY TYPE OF PROJECT

[Subject to revision]

Type of project	Number of wage earners	Amount of pay roll	Number of man-hours worked	Average earnings per hour	Value of material purchased
Building construction.....	3,083	\$324,127	285,932	\$1.134	\$348,535
Bridges.....	5,359	405,418	506,337	.801	1,018,756
Reclamation.....	1,991	132,439	261,578	.506	49,780
Water and sewerage.....	4,945	549,118	810,481	.678	477,075
Miscellaneous.....	2,382	213,822	319,232	.670	438,408
Total.....	17,760	1,624,924	2,183,560	.744	2,332,554

Construction of bridges gave employment to over 5,000 of these employees. More than 4,000 were working on water and sewage systems. Pay rolls for all workers totaled over \$1,600,000. More than 2,100,000 man-hours of labor were provided by this work, and the pay averaged over 74 cents per hour. The average hourly earnings ranged from 50 cents in the case of reclamation projects to \$1.13 for building-construction workers.

Purchase orders were placed for materials to cost over \$2,300,000.

Table 2 shows employment, pay rolls, and man-hours worked on projects financed by the Self-Liquidating Division of the Reconstruction Finance Corporation, by geographic division.

TABLE 2.—EMPLOYMENT, PAY ROLLS, AND MAN-HOURS WORKED ON PROJECTS FINANCED BY THE SELF-LIQUIDATING DIVISION OF THE RECONSTRUCTION FINANCE CORPORATION DURING JULY 1934, BY GEOGRAPHIC DIVISIONS

[Subject to revision]

Geographic division	Number of wage earners	Amount of pay roll	Number of man-hours worked	Average earnings per hour	Value of materials purchased
New England.....	0	0	0	0	0
Middle Atlantic.....	4,549	\$468,225	459,894	\$1.018	\$815,771
East North Central.....	179	16,561	16,457	1.006	30,381
West North Central.....	126	6,993	12,470	.561	7,610
South Atlantic.....	1,028	40,047	96,419	.415	30,058
East South Central.....	128	5,732	20,103	.285	2,677
West South Central.....	910	78,641	115,422	.681	55,419
Mountain.....	2,123	144,640	274,169	.528	61,314
Pacific.....	8,717	864,085	1,188,626	.727	1,329,324
Total.....	17,760	1,624,924	2,183,560	0.744	2,332,554

Nearly 50 percent of the workers were employed in the Pacific States. The Middle Atlantic States gave employment to nearly 25 percent of the workers. There were no employees in the New England States.

In the Middle Atlantic States the average hourly earnings were \$1.018; in the East South Central States only 28.5 cents per hour.

Table 3 shows data concerning employment, pay rolls, and man-hours worked during the months of April to July, inclusive, on construction projects financed by the Reconstruction Finance Corporation.

TABLE 3.—EMPLOYMENT, PAY ROLLS, AND MAN-HOURS WORKED ON PROJECTS FINANCED BY THE SELF-LIQUIDATING DIVISION OF THE RECONSTRUCTION FINANCE CORPORATION, APRIL TO JULY 1934

[Subject to revision]

Month	Number of wage earners	Amount of pay rolls	Number of man-hours worked	Average earnings per hour	Value of material orders placed
April.....	18,638	\$1,518,479	2,302,739	\$0.659	\$2,297,479
May.....	19,274	1,636,503	2,334,060	.701	2,120,498
June.....	19,218	1,743,318	2,412,342	.723	2,189,538
July.....	17,760	1,624,924	2,183,560	.744	2,332,554

There was a decrease of over 1,400 employees, comparing July with June. This decrease occurred mainly in building of bridges.

Table 4 shows, by types, the value of materials purchased by contractors working on construction projects financed by Reconstruction Finance Corporation loans.

TABLE 4.—MATERIALS PURCHASED DURING MONTH ENDING JULY 15, 1934, FOR PROJECTS FINANCED BY THE SELF-LIQUIDATING DIVISION OF THE RECONSTRUCTION FINANCE CORPORATION, BY TYPE OF MATERIAL

[Subject to revision]

Type of material	Value of materials purchased
Belting, leather.....	\$1, 516
Cast-iron pipe and fittings.....	56, 838
Cement.....	136, 882
Clay products.....	67, 407
Coal.....	6, 387
Compressed and liquefied gases.....	2, 528
Concrete products.....	193, 381
Copper products.....	2, 443
Crushed stone.....	8, 375
Electrical machinery and supplies.....	210, 941
Explosives.....	51, 173
Felt goods, wool hair, or jute.....	1, 077
Foundry and machine-shop products, not elsewhere classified.....	188, 038
Fuel oil.....	11, 883
Gasoline.....	32, 836
Glass.....	1, 466
Hardware, miscellaneous.....	92, 917
Lime.....	1, 370
Lubricating oils and greases.....	2, 337
Lumber and timber products, not elsewhere classified.....	130, 237
Marble, granite, slate, and other stone products.....	24, 266
Nails and spikes.....	1, 556
Paints and varnishes.....	1, 878
Plumbing supplies.....	52, 201
Pumps and pumping equipment.....	1, 593
Roofing, built-up and roll; asphalt shingles; roof coatings, other than paint.....	1, 510
Rubber goods.....	2, 593
Sand and gravel.....	51, 521
Sheet-metal work.....	3, 015
Steam and hot-water heating apparatus.....	10, 831
Steel-works and rolling-mill products, other than steel rails, including structural and ornamental metal work.....	883, 048
Switches, railway.....	2, 237
Tools, other than machine tools.....	12, 120
Wire, drawn from purchased rods.....	29, 099
Wirework, not elsewhere classified.....	3, 129
Other.....	51, 103
Total.....	2, 331, 732

The value of material orders placed totaled over \$2,300,000. Of this amount, \$800,000 was spent for steel. The value of purchase orders for electrical machinery totaled over \$200,000. It is estimated that the fabrication of these materials for which orders were placed during July will create over 6,000 man-months of labor.

Wage-Rate Changes in American Industries

Manufacturing Industries

THE following table presents information concerning wage-rate adjustments occurring between June 15 and July 15, 1934, as shown by reports received from 23,257 manufacturing establishments employing 3,604,143 workers in July.

Nine hundred and twenty-four establishments in 49 industries reported wage-rate increases averaging 4.1 percent and affecting 123,605 employees. Fifteen establishments in 9 industries reported decreases which averaged 11.4 percent and affected 69 workers.

The outstanding wage-rate adjustment was an increase of 2.5 percent received by 79,168 wage earners in 522 steam-railroad repair shops which report employment data to this Bureau.

Three establishments in the rubber-tire and inner-tube industry gave an average increase of 1.5 percent to 12,346 workers, while 33 establishments in the canning and preserving industry reported an average increase of 19 percent to 4,416 employees. An average increase of 10.3 percent was received by 3,917 workers in 77 bakeries, and 1 of 7.9 percent was given to 3,498 employees in 38 establishments in the confectionery industry. An increase of 2.5 percent was given to 3,110 workers in 6 car-building establishments, 10 paper and pulp establishments gave an average increase of 7.2 percent to 2,973 employees, and 31 electric-railroad repair shops reported an upward adjustment in rates to 2,418 workers. Four industries (newspapers and periodicals, foundries and machine shops, stoves, and machine tools) showed average wage-rate increases ranging from 9.1 percent to 5.7 percent and affecting a total of 5,053 wage earners. The increases reported in the remaining industries affected less than 1,000 each.

TABLE 1.—WAGE-RATE CHANGES IN MANUFACTURING INDUSTRIES DURING MONTH ENDING JULY 15, 1934

Industry	Establishments reporting	Total number of employees	Number of establishments reporting—			Number of employees having—		
			No wage-rate changes	Wage-rate increases	Wage-rate decreases	No wage-rate changes	Wage-rate increases	Wage-rate decreases
All manufacturing industries.....	23, 257	3, 604, 143	22, 318	924	15	3, 479, 847	123, 605	691
Percent of total.....	100.0	100.0	96.0	4.0	(1)	96.6	3.4	(1)
Iron and steel and their products, not including machinery:								
Blast furnaces, steel works, and rolling mills.....	221	260, 768	219	2	-----	260, 505	263	-----
Bolts, nuts, washers, and rivets.....	57	9, 367	57	-----	-----	9, 367	-----	-----
Cast-iron pipe.....	36	7, 154	36	-----	-----	7, 154	-----	-----
Cutlery (not including silver and plated cutlery) and edge tools.....	169	12, 686	168	1	-----	12, 682	4	-----
Forgings, iron and steel.....	90	8, 285	87	3	-----	8, 278	7	-----
Hardware.....	120	30, 733	120	-----	-----	30, 733	-----	-----
Plumbers' supplies.....	91	10, 055	91	-----	-----	10, 055	-----	-----
Steam and hot-water heating apparatus and steam fittings.....	86	19, 577	86	-----	-----	19, 577	-----	-----
Stoves.....	218	26, 148	195	23	-----	25, 080	1, 068	-----
Structural and ornamental metal work.....	280	20, 581	276	4	-----	20, 489	92	-----
Tin cans and other tinware.....	63	12, 062	63	-----	-----	12, 062	-----	-----
Tools (not including edge tools, machine tools, files, and saws).....	135	9, 918	135	-----	-----	9, 918	-----	-----
Wirework.....	114	9, 594	113	1	-----	9, 343	251	-----

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

TABLE 1.—WAGE-RATE CHANGES IN MANUFACTURING INDUSTRIES DURING MONTH ENDING JULY 15, 1934—Continued

Industry	Establishments reporting	Total number of employees	Number of establishments reporting—			Number of employees having—		
			No wage-rate changes	Wage-rate increases	Wage-rate decreases	No wage-rate changes	Wage-rate increases	Wage-rate decreases
Machinery, not including transportation equipment:								
Agricultural implements.....	78	10, 143	78			10, 143		
Cash registers, adding machines, and calculating machines.....	26	15, 995	26			15, 995		
Electrical machinery, apparatus, and supplies.....	429	126, 298	424	5		126, 062	236	
Engines, turbines, tractors, and water wheels.....	109	26, 765	106	3		26, 227	538	
Foundry and machine-shop products.....	1, 614	152, 642	1, 591	23		151, 504	1, 138	
Machine tools.....	186	20, 638	181	5		19, 573	1, 065	
Radios and phonographs.....	54	36, 761	54			36, 761		
Textile machinery and parts.....	91	12, 708	91			12, 708		
Typewriters and parts.....	13	11, 584	12	1		11, 184	400	
Transportation equipment:								
Aircraft.....	31	6, 729	30	1		6, 649	80	
Automobiles.....	318	321, 567	316	2		321, 524	43	
Cars, electric and steam-railway.....	58	18, 568	52	6		15, 468	3, 100	
Locomotives.....	12	4, 544	12			4, 544		
Shipbuilding.....	117	32, 520	113	4		32, 278	242	
Railroad repair shops:								
Electric railroad.....	380	20, 197	349	31		17, 779	2, 418	
Steam railroad.....	531	79, 474	9	522		306	79, 168	
Nonferrous metals and their products:								
Aluminum manufactures.....	26	3, 748	25	1		3, 725	23	
Brass, bronze, and copper products.....	292	42, 439	286	6		42, 286	153	
Clocks and watches and time-recording devices.....	31	10, 329	31			10, 329		
Jewelry.....	186	8, 582	183	3		8, 564	18	
Lighting equipment.....	76	4, 111	74		2	4, 099		12
Silverware and plated ware.....	67	8, 050	67			8, 050		
Smelting and refining—copper, lead, and zinc.....	41	12, 967	41			12, 967		
Stamped and enameled wire.....	209	24, 082	209			24, 082		
Lumber and allied products:								
Furniture.....	613	54, 914	611	2		54, 717	197	
Lumber:								
Millwork.....	690	28, 560	686	4		28, 531	29	
Sawmills.....	694	77, 916	694			77, 916		
Turpentine and rosin.....	33	2, 498	33			2, 498		
Stone, clay, and glass products:								
Brick, tile, and terra cotta.....	594	19, 451	593	1		19, 396	55	
Cement.....	129	19, 158	127	2		19, 026	132	
Glass.....	174	46, 809	174			46, 809		
Marble, granite, slate, and other products.....	252	5, 648	249	2	1	5, 625	19	4
Pottery.....	136	17, 679	136			17, 679		
Textiles and their products:								
Fabrics:								
Carpets and rugs.....	28	16, 763	28			16, 763		
Cotton goods.....	708	298, 418	708			298, 418		
Cotton small wares.....	114	10, 101	114			10, 101		
Dyeing and finishing textiles.....	176	40, 285	175	1		40, 125	160	
Hats, fur-felt.....	40	6, 750	36	4		6, 224	526	
Knit goods.....	502	111, 474	501	1		111, 452	22	
Silk and rayon goods.....	297	45, 580	295		2	45, 476		104
Woolen and worsted goods.....	394	86, 752	390	3	1	86, 333	358	61
Wearing apparel:								
Clothing, men's.....	558	75, 552	558			75, 552		
Clothing, women's.....	740	32, 886	737	3		32, 741	145	
Corsets and allied garments.....	36	5, 286	36			5, 286		
Men's furnishings.....	95	8, 200	94	1		8, 186	14	
Millinery.....	151	6, 027	151			6, 027		
Shirts and collars.....	168	23, 212	168			23, 212		
Leather and its manufactures:								
Boots and shoes.....	353	113, 665	353			113, 665		
Leather.....	179	34, 479	179			34, 479		

TABLE 1.—WAGE-RATE CHANGES IN MANUFACTURING INDUSTRIES DURING MONTH ENDING JULY 15, 1934—Continued

Industry	Establishments reporting	Total number of employees	Number of establishments reporting—			Number of employees having—		
			No wage-rate changes	Wage-rate increases	Wage-rate decreases	No wage-rate changes	Wage-rate increases	Wage-rate decreases
Food and kindred products:								
Baking.....	1, 127	77, 374	1, 046	77	4	73, 098	3, 917	359
Beverages.....	496	34, 472	486	9	1	34, 216	213	43
Butter.....	294	5, 479	294			5, 479		
Canning and preserving.....	791	74, 726	758	33		70, 310	4, 416	
Confectionery.....	314	29, 863	275	38	1	26, 355	3, 498	10
Flour.....	429	16, 712	423	6		16, 632	80	
Ice cream.....	375	14, 899	372	3		14, 882	17	
Slaughtering and meat packing.....	291	111, 008	288	3		110, 564	444	
Sugar, beet.....	58	5, 073	58			5, 073		
Sugar refining, cane.....	13	7, 787	13			7, 787		
Tobacco manufactures:								
Chewing and smoking tobacco and snuff.....	40	9, 993	40			9, 993		
Cigars and cigarettes.....	242	49, 655	232	9	1	48, 644	931	80
Paper and printing:								
Boxes, paper.....	436	29, 707	432	4		29, 577	130	
Paper and pulp.....	415	105, 890	405	10		102, 917	2, 973	
Printing and publishing:								
Book and job.....	1, 479	61, 965	1, 458	21		61, 570	395	
Newspapers and periodicals.....	565	56, 122	538	27		54, 340	1, 782	
Chemicals and allied products, and petroleum refining:								
Other than petroleum refining:								
Chemicals.....	127	32, 011	125	2		31, 733	278	
Cottonseed—oil, cake, and meal.....	102	2, 974	102			2, 974		
Druggists' preparations.....	73	8, 686	73			8, 686		
Explosives.....	31	4, 440	31			4, 440		
Fertilizers.....	163	4, 671	163			4, 671		
Paints and varnishes.....	373	15, 510	370	1	2	15, 461	31	18
Rayon and allied products.....	29	42, 689	29			42, 689		
Soap.....	116	14, 268	114	2		14, 193	75	
Petroleum refining.....	187	57, 963	185	2		57, 860	103	
Rubber products:								
Rubber boots and shoes.....	6	8, 203	6			8, 203		
Rubber goods, other than boots, shoes, tires, and inner tubes.....	137	27, 119	134	3		27, 107	12	
Rubber tires and inner tubes.....	39	58, 452	36	3		46, 106	12, 346	

Nonmanufacturing Industries

DATA concerning wage-rate changes occurring between June 15 and July 15, 1934, reported by cooperating establishments in 17 nonmanufacturing industries, are presented in table 2.

Anthracite mining, telephone and telegraph, and insurance were the only industries in which no wage-rate changes were reported. Increases were reported by 20 establishments in the electric-railroad and motor-bus operation and maintenance industry, which averaged 4.3 percent and affected 17,133 workers. An average increase of 6.2 percent to 9,520 employees was reported by 1,233 retail trade establishments. Fifteen establishments in the electric light and power and manufactured gas industry gave an average increase of 7.9 percent to 1,649 employees, while an average increase of 7.9 percent affect-

ing 1,289 workers was reported by 17 establishments in the metalliferous mining industry. Sixty-three banks reported an advance in rates of 6.1 percent to 802 employees, and 74 wholesale trade establishments gave an average increase of 9 percent to 763 workers. The increases in the remaining industries affected 174 or less employees each.

A decrease of 15.8 percent affecting 254 employees was reported in the brokerage industry. The decreases in the remaining industries were negligible.

TABLE 2.—WAGE-RATE CHANGES IN **NONMANUFACTURING** INDUSTRIES DURING MONTH ENDING JULY 15, 1934

Industrial group	Establishments reporting	Total number of employees	Number of establishments reporting—			Number of employees having—		
			No wage-rate changes	Wage-rate increases	Wage-rate decreases	No wage-rate changes	Wage-rate increases	Wage-rate decreases
Anthracite mining.....	160	74,497	160			74,497		
Percent of total.....	100.0	100.0	100.0			100.0		
Bituminous-coal mining.....	1,442	232,757	1,439	2	1	232,668	50	39
Percent of total.....	100.0	100.0	99.8	0.1	0.1	100.0	(1)	(1)
Metalliferous mining.....	269	25,781	252	17		24,492	1,289	
Percent of total.....	100.0	100.0	93.7	6.3		95.0	5.0	
Quarrying and nonmetallic mining.....	1,087	34,830	1,078	9		34,756	44	
Percent of total.....	100.0	100.0	99.2	0.8		99.9	0.1	
Crude-petroleum producing.....	242	33,694	241		1	33,691		3
Percent of total.....	100.0	100.0	99.6		0.4	100.0		(1)
Telephone and telegraph.....	8,200	263,265	8,200			263,265		
Percent of total.....	100.0	100.0	100.0			100.0		
Electric light and power and manufactured gas.....	3,058	212,676	3,043	15		211,027	1,649	
Percent of total.....	100.0	100.0	99.5	0.5		99.2	0.8	
Electric-railroad and motor-bus operation and maintenance.....	561	138,274	541	20		121,141	17,133	
Percent of total.....	100.0	100.0	96.4	3.6		87.6	12.4	
Wholesale trade.....	13,669	247,671	13,590	74	5	246,890	763	18
Percent of total.....	100.0	100.0	99.4	0.5	(1)	99.7	0.3	(1)
Retail trade.....	36,722	556,473	35,472	1,233	17	546,885	9,520	68
Percent of total.....	100.0	100.0	96.6	3.4	(1)	98.3	1.7	(1)
Hotels.....	2,686	146,181	2,681	1	4	146,124	6	51
Percent of total.....	100.0	100.0	99.8	(1)	0.1	100.0	(1)	(1)
Laundries.....	1,265	72,102	1,260	5		71,928	174	
Percent of total.....	100.0	100.0	99.6	0.4		99.8	0.2	
Dyeing and cleaning.....	614	16,658	611	1	2	16,603	45	10
Percent of total.....	100.0	100.0	99.5	0.2	0.3	99.7	0.3	(1)
Banks.....	3,023	97,641	2,960	63		96,839	802	
Percent of total.....	100.0	100.0	97.9	2.1		99.2	0.8	
Brokerage.....	372	12,382	363		9	12,128		254
Percent of total.....	100.0	100.0	97.6		2.4	97.9		2.1
Insurance.....	999	66,597	999			66,597		
Percent of total.....	100.0	100.0	100.0			100.0		
Real estate.....	565	8,236	559	5	1	8,203	28	5
Percent of total.....	100.0	100.0	98.9	0.9	0.2	99.6	0.3	0.1

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