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Employment and Pay Rolls

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EMPLOYMENT AND PAY ROLLS

Summary of Reports for December 1936

THE upswing in employment, which had been evidenced each month since February in the combined manufacturing and non-manufacturing industries surveyed by the Bureau of Labor Statistics, continued through December, when more than 492,000 additional workers were given jobs. Aggregate weekly pay rolls in these industries rose between November and December by approximately \$15,000,000.

The gain in employment between December 1935 and December 1936 amounted to more than 1,362,000 workers and the increase in weekly pay rolls was nearly \$53,600,000.

In contrast with the continued increase in the number of workers employed by these industries, class I steam railroads had fewer employees on their pay rolls in December than in November. The decrease was 11,061, exclusive of executives and officials, according to a preliminary report by the Interstate Commerce Commission.

Public employment in December showed decreases on construction projects financed by the Reconstruction Finance Corporation, by regular governmental appropriations, and by the Public Works Administration funds. Decreases in employment were also reported on projects financed by The Works Program and in emergency conservation work.

Industrial and Business Employment

MORE than 103,000 factory wage earners were returned to jobs in December. This represented a gain of 1.2 percent from November and was particularly noteworthy, not only because it was the eleventh consecutive monthly gain but also because it was contraseasonal, decreases having been shown in this month in 13 of the preceding 17 years for which data are available. Weekly factory pay rolls advanced 4.9 percent over the month interval, a gain of over \$9,000,000. Although factory pay rolls have risen in December in 9 of the preceding 17 years, the current gain has been exceeded in only 2 of these years—1919 and 1934. Wage-rate increases affecting more than 797,000 of the 4,700,000 workers covered in the survey accounted in part for the pay-roll rise.

The estimated number of factory wage earners in December (8,220,000) exceeded that of any month since December 1929, and the estimated weekly pay roll (\$193,400,000) was the maximum recorded since May 1930. Comparing the 12-month average for 1936

with the corresponding average for 1935, we find that factory employment rose 6.9 percent and factory pay rolls 15.6 percent.

Of the 89 manufacturing industries included in the monthly survey, 52 showed more employees in December than in the preceding month and 60 reported larger pay rolls. Gift or bonus payments were not included in the pay rolls reported. Among the industries showing substantial seasonal gains in employment were fertilizers, 15.2 percent; automobiles, 8.1 percent; and agricultural implements, 10.5 percent. Other industries showing large gains were woolen and worsted goods, 9.3 percent; locomotives, 8.2 percent; aircraft, 6.9 percent; boots and shoes, 7.1 percent; and iron and steel forgings, 6.0 percent.

Gains in employment ranging from 3.8 percent to 4.5 percent were reported for carpets and rugs, dyeing and finishing textiles, hardware, stamped and enameled ware, and lighting equipment. Industries of major importance in which smaller increases were reported were slaughtering and meat packing (2.5 percent), blast furnaces, steel works, and rolling mills (1.5 percent), foundries and machine shops (2.4 percent), electrical machinery (2.7 percent), book and job printing (1.9 percent), silk and rayon goods (1.8 percent), cotton goods (1.9 percent), and millwork (1.2 percent). A further gain in employment of 2.3 percent was shown in the machine-tool industry, continuing the succession of increases which have been reported in this industry each month with but one exception for more than 2 years. Employment in this industry in December was above the level of any month since June 1930 and was nearly three times greater than the low point of April 1933.

Among the 37 industries in which declines in employment were shown, seasonal slackening of activities resulted in decreases of 36.9 percent in beet sugar, 14.4 percent in canning and preserving, 7.8 percent in jewelry, 6.0 percent in millinery, 5.3 percent in marble-slate-granite, 5.4 percent in cottonseed oil-cake-meal, 4.3 percent in cigars and cigarettes, 6.0 percent in stoves, 3.7 percent in radios and phonographs, 3.5 percent in cement, and 1.3 percent in confectionery. Other substantial declines were shown in shipbuilding (7.7 percent), structural metalwork (4.2 percent), and soap (3.5 percent).

Eight of the 16 nonmanufacturing industries surveyed also reported gains in employment between November and December. The largest gain (approximately 388,000 or 11.0 percent) was a seasonal expansion in retail trade, due primarily to the employment of extra workers to handle the holiday trade. In the general merchandising group under retail trade, which is composed of department, variety, and general merchandising stores and mail-order houses, employment increased 33.2 percent or by 295,000 workers. The level of employment in this group in December 1936 exceeded the December 1929 level by 10.5 percent. In "other retail trade" establishments employment

increased 3.6 percent over the month interval or by more than 93,000 workers. Reports received from wholesale trade firms indicated a net gain in employment of 1.5 percent or approximately 21,000 workers. The increase was shared by most of the branches of wholesale distribution. Seasonal demands resulted in the hiring of more than 12,000 additional workers in the anthracite and bituminous-coal mining industries. The gain in employment in anthracite mining was accompanied by a rise of 37.7 percent in weekly pay rolls. Laundries, metal mines, insurance, and brokerage offices also reported larger numbers of workers in December than in the preceding month, the gain in metal mines being partly due to the resumption of operations in several mines which had been affected by labor disputes.

Seasonal recessions in employment were shown in private building construction (7.9 percent), quarrying and nonmetallic mining (6.1 percent), dyeing and cleaning (4.5 percent), and year-round hotels (0.7 percent). The remaining four nonmanufacturing industries (telephone and telegraph, electric light and power and manufactured gas, electric-railroad and motorbus operation and maintenance, and crude-petroleum producing) showed decreases ranging from 0.1 to 1.1 percent. Total employment in the 16 nonmanufacturing industries combined showed a net gain of approximately 389,000 workers between November and December, and an increase of over \$5,900,000 in weekly pay rolls.

Employment by class I railroads declined, the loss amounting to 1 percent, or 11,061 workers exclusive of executives and officials. The total number of such workers in December, according to a preliminary report of the Interstate Commerce Commission, was 1,068,869. Corresponding pay-roll information for this month was not available at the time this report was prepared. In November, however, the total compensation of all employees except executives and officials was \$149,749,940, a decline of 6.2 percent compared with the October figure. The Commission's preliminary indexes of employment, based on the 3-year average 1923-25 as 100 and covering all employees, were 60.5 for December and 61.1 for November. The final October index was 62.1.

Hours and earnings.—Average hours worked per week in December in manufacturing industries were 41.1 and average hourly earnings were 59.4 cents according to reports from cooperating firms. These averages were 1.3 percent and 2.6 percent, respectively, higher than the November figures and 6.0 percent and 4.0 percent higher than the December 1935 averages. Average weekly earnings of factory wage-earners were \$24.83 in December, or 3.5 percent higher than in November and 10.2 percent higher than in December of the preceding year.

Of the 14 nonmanufacturing industries for which man-hour data are compiled, 9 reported longer hours worked per week in December

than in November and the same number showed higher rates of pay. Eleven of the 16 nonmanufacturing industries covered reported gains in average weekly earnings.

Table 1 presents a summary of employment and pay-roll indexes and average weekly earnings in December 1936 for all manufacturing industries combined, for selected nonmanufacturing industries and for class I railroads, with percentage changes over the month and year intervals, except in the few industries for which certain items cannot be computed. The indexes of employment and pay rolls for the manufacturing industries are based on the 3-year average 1923-25 as 100, and for the nonmanufacturing industries on the 12-month average of 1929 as 100. The information for the manufacturing industries, mining, laundries, dyeing and cleaning, and building construction covers wage earners only. For crude-petroleum producing it covers wage earners and clerical field force. The figures for public utilities, trade, hotels, brokerage, and insurance cover all employees including executives.

As explained in the preceding issue of this publication the indexes of factory employment and pay rolls have been revised and adjusted to the 1933 Census of Manufactures.

Table 1.—Employment, Pay Rolls, and Earnings in All Manufacturing Industries Combined and in Nonmanufacturing Industries, December 1936

Industry	Employment			Pay roll			Average weekly earnings		
	Index, Decem- ber 1936	Percentage change from—		Index, Decem- ber 1936	Percentage change from—		Aver- age in Decem- ber 1936	Percentage change from—	
		Novem- ber 1936	Decem- ber 1935		Novem- ber 1936	Decem- ber 1935		Novem- ber 1936	Decem- ber 1935
All manufacturing indus- tries combined ¹	(1923-25 =100) 98.1	+1.2	+11.1	(1923-25 =100) 95.1	+4.9	+22.6	\$24.83	+3.5	+10.2
Class I steam railroads ²	60.5	-1.0	+10.0	(³)	(³)	(³)	(³)	(³)	(³)
Coal mining:	(1929= 100)			(1929= 100)					
Anthracite.....	54.8	+6.5	-4.4	55.4	+37.7	+ ⁽⁴⁾	29.41	+29.3	+4.6
Bituminous.....	83.9	+1.8	+6.1	85.0	+5.4	+22.4	25.74	+3.5	+15.4
Metalliferous mining.....	64.4	+2.4	+20.3	57.7	+5.7	+33.6	28.52	+3.2	+11.0
Quarrying and nonmetallic mining.....	49.4	-6.1	+14.6	39.4	-9.4	+32.6	20.14	-3.5	+15.7
Crude-petroleum producing.....	72.4	-1.1	+7	61.3	+1.9	+2.3	31.31	+3.1	+1.6
Public utilities:									
Telephone and telegraph	73.6	-.1	+5.9	82.4	+9	+8.9	29.86	+1.0	+3.0
Electric light and power and manufactured gas.....	93.2	-.3	+7.4	93.8	+2.2	+9.1	32.45	+2.5	+1.5
Electric-railroad and motorbus operation and maintenance.....	72.5	-.7	+2.8	69.3	-.5	+4.9	30.87	+2	+1.9
Trade:									
Wholesale.....	91.0	+1.5	+4.9	72.8	-.4	+6.0	28.37	-1.8	+1.1
Retail.....	100.0	+11.0	+7.6	76.0	+8.3	+9.7	20.45	-2.4	+1.7
General merchan- dising.....	145.5	+33.2	+10.6	116.8	+27.7	+11.8	17.50	-4.1	+1.1
Other than general merchandising.....	88.1	+3.6	+6.5	67.5	+2.7	+8.8	23.56	-.8	+2.2
Hotels (year-round) ⁴	84.0	-.7	+3.9	69.8	+3	+8.8	13.92	+1.0	+4.7
Laundries.....	87.6	+7	+8.0	76.1	+2.2	+12.9	16.28	+1.5	+4.4
Dyeing and cleaning.....	77.7	-4.5	+5.8	57.3	-4.8	+8.3	18.17	-.3	+2.4
Brokerage.....	(³)	+8	+11.1	(³)	+1.6	+16.5	37.80	+8	+4.9
Insurance.....	(³)	+1	+1.1	(³)	+2	+3.9	38.25	+2	+2.7
Building construction.....	(³)	-7.9	+30.7	(³)	-9.1	+52.6	28.60	-1.2	+16.9

¹ Revised and adjusted to Census of Manufactures totals for 1933.

² Preliminary—Source: Interstate Commerce Commission.

³ Not available. ⁴ Less than 1/10 of 1 percent.

⁵ Cash payments only; the additional value of board, room, and tips cannot be computed.

Public Employment

IN December 243,000 workers were employed on construction projects financed from funds provided by the Public Works Administration. This was a decrease of 9.8 percent compared with the number employed in November. Losses in employment occurred on Federal and non-Federal projects financed from funds provided by the National Industrial Recovery Act and on non-Federal projects financed from funds released under the Emergency Relief Appropriation Act of 1935. Total pay-roll disbursements during the month amounted to \$18,576,000, a decrease of 10.9 percent compared with November.

Over 144,000 workers were employed on construction projects financed from regular governmental appropriations. This was a decrease of 7.4 percent compared with November. Increases in employment occurring on building construction, electrification, naval vessel, reclamation, and street and road projects were offset by decreases on forestry, public roads, river, harbor, and flood control, water and sewerage, and miscellaneous projects. December pay-roll disbursements amounted to \$13,491,000, a decrease of \$816,000 compared with the previous month.

The number of wage earners employed on construction projects financed by the Reconstruction Finance Corporation in December totaled 9,200, a decrease of 400 compared with the preceding month. Decreases in employment occurred on all types of projects with the exception of building construction. Total pay-roll disbursements amounted to \$1,107,000 in December.

Employment on projects financed by The Works Program totaled 2,964,000 in December. This was a decrease of 167,000 compared with November. Over 370,000 workers were employed on Federal projects, a decrease of 8.3 percent. On projects operated by the Works Progress Administration employment totaled 2,594,000, a decrease of 4.9 percent. Total pay-roll disbursements amounted to \$154,731,000.

In the regular agencies of the Federal Government small decreases in employment occurred in the executive, judicial, and legislative branches; a slight increase, however, was reported for the Military Service. Although employment in the executive service dropped 1 percent in December, it was 2 percent higher than a year ago. Of the 831,000 employees in the executive service in December, 116,000 were working in the District of Columbia and 715,000 outside the District. The most marked increases in employment in the executive departments of the Federal Government occurred in the Social Security Board, the Post Office Department, and Panama Canal. Pronounced decreases in the number of workers, on the other hand, were reported for the War Department, the Works Progress Administration, and the Tennessee Valley Authority.

In December 377,000 workers were employed on emergency conservation work. Compared with November this was a decrease of 14,000. Decreases were shown in all groups of workers with the exception of educational advisers. Employment in this group remained virtually the same. December pay-roll disbursements totaled \$18,112,000, a drop of \$493,000 compared with the previous month.

Over 159,000 employees were working on the construction and maintenance of State roads in December. This was a decrease of 22,000 compared with November. Of the total number engaged on the program 86.6 percent were working on maintenance and 13.4 percent on new construction. Pay-roll disbursements for the month totaled \$10,000,000.

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

Table 2.—Summary of Federal Employment and Pay Rolls, December 1936 ¹

[Preliminary figures]

Class	Employment		Per- cent- age change	Pay roll		Per- cent- age change
	Decem- ber	Novem- ber		December	November	
Federal service:						
Executive ²	\$ 831,486	839,446	-0.9	\$138,694,501	\$130,218,059	+6.5
Judicial.....	1,970	1,985	- .8	511,213	501,392	+2.0
Legislative.....	5,274	5,381	-2.0	1,234,689	1,231,814	+ .2
Military.....	308,972	305,757	+1.1	23,574,147	\$ 23,558,487	+ .1
Construction projects:						
Financed by P. W. A.	\$ 242,818	\$ 269,167	-9.8	\$ 18,575,619	\$ 20,854,480	-10.9
Financed by R. F. C. ³	9,189	9,611	-4.4	1,106,816	1,108,258	- .1
Financed by regular governmental appropriations.....	144,274	155,839	-7.4	13,491,223	14,307,158	-5.7
The Works Program:⁴						
Federal projects.....	370,911	404,671	-8.3	18,595,253	20,074,062	-7.4
Projects operated by W. P. A.	2,593,569	2,726,361	-4.9	136,135,774	138,543,440	-1.7
Relief work: Emergency conservation work ⁵	376,953	391,296	-3.7	18,112,149	18,604,821	-2.6

¹ Includes data on projects financed wholly or partially from Federal funds.

² Includes employees of Columbia Institution for the Deaf and Howard University.

³ Includes 387 employees by transfer, previously reported as separations by transfer, not actual additions for December.

⁴ Revised.

⁵ Includes 154,845 wage earners and \$11,144,602 pay roll covering P. W. A. projects financed from E. R. A. A. 1935 funds, and 149 wage earners and \$7,714 pay roll financed from First Deficiency Appropriation Act of 1936.

⁶ Includes 166,178 wage earners and \$12,135,818 pay roll covering P. W. A. projects financed from E. R. A. A. 1935 funds.

⁷ Includes 61 employees and pay-roll disbursements of \$3,533 for December and 81 employees and pay-roll disbursements of \$4,145 for November on projects financed by RFC Mortgage Co.

⁸ Data covering P. W. A. projects financed from E. R. A. A. 1935 funds are not included in The Works Program and shown only under P. W. A.

⁹ Includes 40,121 employees and pay roll of \$5,691,819 for December and 40,348 employees and pay roll of \$5,751,433 for November also included in executive service.

Detailed Reports for December 1936

Industrial and Business Employment

MONTHLY reports on employment and pay rolls in industrial and business industries are now available for the following groups: 89 manufacturing industries; 16 nonmanufacturing industries, including building construction; and class I steam railroads. The reports for the first two of these groups—manufacturing and nonmanufacturing—are based on sample surveys by the Bureau of Labor Statistics, and in virtually all industries the samples are large enough to be entirely representative. The figures on class I steam railroads are compiled by the Interstate Commerce Commission and are presented in the foregoing summary.

Employment, Pay Rolls, Hours, and Earnings in December 1936

THE indexes of employment and pay rolls, average hours worked per week, average hourly earnings, and average weekly earnings in manufacturing and nonmanufacturing industries in December 1936 are shown in table 3. Percentage changes from November 1936 and December 1935 are also given. The indexes for the manufacturing industries have been revised and adjusted to the Census of Manufactures for 1933 as explained in the preceding issue of this publication.

Table 3.—Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, December 1936

Manufacturing (indexes are based on 3-year average 1923-25=100)

Industry	Employment			Pay rolls			Average weekly earnings ¹			Average hours worked per week ¹			Average hourly earnings ¹		
	Index December 1936 (revised series) ²	Percentage change from—		Index December 1936 (revised series) ²	Percentage change from—		December 1936	Percentage change from—		December 1936	Percentage change from—		December 1936	Percentage change from—	
		November 1936	December 1935		November 1936	December 1935		November 1936	December 1935		November 1936	December 1935		November 1936	December 1935
All manufacturing industries.....	98.1	+1.2	+11.1	55.1	+4.9	+22.6	\$24.83	+3.5	+10.2	41.1	+1.3	+6.0	<i>Cents</i> 59.4	+2.6	+4.0
Durable goods.....	92.7	+1.9	+15.9	93.1	+4.7	+30.2	27.94	+2.8	+12.3	42.8	—(3)	+6.7	64.4	+2.8	+4.8
Nondurable goods.....	104.0	+7	+7.0	97.6	+5.1	+14.4	21.43	+4.3	+6.8	39.4	+2.6	+4.9	54.3	+2.1	+2.1
<i>Durable goods</i>															
Iron and steel and their products, not including machinery.....	100.4	+1.1	+17.8	102.0	+6.5	+37.3	29.01	+5.3	+16.5	43.2	—5	+8.2	66.7	+5.6	+7.0
Blast furnaces, steel works, and rolling mills...	109.3	+1.5	+18.4	115.4	+9.9	+42.4	31.59	+8.3	+20.1	43.5	0	+10.0	73.0	+8.3	+9.6
Bolts, nuts, washers, and rivets.....	83.8	+4.0	+17.9	98.4	+11.1	+36.3	27.24	+6.9	+15.6	45.4	+2.5	+11.0	60.2	+4.4	+4.1
Cast-iron pipe.....	66.9	+2.0	+18.8	52.5	+10.0	+40.8	21.39	+7.8	+18.4	41.1	+5.2	+13.9	51.6	+2.7	+4.5
Cutlery (not including silver and plated cutlery) and edge tools.....	87.1	+1.6	+8.5	85.4	+3.6	+17.7	24.18	+1.9	+8.4	45.8	+4	+9.3	53.6	+1.2	—1.3
Forgings, iron and steel.....	68.2	+6.0	+19.7	67.5	+15.8	+38.1	30.79	+9.3	+15.5	47.3	+6.0	+7.7	65.2	+3.0	+7.1
Hardware.....	95.7	+4.5	+17.5	93.5	—12.0	+11.2	22.08	—15.7	—5.5	39.2	—12.6	—6.5	56.7	—4.3	+1.2
Plumbers' supplies.....	87.4	+1.8	+3.9	69.6	+10.0	+17.6	24.74	+8.1	+13.4	42.9	+8.3	+9.9	57.6	—1	+3.0
Steam and hot-water heating apparatus and steam fittings.....	73.2	—7	+23.2	67.4	+2.3	+44.6	26.85	+3.1	+17.2	44.1	+1.2	+13.3	61.0	+1.9	+3.7
Stoves.....	107.7	—6.0	+14.7	96.0	—6.8	+27.6	25.73	—8	+11.1	43.7	—1.3	+10.1	59.3	+7	+8
Structural and ornamental metalwork.....	70.1	—4.2	+31.3	65.7	+2	+57.6	26.37	+4.7	+19.9	43.4	+8	+15.2	60.8	+4.0	+4.1
Tin cans and other tinware.....	94.4	—1.4	+3.5	93.5	+1.4	+6.3	21.88	+2.8	+2.8	39.9	+1.7	+1.5	55.4	+1.4	+1.4
Tools (not including edge tools, machine tools, files, and saws).....	96.2	+2.9	+21.5	104.5	+7.1	+29.8	25.40	+4.1	+6.9	46.1	+1.7	+4.6	55.1	+1.7	+1.9
Wirework.....	187.6	+7.4	+26.7	182.5	+5.5	+33.0	24.62	—1.8	+6.5	42.3	—6.4	+1.3	58.2	+4.9	+5.1
Machinery, not including transportation equipment.....	114.1	+2.4	+19.0	113.6	+7.6	+33.5	27.43	+5.1	+12.3	43.5	+2.7	+8.5	63.0	+2.1	+4.0
Agricultural implements.....	102.9	+10.5	—14.0	121.5	+19.1	—6.4	26.46	+7.8	+8.9	40.9	+1.9	+2.1	64.8	+6.1	+6.5
Cash registers, adding machines, and calculating machines.....	120.7	+1.0	+10.0	122.9	+10.2	+21.5	31.43	+9.0	+10.4	42.9	+7.2	+3.1	74.0	+1.7	+6.9
Electrical machinery, apparatus, and supplies.....	105.8	+2.7	+26.0	103.1	+6.4	+38.7	26.86	+3.6	+10.1	42.1	+1.9	+7.6	63.4	+1.8	+2.8
Engines, turbines, tractors, and water wheels.....	123.5	+4.5	+13.4	117.6	+10.9	+25.0	29.73	+6.2	+10.9	41.0	+1.9	+4.6	72.6	+4.2	+6.1

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Foundry and machine-shop products.....	99.4	+2.4	+21.6	100.2	+7.4	+38.9	27.96	+4.8	+14.2	45.1	+3.1	+9.7	61.8	+1.6	+4.5
Machine tools.....	130.7	+2.3	+21.7	135.5	+9.0	+34.3	31.16	+6.5	+10.3	47.5	+4.3	+6.1	65.6	+2.2	+4.0
Radios and phonographs.....	202.7	+3.7	+6.6	167.5	-1.2	+21.9	21.67	+2.7	+14.3	38.9	+9.9	+10.1	55.7	+1.8	+3.9
Textile machinery and parts.....	76.9	+3.9	+13.9	78.8	+17.0	+26.9	27.55	+12.7	+11.5	44.6	+9.5	+8.9	62.0	+2.7	+2.6
Typewriters and parts.....	143.6	+3.2	+24.6	137.6	+2.4	+39.7	25.59	-9.9	+12.1	44.5	-1.2	+14.0	57.4	+3.3	+1.3
Transportation equipment.....	122.1	+6.2	+17.4	120.9	+6.6	+31.3	31.46	+4.4	+11.7	40.2	+2.0	+5.7	78.4	+2.5	+5.9
Aircraft.....	690.9	+6.9	+61.8	619.9	+12.1	+71.1	28.25	+4.9	-2.1	45.4	+5.5	+4.1	62.8	-6.6	-2.5
Automobiles.....	138.7	+8.1	+15.9	135.7	+7.9	+30.7	32.22	-2	+12.9	40.4	-2.8	+5.6	79.9	+2.6	+7.1
Cars, electric- and steam-railroad.....	56.8	-1.1	+32.8	59.9	+4.0	+50.1	25.83	+5.2	+13.8	40.0	+2.1	+8.2	64.7	+2.0	+4.3
Locomotives.....	43.8	+8.2	+81.9	31.4	+11.4	+118.3	28.10	+2.9	+20.5	43.6	+1.6	+14.5	64.4	+1.3	+5.2
Shipbuilding.....	89.9	+7.7	+6.1	90.6	-6.9	+9.9	28.02	+9.9	+3.6	35.0	-2.1	+1.4	79.4	+2.7	+2.0
Railroad repair shops.....	61.2	+1.0	+13.8	65.5	+5	+18.7	30.74	-6	+4.3	44.7	-2	+3.8	69.2	-1	+7
Electric railroad.....	63.4	+1	+3.4	67.4	+3.0	+9.1	29.95	+2.9	+5.6	45.1	+7	+5	65.3	+2.7	+4.9
Steam railroad.....	61.0	+9	+14.7	65.6	+4	+19.7	30.87	-6	+4.3	44.6	-2	+4.2	69.6	-3	+3
Nonferrous metals and their products.....	111.6	+1.5	+13.6	105.5	+3.4	+27.1	25.36	+1.9	+11.8	43.8	-1	+5.9	57.7	+2.1	+5.6
Aluminum manufactures.....	117.7	-9	+17.0	114.7	-2	+28.2	24.59	+7	+9.4	42.8	-1.4	+2.6	57.5	+1.9	+7.2
Brass, bronze, and copper products.....	116.2	+3.0	+15.4	111.6	+7.5	+32.8	27.31	+4.4	+15.0	44.0	+2.2	+6.2	62.1	+2.2	+8.2
Clocks and watches and time-recording devices.....	121.3	+7	+13.6	117.9	-3.3	+18.3	22.78	-4.0	+4.2	44.8	-3.9	+1.0	51.0	+1.0	+3.9
Jewelry.....	92.8	-7.8	+14.4	74.6	-4.3	+19.7	24.17	+3.8	+4.7	41.9	-3	+3.2	57.3	+4.9	+1.3
Lighting equipment.....	101.4	+4.3	+27.2	104.2	+7.5	+44.8	25.91	+3.0	+13.5	44.2	-2.4	+6.0	58.7	+5.5	+7.0
Silverware and plated ware.....	73.5	-5	+5.6	71.3	-4	+24.5	26.80	+1	+18.0	47.3	+1.6	+26.9	57.8	+1.1	-3.9
Smelting and refining—copper, lead, and zinc.....	81.1	+2.1	+4.1	70.1	+2	+12.7	25.51	-1.8	+8.2	42.4	-2.6	+1.3	60.2	+9	+6.9
Stamped and enameled ware.....	162.4	+4.1	+12.6	164.2	+5.9	+26.7	23.28	+1.7	+12.6	43.8	+1.1	+8.2	53.3	+5	+4.8
Lumber and allied products.....	67.1	-1.0	+10.4	60.5	-5	+23.5	20.28	+6	+11.9	43.6	+1	+6.8	46.5	-1	+1.6
Furniture.....	87.8	-6	+18.6	78.3	+9	+35.4	21.24	+1.5	+14.2	45.1	+1	+9.6	47.2	+1.0	+4.6
Lumber:															
Millwork.....	54.1	+1.2	+19.9	50.7	+2.2	+35.5	21.64	+1.1	+13.0	45.7	+7	+11.8	47.4	+4	+1.0
Sawmills.....	49.0	-1.9	+3.6	41.6	-2.6	+11.3	19.01	-7	+7.5	42.1	-1	+5.3	45.8	-9	+1.2
Stone, clay, and glass products.....	67.1	-3	+11.6	59.1	-3.3	+19.9	22.32	-3.0	+7.4	40.1	-3.4	+5.2	56.3	+1.0	+1.8
Brick, tile, and terra cotta.....	48.8	-1.6	+22.8	40.9	-5	+40.1	20.31	+1.1	+14.2	43.2	-1.8	+9.9	47.6	+3.6	+4.9
Cement.....	62.0	-3.5	+31.3	58.8	-6.8	+53.0	23.42	-3.5	+16.3	39.7	-4.6	+13.3	59.1	+1.1	+3.0
Glass.....	100.6	+3.1	+9	95.1	-4.2	+2.6	22.74	-7.1	+1.5	37.7	-6.6	-5	60.4	-7	+1.9
Marble, granite, slate, and other products.....	41.0	-5.3	+17.4	33.2	-2.7	+31.4	23.91	+2.8	+12.2	38.4	+2.2	+11.7	62.5	+1.3	-2
Pottery.....	76.5	-7	+5.7	65.2	-2.7	+12.2	22.71	-2.1	+6.2	41.8	-9	+5.1	55.4	+8	+1.5
<i>Nondurable goods</i>															
Textiles and their products.....	106.4	+1.5	+6.4	94.6	+8.5	+14.0	17.98	+6.9	+7.1	37.9	+3.8	+6.4	47.1	+2.9	+3
Fabrics.....	101.7	+2.9	+5.8	96.8	+11.6	+15.4	18.00	+8.4	+9.0	39.8	+4.3	+6.4	45.1	+4.0	+2.4
Carpets and rugs.....	97.9	+3.8	+14.9	96.5	+7.7	+36.1	23.34	+3.7	+18.5	40.7	+8	+15.3	57.5	+2.6	+2.6
Cotton goods.....	101.4	+1.9	+12.1	98.2	+11.7	+24.3	15.35	+9.6	+11.1	39.8	+4.1	+5.8	38.5	+5.3	+5.1
Cotton small wares.....	105.8	+2.2	+6.6	106.8	+9.2	+11.0	18.83	+6.9	+4.3	41.4	+5.4	+4.7	45.6	+2.0	+1.8
Dyeing and finishing textiles.....	122.8	+4.3	+3.4	116.4	+15.7	+18.5	22.92	+11.0	+14.6	42.8	+6.0	+12.9	53.3	+5.2	+1.8
Hats, fur-felt.....	85.5	+3.3	-1.1	82.5	+21.2	+7.9	26.18	+17.3	+9.1	38.2	+17.5	+4.7	68.0	-4	-1
Knit goods.....	121.8	+7	+5.7	126.2	+1.6	+11.7	18.01	+8	+5.7	38.8	+1.2	+7.6	47.5	-(3)	-5
Silk and rayon goods.....	81.4	+1.8	-6.2	68.4	+7.3	-2.7	16.42	+5.5	+3.7	38.7	+3.3	+5.3	42.3	+7.1	-2.2
Woolen and worsted goods.....	91.6	+9.3	-1.4	84.3	+27.6	+10.1	21.18	+16.8	+11.5	40.0	+8.8	+4.1	53.0	+7.1	+7.0
Wearing apparel.....	114.8	-1.0	+8.0	86.3	+2.0	+11.1	17.91	+3.2	+2.9	33.9	+2.2	+7.3	51.4	+1.5	-3.3
Clothing, men's.....	107.8	+1.2	+5.2	84.9	+7.1	+11.9	18.95	+5.9	+6.3	33.6	+4.0	+11.7	55.7	+1.3	-2.7
Clothing, women's.....	154.0	-2.6	+9.2	103.6	+9	+10.5	18.60	+3.7	+1.2	32.8	+3.0	+4.3	54.6	+3.0	-2.5

See footnotes at end of table.

Table 3.—Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, December 1936—Continued

Manufacturing (indexes are based on 3-year average 1923-25=100)—Continued

Industry	Employment			Pay rolls			Average weekly earnings			Average hours worked per week			Average hourly earnings		
	Index De- cember 1936 (re- vised series)	Percentage change from—		Index De- cember 1936 (re- vised series)	Percentage change from—		De- cember 1936	Percentage change from—		De- cember 1936	Percentage change from—		De- cember 1936	Percentage change from—	
		No- vember 1936	De- cember 1935		No- vember 1936	De- cember 1935		No- vember 1936	De- cember 1935		No- vember 1936	De- cember 1935			
<i>Nondurable goods—Continued</i>															
Textiles and their products—Continued.															
Corsets and allied garments.....	89.3	-1.2	+3.8	88.0	-0.1	+9.6	\$16.24	+1.1	+5.6	36.2	+3.3	+10.8	<i>Cents</i> 44.1	-1.9	-5.8
Men's furnishings.....	140.6	-1.7	+18.8	115.1	-8.2	+15.0	14.94	-6.7	-3.3	38.5	-2	+1.0	34.8	-5.6	-7.0
Millinery.....	44.9	-6.0	-1.1	29.2	-6.6	-7	18.15	-6	+5						
Shirts and collars.....	122.8	-1.6	+11.1	112.1	-3.8	+13.9	13.79	-2.3	+2.3	36.8	-2.8	+3.4	37.4	+6	-2.2
Leather and its manufactures	94.0	+5.6	+3.6	78.3	+16.3	+7.4	19.40	+10.2	+3.6	39.0	+10.5	+3.8	51.6	+4	-9
Boots and shoes.....	94.1	+7.1	+5.0	71.4	+22.7	+7.8	18.23	+14.4	+2.5	38.4	+13.2	+3.4	50.0	+4	-1.9
Leather.....	98.4	+(9)	-1.3	105.0	+4.2	+6.7	23.72	+4.1	+8.2	41.3	+3.1	+5.4	57.6	+1.3	+2.6
Food and kindred products.	110.6	-3.1	+7.3	105.7	-2.4	+13.3	22.82	+7	+5.6	42.0	-5	+2.9	54.2	+1.8	+3.9
Baking.....	132.2	-6	+6.1	119.8	-5	+11.1	23.36	+2	+4.8	42.4	-8	+5.6	55.3	+1.1	+2.0
Beverages.....	181.0	-1.1	+12.0	187.6	-1.9	+14.5	30.40	-8	+2.3	38.8	-1.1	+6	78.7	+2	+9
Butter.....	81.6	-5	+4.2	62.9	-3.3	+4.9	21.49	-2.8	+5						
Canning and preserving.....	96.8	-14.4	+4.9	90.8	-7.5	+14.3	15.25	+8.0	+9.0	36.7	+2.9	+3.5	42.4	+4.7	+6.5
Confectionery.....	90.6	-1.3	+3.0	86.3	+2.1	+4.3	17.30	+3.5	+1.3	42.4	+1.9	+2.4	40.7	+7	-2.3
Flour.....	74.3	-5	-7	69.7	-1.1	+5.5	23.67	-6	+6.3	43.9	-1.2	+8.4	53.5	+7	-1.8
Ice cream.....	61.2	-1.6	+4.8	55.1	-2.1	+6.6	27.45	-5	+1.7	46.7	-1.4	+1	57.8	+9	-2
Slaughtering and meat packing.....	99.4	+2.5	+15.8	101.5	+1.7	+25.6	25.54	-9	+8.5	44.1	+(9)	+5.0	58.1	-5	+3.8
Sugar, beet.....	172.5	-36.9	+6.0	151.8	-43.5	+7.6	20.15	-10.4	+1.5	44.9	-15.3	-1.1	45.1	+4.6	+2
Sugar refining, cane.....	69.0	+1.4	-10.2	59.3	+1.2	-9.4	23.08	-2	+9	41.1	-6	+6	54.3	+2.0	-2.3
Tobacco manufactures.	63.3	-3.9	+2.8	55.4	+1.1	+7.6	16.10	+5.2	+4.7	37.5	+2.0	+1.4	42.6	+3.4	+2.8
Chewing and smoking tobacco and snuff.....	56.4	-1.2	-1.2	64.8	+4.2	+8.8	17.28	+5.6	+10.3	37.7	+4.9	+4.7	46.0	+5	+5.4
Cigars and cigarettes.....	64.1	-4.3	+3.2	54.3	+7	+7.5	15.86	+5.2	+4.3	37.5	+1.7	+9	42.3	+3.8	+2.4
Paper and printing.	106.0	+1.0	+5.7	102.6	+4.1	+13.2	28.03	+3.1	+7.2	41.7	+2.0	+5.8	70.5	+1.0	+6
Boxes, paper.....	106.3	+2	+9.2	108.3	-4	+14.9	20.63	-6	+5.2	44.0	-1.3	+6.2	47.4	+9	-7
Paper and pulp.....	112.8	+8	+3.9	108.6	+3.9	+15.9	24.25	+3.1	+11.6	44.1	+1.3	+7.8	55.0	+1.9	+3.3
Printing and publishing:															
Book and job.....	97.4	+1.9	+8.0	93.2	+6.4	+13.2	30.32	+4.4	+4.7	41.4	+4.5	+5.4	74.2	-1	-6
Newspapers and periodicals.....	106.0	+7	+3.4	105.4	+3.5	+10.7	37.33	+2.8	+7.1	38.3	+2.0	+3.8	94.9	+1.3	+1.3

Chemicals and allied products, and petroleum refining

Chemicals and allied products, and petroleum refining	119.3	- .3	+5.4	118.3	+3.1	+14.5	25.76	+3.5	+8.7	40.0	+ .6	+2.6	65.6	+3.0	+6.5
Other than petroleum refining	119.3	- .1	+6.2	118.0	+4.1	+16.7	23.73	+4.2	+9.9	41.2	+ .8	+3.3	58.7	+3.6	+7.3
Chemicals	129.1	- .7	+11.7	132.5	+3.9	+24.7	28.48	+4.6	+11.8	41.3	- .6	+3.3	68.8	+5.1	+7.9
Cottonseed—oil, cake, and meal	98.0	-5.4	-1.8	82.1	-1.2	+3.5	11.63	+4.3	+5.2	54.3	+2.0	+7.1	21.5	+2.6	-1.3
Druggists' preparations	106.6	+ .7	+3.7	112.5	- .2	+8.7	22.93	- .8	+4.9	40.1	- .7	+4.1	54.1	+ (2)	- .4
Explosives	93.2	-2.3	+14.9	98.0	- .4	+34.8	28.96	+2.0	+17.4	39.9	-3.3	+9.4	72.6	+5.5	+7.4
Fertilizers	80.4	+15.2	-9.6	71.6	+13.4	+16.5	14.53	-1.5	+6.1	39.2	- .1	+8.4	37.0	-1.5	-1.2
Paints and varnishes	127.5	+1.8	-5.6	121.6	+4.1	+14.5	26.24	+2.3	+8.4	42.3	+ .5	+4.3	62.3	+1.8	+3.8
Rayon and allied products	362.4	- .4	+3.0	321.3	+7.7	+13.6	21.90	+8.2	+10.1	38.4	+4.0	- .4	57.0	+4.1	+10.7
Soap	98.8	-3.5	+3.4	104.3	+2.6	+12.3	25.86	+6.4	+8.9	40.1	+ .8	+2.5	64.7	+5.7	+6.3
Petroleum refining	119.5	-1.3	+2.4	119.5	+ .3	+8.0	30.95	+1.6	+5.4	36.5	+1.1	- .1	85.7	+2.1	+5.8
Rubber products	101.9	+1.9	+17.9	104.8	+3.6	+28.0	27.67	+1.6	+8.4	39.1	+1.2	+4.1	72.5	+1.1	+4.6
Rubber boots and shoes	82.5	+3.3	+14.5	76.9	+11.1	+27.7	23.19	+7.6	+11.4	41.7	+2.2	+3.9	55.6	+5.4	+6.0
Rubber goods, other than boots, shoes, tires, and inner tubes	137.8	+1.6	+13.2	139.2	+6.7	+28.2	23.41	+5.0	+13.1	42.9	+3.5	+10.6	55.3	+1.7	+3.1
Rubber tires and inner tubes	92.5	+1.7	+22.3	99.7	+ .8	+28.0	31.56	- .9	+4.5	35.8	- .9	- .1	88.7	+1.1	+3.9

Nonmanufacturing (indexes are based on 12-month average 1929=100)

Coal mining:															
Anthracite	54.8	+6.5	-4.4	55.4	+37.7	+ (3)	\$29.41	+29.3	+4.6	34.7	+26.0	+3.7	84.0	+1.3	+1.1
Bituminous	83.9	+1.8	+6.1	85.0	+5.4	+22.4	25.74	+3.5	+15.4	32.7	+3.0	+14.5	79.5	+ .5	- .3
Metalliferous mining	64.4	+2.4	+20.3	57.7	+5.7	+33.6	28.52	+3.2	+11.0	44.5	+ .8	+4.0	64.3	+2.6	+8.0
Quarrying and nonmetallic mining	49.4	-6.1	+14.6	39.4	-9.4	+32.6	20.14	-3.5	+15.7	41.2	-4.7	+14.6	49.3	+2.2	+1.6
Crude-petroleum producing	72.4	-1.1	+ .7	61.3	+1.9	+2.3	31.31	+3.1	+1.6	40.3	+2.2	+3.1	76.8	+ .5	-2.5
Public utilities:															
Telephone and telegraph	73.6	- .1	+5.9	82.4	+ .9	+8.9	29.86	+1.0	+3.0	38.6	- .1	+ .5	80.4	+1.1	+2.8
Electric light and power and manufactured gas	93.2	- .3	+7.4	93.8	+2.2	+9.1	32.45	+2.5	+1.5	40.7	+2.7	+1.6	80.2	- (2)	+ .9
Electric-railroad and motorbus operation and maintenance	72.5	- .7	+2.8	69.3	- .5	+4.9	30.87	+ .2	+1.9	46.9	+ (3)	- .8	64.8	+ .8	+3.3
Trade:															
Wholesale	91.0	+1.5	+4.9	72.8	- .4	+6.0	28.37	-1.8	+1.1	43.0	- .5	+ .2	65.2	-1.6	+ .7
Retail	100.0	+11.0	+7.6	76.0	+8.3	+9.7	20.45	-2.4	+1.7	44.5	+ .7	+1.7	50.5	-3.2	+ .7
General merchandising	145.5	+33.2	+10.6	116.8	+27.7	+11.8	17.50	-4.1	+1.1	43.8	+4.5	+4.0	41.7	-7.6	- .9
Other than general merchandising	88.1	+3.6	+6.5	67.5	+2.7	+8.8	23.56	- .8	+2.2	44.9	- .3	+ .9	54.3	- .5	+1.4
Hotels (year-round) ¹	84.0	- .7	+3.9	69.8	+ .3	+8.8	13.92	+1.0	+4.7	48.2	+ .9	+1.5	28.9	- .1	+2.8
Laundries	87.6	+ .7	+8.0	76.1	+2.2	+12.9	16.28	+1.5	+4.4	43.0	+1.7	+3.5	37.4	- .5	+1.9
Dyeing and cleaning	77.7	-4.5	+5.8	57.3	-4.8	+8.3	18.17	- .3	+2.4	41.9	- .7	+1.3	44.0	+ (2)	+ (2)
Brokerage	(3)	+ .8	+11.1	(9)	+1.6	+16.5	37.80	+ .8	+4.9	(9)	(9)	(9)	(9)	(9)	(9)
Insurance	(3)	+1.1	+1.1	(9)	+ .2	+3.9	38.25	+ .2	+2.7	(9)	(9)	(9)	(9)	(9)	(9)
Building construction	(3)	-7.9	+30.7	(9)	-9.1	+52.6	28.69	-1.2	+16.9	33.1	-2.2	+8.6	86.0	+1.0	+7.7

¹ Average weekly earnings are computed from figures furnished by all reporting establishments. Average hours and average hourly earnings are computed from data supplied by a smaller number of establishments as all reporting firms do not furnish man-hours. Percentage changes over year are computed from indexes. Percentage changes over month in average weekly earnings for the manufacturing groups, for all manufacturing industries combined, and for retail trade are also computed from indexes.

² Comparable indexes for earlier years are available in mimeographed form and will be furnished by the Bureau of Labor Statistics on request.

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

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

⁵ Not available.

Indexes of Employment and Pay Rolls

General indexes of factory employment and pay rolls, adjusted to the 1933 Census of Manufactures, are given in table 4 for the months January 1919 to December 1936. The accompanying chart indicates the trend of factory employment and pay rolls as shown by the adjusted indexes. Indexes for 13 nonmanufacturing industries including 2 subgroups under retail trade, by months, January 1935 to December 1936, inclusive, are presented in table 5.

The indexes of factory employment and pay rolls are computed from returns supplied by representative establishments in 89 manufacturing industries and cover only wage earners. The base used in computing these indexes is the 3-year average 1923-25 as 100. In December 1936 reports were received from 25,086 manufacturing establishments employing 4,716,875 workers whose weekly earnings were \$117,943,756. The employment reports received from these establishments cover more than 55 percent of the total wage earners in all manufacturing industries of the country and more than 65 percent of the wage earners in the 89 industries included in the monthly survey of the Bureau of Labor Statistics.

The indexes for nonmanufacturing industries are also computed from data supplied by reporting establishments, but the base is the 12-month average for 1929 as 100. Figures for mining, laundries, dyeing and cleaning, and building construction cover wage earners only, but the figures for public utilities, trade, hotels, brokerage, and insurance relate to all employees, including executives. For crude-petroleum producing they cover wage earners and clerical field force.

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

Table 4.—General Indexes of Factory Employment and Pay Rolls, by Months, January 1919 to December 1936, adjusted to 1933 Census of Manufactures ¹

[1923-25=100]

Month and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
<i>Employment</i>													
1919.....	104.8	101.6	101.9	102.0	102.6	103.8	106.5	109.1	111.2	110.8	112.0	113.8	106.7
1920.....	114.3	113.3	115.5	114.0	111.5	110.6	108.1	108.4	107.1	103.4	97.2	89.6	107.8
1921.....	80.9	82.4	83.0	82.0	81.8	80.9	79.7	81.3	83.3	84.1	84.2	83.2	82.2
1922.....	82.5	84.5	85.7	85.5	87.8	89.5	87.8	91.0	94.0	96.7	98.4	99.7	90.3
1923.....	100.8	102.6	104.7	105.2	105.3	106.0	104.9	105.2	105.6	104.4	103.1	101.3	104.1
1924.....	100.1	101.5	101.7	100.0	96.7	93.8	90.8	92.1	94.3	95.1	94.7	96.1	96.4
1925.....	96.5	98.2	99.1	98.9	98.2	98.1	98.0	99.7	101.6	102.2	101.9	101.6	99.5
1926.....	100.7	101.7	102.2	101.5	100.4	100.4	99.4	101.4	103.5	103.1	101.3	100.0	101.3
1927.....	98.2	99.7	100.3	99.6	99.0	99.1	98.0	99.3	100.4	99.5	97.3	96.0	98.9
1928.....	94.8	96.4	97.4	97.0	97.0	97.6	97.5	100.1	102.1	102.4	101.5	101.0	98.7
1929.....	100.6	102.9	104.1	105.3	105.2	105.4	105.9	107.7	108.7	107.5	103.3	99.6	104.7
1930.....	97.1	97.1	96.7	96.1	94.5	92.6	89.3	88.6	89.5	87.6	84.4	82.1	91.3
1931.....	79.5	80.1	80.5	80.4	79.8	78.0	76.9	77.0	77.3	74.6	72.0	71.2	77.3
1932.....	69.1	70.3	69.3	67.1	64.6	62.5	60.4	61.8	65.1	66.3	65.5	64.3	65.5
1933.....	62.6	63.7	61.5	62.9	65.8	70.2	74.9	79.6	83.2	82.8	79.5	77.6	72.0
1934.....	76.5	81.1	84.4	86.0	86.2	84.9	82.5	83.6	80.1	82.2	80.4	81.5	82.5
1935.....	82.2	85.1	86.2	86.3	84.8	83.2	83.5	86.3	88.1	89.4	88.8	88.3	86.0
1936.....	86.8	86.9	87.9	89.1	89.8	90.1	91.2	93.5	95.5	96.7	96.9	98.1	91.9

Pay rolls

Month and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
1919.....	96.2	90.4	91.0	90.0	90.9	92.9	95.6	100.9	105.7	103.2	107.7	115.0	98.3
1920.....	118.3	116.7	124.8	122.0	123.5	125.3	120.4	122.7	120.9	116.9	108.1	99.0	118.2
1921.....	83.7	82.1	82.4	79.7	78.1	76.2	72.4	74.6	74.2	73.4	72.5	74.0	76.9
1922.....	70.3	73.1	75.3	74.2	77.6	80.9	78.6	83.2	87.1	89.6	93.4	95.7	81.6
1923.....	94.8	98.1	102.8	104.1	107.5	107.7	103.4	103.8	104.2	106.5	104.4	102.8	103.3
1924.....	98.7	104.1	104.1	101.9	97.5	92.2	85.4	89.2	92.3	94.9	93.4	97.7	96.0
1925.....	95.7	100.9	102.6	100.1	100.8	98.8	96.9	99.5	98.8	104.7	104.7	105.1	100.7
1926.....	100.9	105.1	106.6	104.3	103.0	103.2	98.9	103.3	104.3	107.4	104.0	103.3	103.7
1927.....	98.2	104.3	105.7	104.3	104.1	102.4	98.4	101.7	101.2	102.0	98.4	99.4	101.7
1928.....	95.9	101.1	102.6	100.5	101.3	101.7	99.1	103.2	104.6	108.2	105.0	105.7	102.4
1929.....	102.4	109.3	111.6	112.7	112.9	111.2	107.1	112.0	112.8	112.3	104.1	100.5	109.1
1930.....	95.6	98.6	98.6	97.5	95.1	92.0	84.1	83.1	83.8	82.0	76.6	75.0	88.5
1931.....	69.9	74.1	75.4	74.2	73.1	69.5	66.1	65.8	63.3	61.4	58.1	57.5	67.4
1932.....	53.6	54.8	53.1	49.4	46.8	43.5	40.2	41.0	43.5	45.3	43.5	42.3	46.4
1933.....	40.1	41.0	37.9	39.8	43.7	48.1	51.7	57.7	60.6	60.4	56.4	55.5	49.4
1934.....	54.6	61.3	65.6	68.1	68.1	66.0	61.4	63.2	59.1	62.2	60.7	64.2	62.9
1935.....	65.0	70.0	71.7	71.7	69.4	67.4	66.5	71.0	73.7	76.4	75.6	77.6	71.3
1936.....	73.8	73.7	77.6	79.3	80.8	81.1	80.2	83.5	83.6	89.0	90.7	95.1	82.4

¹ Comparable revised indexes for each of 89 manufacturing industries, for the durable- and nondurable-groups, for 14 divisions under these groups, and for 2 subgroups under textiles are available in mimeographed form and will be supplied on request.

² The December 1936 employment index without the adjustment would be 93.8 and the corresponding pay-roll index 92.7.

EMPLOYMENT & PAY ROLLS ALL MANUFACTURING INDUSTRIES 1923=100

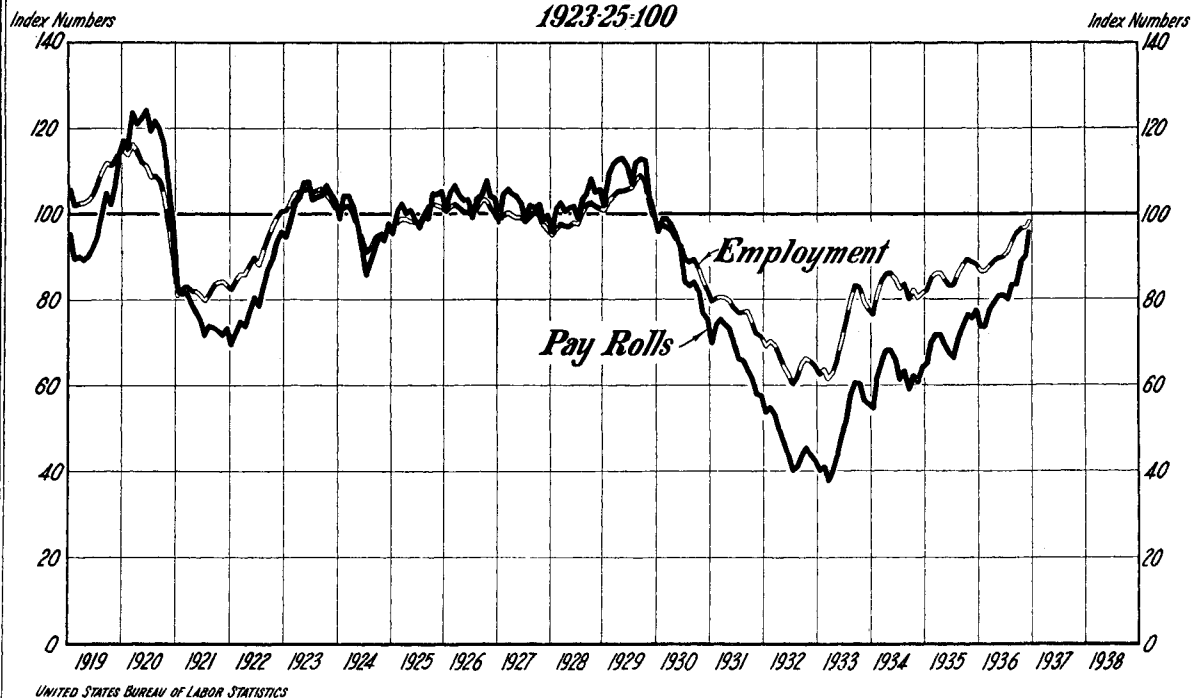


Table 5.—Indexes of Employment and Pay Rolls in Selected Nonmanufacturing Industries, January 1935 to December 1936 ¹

[12-month average 1929=100]

Month	Anthracite mining				Bituminous-coal mining				Metalliferous mining				Quarrying and non-metallic mining			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936
January.....	62.9	59.1	57.5	54.4	80.0	79.8	59.6	70.6	44.3	54.2	30.1	41.7	36.9	39.4	20.8	25.5
February.....	64.4	61.2	64.3	76.7	81.1	80.2	66.1	78.4	44.3	55.5	29.9	42.8	37.3	36.9	22.2	23.9
March.....	51.4	52.5	38.9	42.6	81.6	80.4	67.5	70.2	45.0	55.9	30.9	45.1	40.5	42.2	24.9	30.9
April.....	52.6	49.8	49.9	28.6	74.3	77.5	45.0	62.6	46.0	57.5	31.8	45.5	45.3	48.4	28.9	36.1
May.....	53.5	54.9	49.5	56.3	75.3	76.2	49.1	62.2	44.4	60.8	31.4	47.7	49.5	52.0	32.8	42.1
June.....	56.8	51.2	66.0	42.0	77.9	75.7	64.7	61.5	46.0	61.9	31.5	48.2	50.4	53.5	33.8	44.0
July.....	49.4	48.4	37.5	37.2	70.0	75.5	35.9	62.6	45.2	61.3	31.1	46.1	50.9	54.4	34.4	43.9
August.....	38.7	41.1	28.3	31.4	73.4	76.9	45.8	65.4	46.3	61.6	33.4	48.2	51.0	55.3	36.3	46.2
September.....	46.0	47.6	38.2	34.9	77.1	78.2	60.1	71.0	48.9	63.1	35.4	50.0	50.0	54.9	35.4	44.8
October.....	58.8	49.9	55.9	48.5	74.3	81.1	69.8	79.2	51.6	64.2	38.7	53.7	50.0	54.6	36.5	46.2
November.....	46.6	51.5	28.4	40.3	76.1	82.3	65.5	80.7	52.6	62.9	39.6	54.6	46.7	52.6	32.1	43.5
December.....	57.3	54.8	55.4	55.4	79.1	83.9	69.5	85.0	53.5	64.4	43.2	57.7	43.1	49.4	29.7	39.4
Average..	53.2	51.8	47.5	45.7	76.7	79.0	58.2	70.8	47.3	60.3	33.9	48.4	46.0	49.5	30.7	38.9

Month	Crude-petroleum producing				Telephone and telegraph				Electric light and power and manufactured gas				Electric-railroad and motorbus operation and maintenance ²			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936
January.....	74.9	71.1	55.5	55.7	70.5	70.1	73.9	75.0	82.7	86.1	78.0	84.8	71.2	70.7	62.9	65.0
February.....	74.2	70.8	54.9	55.7	70.0	69.9	72.9	76.2	82.2	86.1	78.3	84.7	71.0	71.7	63.1	68.3
March.....	74.0	70.9	56.0	56.0	69.8	70.2	75.3	77.2	82.3	86.8	79.4	85.9	71.3	71.2	63.4	67.8
April.....	74.9	71.3	56.7	57.1	69.7	70.8	73.1	76.0	82.6	88.0	79.0	86.2	71.4	71.3	63.3	65.9
May.....	76.0	72.7	57.8	58.0	70.0	71.6	73.7	78.5	83.3	89.0	79.8	87.0	71.6	71.5	63.6	66.1
June.....	76.7	73.7	59.2	58.9	70.2	72.1	74.4	77.4	83.9	90.4	79.8	88.1	71.7	71.7	63.9	66.8
July.....	77.4	75.4	59.9	60.4	70.3	73.1	75.7	79.9	84.8	91.7	81.5	89.8	71.5	72.4	63.4	66.5
August.....	76.3	75.0	58.9	59.7	70.5	73.5	75.5	81.2	86.8	93.1	82.8	89.8	71.2	72.4	63.3	66.5
September.....	75.1	74.5	60.9	60.4	70.4	73.7	73.8	78.8	86.9	93.5	84.5	91.4	71.0	72.8	64.0	66.4
October.....	74.7	73.6	57.9	59.6	70.0	73.8	74.9	83.1	87.4	94.0	84.4	92.7	71.1	73.1	64.1	67.7
November.....	73.0	73.2	57.2	60.1	69.8	73.7	74.9	81.6	87.6	93.5	83.4	91.8	71.1	73.0	63.8	69.7
December.....	71.9	72.4	59.9	61.3	69.6	73.6	75.6	82.4	86.8	93.2	86.0	93.8	70.5	72.5	66.1	69.3
Average..	74.9	72.9	57.9	58.6	70.1	72.2	74.5	78.9	84.8	90.5	81.4	88.8	71.2	72.0	63.7	67.2

¹ Comparable indexes for earlier years for all of these industries, except year-round hotels, will be found in the November 1934 and subsequent issues of this pamphlet, or the February 1935 and subsequent issues of the Monthly Labor Review. Comparable indexes for year-round hotels will be found in the June 1935 issue of this pamphlet, or the September 1935 issue of the Monthly Labor Review.

² Not including electric-railroad car building and repairing; see transportation equipment and railroad repair-shop groups, manufacturing industries, table 3.

Table 5.—Indexes of Employment and Pay-Rolls in Selected Nonmanufacturing Industries, January 1935 to December 1936—Continued

Month	Wholesale trade				Total retail trade				Retail trade—general merchandising				Retail trade—other than general merchandising			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936
January.....	84.2	85.6	63.9	66.6	79.5	80.4	59.7	62.1	87.3	88.2	73.5	76.4	77.4	78.4	56.9	59.1
February.....	84.6	85.0	64.6	66.6	79.2	79.7	59.3	61.6	86.2	85.1	72.3	73.9	77.3	78.3	56.6	58.1
March.....	84.0	85.6	65.2	69.0	80.2	81.9	60.4	63.5	88.6	90.9	74.1	77.3	78.0	79.5	57.6	60.7
April.....	83.2	85.7	64.8	67.9	83.5	85.2	62.5	65.3	94.4	97.4	77.5	81.0	80.7	82.0	59.4	62.1
May.....	82.5	84.6	64.6	68.2	82.2	85.0	62.0	65.8	91.3	95.5	76.3	80.8	79.8	82.3	59.0	62.7
June.....	82.1	84.6	64.6	68.4	82.2	85.5	62.5	66.4	91.2	96.4	76.7	81.3	79.8	82.6	59.5	63.3
July.....	82.1	85.4	64.6	69.0	79.3	83.2	60.5	65.1	85.5	90.7	72.0	77.3	77.7	81.2	58.1	62.6
August.....	82.7	86.3	64.8	69.7	78.0	82.4	59.3	64.4	83.1	89.4	69.5	76.4	76.7	80.5	57.2	61.9
September.....	83.7	88.0	67.2	70.5	81.8	86.6	62.5	66.6	92.2	98.5	77.2	82.8	79.1	83.5	59.4	63.3
October.....	85.7	89.0	66.8	71.5	83.8	88.7	63.2	68.3	97.1	103.9	79.8	87.2	80.3	84.7	59.8	64.4
November.....	86.4	89.7	66.9	73.1	84.6	90.1	63.4	70.1	101.6	109.3	82.0	91.4	80.1	85.1	59.6	65.7
December.....	86.8	91.0	68.6	72.8	92.9	100.0	69.3	76.0	131.7	145.5	104.5	116.8	82.7	88.1	62.0	67.5
Average.....	84.0	86.7	65.6	69.4	82.3	85.7	62.1	66.3	94.2	99.2	78.0	83.6	79.1	82.2	58.8	62.7

Month	Year-round hotels				Laundries				Dyeing and cleaning			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936
January.....	80.3	81.9	62.2	64.9	79.6	81.5	63.9	68.3	70.3	71.5	50.4	51.6
February.....	81.1	82.8	63.5	66.5	79.6	81.2	64.1	67.8	69.6	70.3	49.8	49.0
March.....	80.8	82.8	63.9	66.0	79.7	82.1	64.6	69.9	72.5	74.7	53.5	56.4
April.....	81.1	83.2	63.6	66.3	80.0	83.2	65.5	70.9	79.9	81.8	61.9	64.1
May.....	81.6	84.1	63.7	67.0	81.1	85.5	66.6	75.6	80.9	87.3	61.7	72.2
June.....	81.3	83.9	63.5	66.6	82.3	87.2	68.2	75.8	83.6	87.5	65.7	69.2
July.....	80.3	83.3	62.1	66.0	84.4	90.5	70.9	79.0	81.7	85.5	61.5	64.8
August.....	80.7	83.2	62.0	66.1	84.2	89.6	69.2	76.7	79.4	83.5	58.2	63.2
September.....	81.1	84.2	63.1	67.5	83.0	89.6	67.9	76.6	82.1	86.7	63.1	66.1
October.....	81.6	85.4	64.3	69.6	81.9	87.6	67.1	75.3	80.4	86.5	61.1	66.7
November.....	81.5	84.6	64.8	69.6	81.3	87.0	66.7	74.5	76.3	81.3	55.4	60.2
December.....	80.8	84.0	64.2	69.8	81.1	87.6	67.5	76.1	73.4	77.7	52.9	57.3
Average.....	81.0	83.6	63.4	67.2	81.5	86.1	66.9	73.9	77.5	81.2	57.9	61.7

* Revised.

In table 6 are presented general indexes of factory employment and pay rolls by yearly averages, 1923 to 1936, inclusive, and by months January to December 1936, inclusive. Indexes for the same periods, where available, are also presented for each of the 89 manufacturing industries surveyed, for the durable- and nondurable-goods groups, and for the 14 smaller groups and 2 subgroups into which they are classified.

The indexes over the period 1923-33 have been adjusted to conform with the annual averages and totals shown in published reports of the Census of Manufactures. Indexes for subsequent months are subject to revision as adjustments will be made to bring them into conformity with later census data when they become available.

Table 6.—Employment and Pay-Roll Indexes, Manufacturing Industries

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

Month and year	Iron and steel and their products, not including machinery											
	General index		Durable-goods group		Nondurable-goods group		Group index		Blast furnaces, steel works, and rolling mills		Bolts, nuts, washers, and rivets	
	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls
1923.....	104.1	103.3	104.6	104.1	103.5	102.4	103.9	103.2	104.5	104.5	112.5	111.5
1924.....	96.4	96.0	96.4	95.7	96.4	96.2	97.0	96.7	97.1	96.5	89.5	89.5
1925.....	99.5	100.7	99.0	100.2	100.1	101.4	99.1	100.1	98.4	99.0	98.0	99.0
1926.....	101.3	103.7	101.7	103.8	100.9	103.6	102.5	105.0	101.0	103.0	(1)	(1)
1927.....	98.9	101.7	95.6	97.9	102.4	106.4	97.2	98.6	95.7	96.7	96.0	95.6
1928.....	98.7	102.4	96.1	100.4	101.6	104.9	96.6	100.4	96.2	100.6	(1)	(1)
1929.....	104.7	109.1	103.7	108.8	105.8	109.4	102.6	107.8	103.2	109.6	114.0	122.0
1930.....	91.3	88.5	86.1	83.0	96.9	95.5	89.2	85.7	90.3	87.7	(1)	(1)
1931.....	77.3	67.4	67.3	56.3	87.9	81.5	69.7	55.0	68.4	53.6	74.2	56.2
1932.....	65.5	46.4	52.8	34.4	79.2	61.7	56.5	30.4	57.8	27.4	55.2	32.5
1933.....	72.0	49.4	56.7	37.2	88.4	64.9	64.6	39.0	71.0	40.5	59.8	39.5
1934.....	82.5	62.9	69.7	51.7	96.1	77.1	76.2	52.3	83.6	55.4	66.4	51.4
1935.....	86.0	71.3	75.5	62.6	97.3	82.5	81.1	64.4	88.4	69.8	67.6	61.4
1936.....	91.9	82.4	84.7	78.0	99.5	87.9	92.3	84.1	100.9	93.6	75.6	78.5
1936												
January.....	86.8	73.8	78.7	66.9	95.4	82.5	84.4	69.6	92.4	76.6	72.1	71.3
February.....	86.9	73.7	78.6	66.6	95.8	82.7	84.4	70.3	91.8	76.8	71.1	68.0
March.....	87.9	77.6	80.2	71.8	96.1	84.9	85.6	75.4	92.8	83.1	70.5	69.1
April.....	89.1	79.3	82.3	76.0	96.3	83.5	87.8	79.7	95.5	89.1	73.6	78.2
May.....	89.8	80.8	84.0	78.5	96.0	83.8	90.1	83.0	98.5	92.9	74.1	77.5
June.....	90.1	81.1	84.7	79.0	95.9	83.9	91.4	84.6	99.7	94.5	74.5	74.7
July.....	91.2	80.2	84.6	75.9	98.2	85.6	93.0	81.8	102.8	92.5	75.5	74.3
August.....	93.5	83.5	84.7	77.0	102.8	91.8	95.3	86.8	105.7	98.1	76.1	77.8
September.....	95.5	83.6	85.7	77.2	105.9	91.6	97.2	87.1	107.2	97.7	76.7	77.4
October.....	96.7	89.0	89.2	85.3	104.7	93.7	98.9	93.2	107.9	101.8	78.5	86.6
November.....	96.9	90.7	91.0	88.9	103.3	92.9	99.3	95.8	107.7	105.0	80.6	88.6
December.....	98.1	95.1	92.7	93.1	104.0	97.6	100.4	102.0	109.3	115.4	83.8	98.4

Month and year	Iron and steel and their products, not including machinery—Continued											
	Cast-iron pipe		Cutlery (except silver and plated cutlery) and edge tools		Forgings—iron and steel		Hardware		Plumbers' supplies		Steam and hot-water heating apparatus and steam fittings	
	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls
1923.....	96.0	94.6	99.6	97.9	116.5	113.9	101.6	100.1	89.9	89.5	102.2	101.7
1924.....	101.6	101.7	102.4	101.8	97.4	97.4	96.6	96.3	100.1	100.0	97.7	98.0
1925.....	102.4	103.7	98.0	100.3	86.1	88.7	101.8	103.6	110.0	110.5	100.1	100.3
1926.....	110.1	110.5	(1)	(1)	(1)	(1)	100.8	106.3	(1)	(1)	102.6	105.5
1927.....	101.8	98.2	94.6	93.7	65.5	66.7	93.0	96.1	96.7	94.6	99.3	101.6
1928.....	92.4	85.3	(1)	(1)	(1)	(1)	92.8	96.0	(1)	(1)	92.4	94.4
1929.....	87.8	85.2	89.5	87.5	87.8	97.8	101.7	106.9	92.5	87.2	91.6	92.4
1930.....	80.4	75.3	(1)	(1)	(1)	(1)	88.6	81.6	(1)	(1)	78.3	69.0
1931.....	71.5	55.1	74.2	60.4	41.9	32.5	70.3	58.9	65.1	48.0	67.1	46.3
1932.....	46.3	25.1	67.4	47.2	32.1	17.9	58.9	38.4	48.3	27.3	47.4	26.8
1933.....	42.1	22.1	64.5	43.8	33.4	20.9	63.4	42.6	52.6	30.3	51.6	30.6
1934.....	54.5	30.5	77.0	56.5	46.4	34.7	77.8	59.6	52.2	31.6	49.6	34.3
1935.....	53.6	31.1	77.3	62.1	51.9	42.0	75.8	68.6	75.4	51.1	54.8	41.4
1936.....	63.1	44.3	79.3	69.9	59.5	50.5	80.4	79.8	85.0	61.3	66.5	55.8
1936												
January.....	56.8	35.9	78.9	66.2	57.2	45.9	81.2	77.1	82.4	53.8	57.5	44.8
February.....	57.8	37.4	79.4	66.5	56.3	46.4	79.6	72.8	83.9	59.0	60.0	47.3
March.....	58.9	38.1	78.5	64.7	56.6	48.3	77.8	74.0	84.7	61.8	60.8	48.9
April.....	60.5	40.6	77.3	66.0	56.9	48.6	78.1	76.8	84.0	58.2	62.7	50.2
May.....	62.0	44.5	75.9	63.7	58.3	49.4	77.5	78.7	84.8	62.7	64.5	53.2
June.....	64.2	45.9	76.2	67.0	58.6	48.2	77.2	77.8	85.3	63.2	65.2	55.2
July.....	65.6	46.2	73.4	61.2	58.5	45.7	77.1	74.7	85.4	56.1	65.8	53.5
August.....	66.4	47.8	76.4	68.2	58.5	48.0	69.1	64.8	86.2	62.0	68.9	59.6
September.....	65.9	44.8	79.4	69.6	59.2	47.3	74.6	71.4	83.9	59.6	72.1	58.4
October.....	66.3	49.6	83.0	78.3	60.7	51.8	84.8	92.9	85.6	66.0	73.0	65.5
November.....	65.6	47.8	85.8	82.5	64.4	58.3	91.6	106.2	85.8	63.3	73.7	65.9
December.....	66.9	52.5	87.1	85.4	68.2	67.5	95.7	93.5	87.4	69.6	73.2	67.4

1 Data not available.

Table 6.—Employment and Pay-Roll Indexes, Manufacturing Industries—Con.

Month and year	Iron and steel and their products, not including machinery—Continued									
	Stoves		Structural and ornamental metalwork		Tin cans and other tinware		Tools, not including edge tools, machine tools, files, and saws		Wirework	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923.....	106.0	103.5	104.4	104.0	101.0	97.7	105.7	103.1	93.1	89.6
1924.....	95.0	96.0	97.7	96.6	100.0	100.0	102.2	101.8	100.0	100.0
1925.....	99.0	100.5	97.9	99.4	99.0	102.3	92.1	95.1	106.9	110.4
1926.....	104.2	105.8	107.5	109.9	(1)	(1)	(1)	(1)	(1)	(1)
1927.....	96.2	97.5	106.1	108.8	98.4	104.2	91.7	95.6	120.4	122.5
1928.....	94.0	93.5	106.5	111.0	(1)	(1)	(1)	(1)	(1)	(1)
1929.....	99.3	98.8	111.2	112.8	104.3	113.6	107.6	117.8	124.2	129.3
1930.....	83.1	74.3	98.9	94.2	(1)	(1)	(1)	(1)	(1)	(1)
1931.....	69.4	53.4	76.0	61.5	83.7	83.3	60.4	51.1	95.6	80.6
1932.....	55.0	33.4	49.7	29.9	73.3	65.8	48.8	33.2	87.6	56.8
1933.....	64.3	40.8	43.3	23.9	77.3	67.6	53.5	37.2	97.9	65.6
1934.....	82.0	56.0	53.6	36.0	89.2	81.1	64.7	52.9	118.4	89.4
1935.....	92.7	70.9	53.4	39.0	92.5	87.9	70.6	65.4	127.1	105.8
1936.....	102.5	85.8	66.6	57.5	98.3	95.6	83.4	83.9	154.0	136.7
1936										
January.....	82.5	60.2	54.1	42.0	90.0	87.4	79.2	77.8	149.4	121.9
February.....	90.0	73.4	54.4	41.6	89.8	82.7	78.1	77.0	142.3	116.1
March.....	94.1	78.6	57.4	46.3	92.3	90.8	79.4	78.8	145.5	131.1
April.....	98.6	79.7	60.8	50.7	94.1	90.6	78.6	79.1	147.7	137.3
May.....	99.9	81.5	65.1	56.3	96.9	94.8	78.4	78.3	151.0	139.7
June.....	104.2	87.0	68.4	60.4	100.9	98.1	79.8	79.9	147.6	134.2
July.....	100.5	76.6	71.0	61.3	102.4	98.4	80.5	76.0	145.7	121.7
August.....	108.2	90.0	74.8	65.5	109.1	108.8	82.6	81.5	143.2	116.5
September.....	112.2	94.5	75.3	66.0	111.6	112.5	85.1	82.1	149.3	114.7
October.....	117.0	108.8	74.9	68.5	102.7	97.2	89.7	94.1	164.0	151.5
November.....	114.6	102.9	73.2	65.5	95.8	92.2	93.5	97.6	174.6	173.0
December.....	107.7	96.0	70.1	65.7	94.4	93.5	96.2	104.5	187.6	182.5
Machinery, not including transportation equipment										
Month and year	Group index		Agricultural implements		Cash registers, adding machines, and calculating machines		Electrical machinery, apparatus, and supplies		Engines, turbines, tractors, and water wheels	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923.....	105.8	104.1	110.0	109.9	107.4	105.1	103.0	100.0	99.1	99.5
1924.....	94.9	94.9	88.1	88.7	97.2	97.3	97.9	99.2	96.0	96.7
1925.....	99.3	101.0	101.9	101.4	95.4	97.6	99.1	100.7	104.9	103.8
1926.....	107.4	111.1	115.3	119.1	(1)	(1)	(1)	(1)	115.4	119.2
1927.....	102.4	106.2	118.5	125.9	103.1	100.4	(1)	(1)	111.3	119.3
1928.....	104.9	111.3	137.9	152.4	(1)	(1)	(1)	(1)	113.2	125.5
1929.....	125.9	134.3	147.9	160.0	120.8	137.3	127.3	134.4	125.3	138.9
1930.....	104.9	102.7	110.7	106.9	(1)	(1)	107.1	109.3	106.1	107.2
1931.....	78.3	64.2	62.3	51.9	87.3	69.1	80.9	68.7	68.1	54.0
1932.....	57.0	37.3	36.8	26.9	74.9	52.5	60.6	39.7	43.5	27.4
1933.....	60.8	40.5	39.6	26.7	78.2	60.1	58.8	38.9	47.0	32.5
1934.....	80.0	60.4	68.8	62.8	100.5	83.6	72.5	54.4	72.4	54.5
1935.....	89.7	74.4	100.2	103.0	103.0	90.6	80.6	67.2	101.2	84.3
1936.....	103.7	94.8	113.1	121.2	115.0	108.4	91.4	83.1	119.4	104.6
1936										
January.....	95.3	82.5	124.6	136.0	112.1	105.3	81.8	69.9	111.9	96.7
February.....	95.5	83.5	126.4	138.5	113.9	106.0	81.1	69.6	116.7	100.8
March.....	96.9	86.8	128.8	143.9	115.6	106.4	82.1	72.7	121.0	106.8
April.....	99.6	91.2	131.1	145.9	117.6	110.6	85.5	78.3	126.0	110.3
May.....	102.4	94.7	129.1	142.4	119.4	113.5	87.5	81.1	126.7	111.5
June.....	103.6	95.8	123.6	131.4	111.6	107.4	89.7	83.3	126.9	112.1
July.....	104.0	92.8	110.1	108.3	114.2	106.3	91.8	82.9	120.0	102.5
August.....	104.4	93.9	95.7	91.5	100.3	89.8	92.4	82.6	114.7	98.7
September.....	107.5	94.7	93.9	87.1	116.3	104.6	96.5	84.3	113.5	92.1
October.....	109.6	102.7	97.5	105.9	118.8	116.5	99.6	92.7	113.1	99.9
November.....	111.4	105.6	93.2	102.0	119.5	111.6	103.0	96.8	118.2	106.0
December.....	114.1	113.6	102.9	121.5	120.7	122.9	105.8	103.1	123.5	117.6

1 Data not available.

Table 6.—Employment and Pay-Roll Indexes, Manufacturing Industries—Con.

Month and year	Machinery, not including transportation equipment—Continued									
	Foundry and machine-shop products		Machine tools		Radios and phonographs		Textile machinery and parts		Typewriters and parts	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923.....	108.4	106.7	108.1	105.3	89.5	88.1	116.4	117.5	100.0	98.4
1924.....	93.9	93.6	92.0	90.8	105.9	107.5	92.7	86.8	100.0	100.0
1925.....	97.7	99.7	99.9	103.9	104.6	104.4	90.9	95.7	100.0	101.6
1926.....	103.3	107.4	119.3	125.3	(1)	(1)	90.1	95.7	(1)	(1)
1927.....	97.7	99.9	114.3	116.3	(1)	(1)	85.3	93.2	111.5	113.0
1928.....	98.8	102.6	127.9	139.8			78.5	84.2	(1)	(1)
1929.....	111.3	117.9	167.2	187.6	204.5	202.9	88.1	96.7	121.1	130.1
1930.....	94.2	89.0	126.0	121.9	141.0	139.8	71.2	66.0	(1)	(1)
1931.....	69.7	55.4	74.7	61.5	124.4	96.5	61.3	54.3	77.8	60.0
1932.....	51.1	31.9	42.1	28.6	80.4	60.5	48.4	35.1	61.6	35.8
1933.....	54.6	34.9	44.9	30.9	112.1	81.4	60.5	47.9	68.5	44.1
1934.....	70.4	52.3	73.0	56.1	167.6	114.0	68.5	55.3	101.1	83.2
1935.....	76.9	62.7	93.2	80.1	173.6	124.4	64.0	53.8	107.0	87.5
1936.....	90.4	83.1	117.6	111.0	189.9	143.5	71.6	65.6	116.2	104.3
<i>1936</i>										
January.....	81.8	70.2	108.2	99.6	176.1	120.6	69.0	63.2	111.6	90.2
February.....	82.8	71.9	109.5	101.3	162.0	109.0	70.1	64.4	110.7	92.5
March.....	84.4	75.4	110.5	102.4	153.8	104.9	70.5	65.6	112.2	93.5
April.....	86.7	79.4	112.0	102.5	155.8	112.8	70.2	63.5	113.3	97.9
May.....	89.1	82.5	113.9	106.9	178.0	135.6	69.9	64.6	114.2	99.7
June.....	90.0	83.7	116.1	109.6	200.4	154.9	70.3	62.4	84.3	72.5
July.....	91.2	81.4	118.4	108.4	193.5	143.3	70.6	62.6	99.3	90.4
August.....	92.5	83.9	114.2	108.1	210.7	164.7	71.4	64.8	111.5	102.1
September.....	94.3	85.0	124.1	111.2	216.3	160.9	72.8	63.3	121.2	112.4
October.....	95.6	90.2	126.1	122.4	218.3	177.9	73.3	66.3	133.1	128.9
November.....	97.0	93.3	127.8	124.4	210.6	169.4	74.0	67.4	139.0	134.4
December.....	99.4	100.2	130.7	135.5	202.7	167.5	76.9	78.8	143.6	137.6
<i>1936</i>										
January.....	107.6	107.7	103.6	103.4	100.6	100.6	126.9	128.7	157.7	168.1
1924.....	93.1	90.8	100.0	100.0	93.6	90.6	93.8	94.3	76.4	72.9
1925.....	99.3	101.5	96.4	96.6	105.8	108.8	79.3	77.0	65.9	59.0
1926.....	99.1	99.5	(1)	(1)	104.8	104.8	75.0	70.9	86.2	80.6
1927.....	87.9	89.8	157.9	156.8	91.9	93.3	59.9	60.4	66.7	57.2
1928.....	96.2	101.6	(1)	(1)	108.1	113.9	48.4	48.2	45.4	39.6
1929.....	103.5	105.4	525.2	501.5	111.3	111.6	63.1	63.1	56.8	58.3
1930.....	80.2	70.2	(1)	(1)	80.3	65.7	54.7	53.2	52.3	51.5
1931.....	66.3	52.3	353.1	354.8	71.0	53.4	29.6	25.4	28.0	18.1
1932.....	55.5	37.8	244.2	234.3	60.5	38.8	24.9	20.5	17.7	9.0
1933.....	54.5	35.6	279.6	236.2	60.6	38.3	22.5	14.6	12.2	6.0
1934.....	53.5	61.8	338.0	265.0	94.5	68.2	39.1	31.3	25.7	14.0
1935.....	95.7	79.2	363.5	301.0	110.4	89.5	39.3	34.1	23.9	13.2
1936.....	103.4	94.2	578.6	482.4	114.1	102.0	53.8	51.3	33.7	21.9
<i>1936</i>										
January.....	102.6	85.7	440.0	370.9	117.9	95.7	41.0	36.8	22.2	11.5
February.....	99.8	77.1	474.7	388.3	113.6	83.9	43.9	39.7	24.0	13.7
March.....	100.9	87.0	513.6	420.1	112.6	94.4	49.7	46.0	26.6	15.7
April.....	104.9	99.9	544.0	441.8	115.6	109.1	55.0	52.4	29.0	18.0
May.....	106.3	101.6	582.1	491.3	117.2	111.1	55.2	51.6	32.6	20.7
June.....	105.3	98.7	592.7	508.7	115.8	107.1	57.1	54.0	35.2	22.4
July.....	101.9	92.6	620.7	496.0	111.1	99.5	54.2	50.5	37.2	24.3
August.....	93.0	81.0	612.7	479.5	98.3	83.4	59.0	55.3	36.1	24.6
September.....	87.3	76.3	606.2	491.5	90.3	77.3	57.3	52.6	37.6	25.8
October.....	102.1	95.8	619.0	527.7	110.0	101.5	58.7	59.7	39.5	27.0
November.....	115.0	113.4	646.4	552.9	128.3	125.8	57.5	57.6	40.5	28.2
December.....	122.1	120.9	690.9	619.9	138.7	135.7	56.8	59.9	43.8	31.4

1 Data not available.

Table 6.—Employment and Pay-Roll Indexes, Manufacturing Industries—Con.

Month and year	Railroad repair shops						Nonferrous metals and their products					
	Group index		Electric rail-road		Steam rail-road		Group index		Aluminum manu-factures		Brass, bronze, and copper products	
	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls
1923.....	108.6	109.6	104.0	101.5	108.9	110.2	105.4	103.7	106.3	100.2	103.4	101.3
1924.....	96.4	95.6	99.1	98.8	96.3	95.5	96.7	95.9	100.0	100.0	96.6	95.6
1925.....	95.0	94.8	96.9	99.7	94.8	94.3	97.9	100.4	93.7	99.8	100.0	103.1
1926.....	95.5	96.1	96.5	100.4	95.4	95.7	(1)	(1)	(1)	(1)	102.7	107.4
1927.....	89.0	92.0	94.1	99.8	88.6	91.4	96.5	100.5	96.6	105.5	101.2	104.7
1928.....	83.8	87.2	89.6	97.9	83.3	86.3	(1)	(1)	(1)	(1)	107.3	115.6
1929.....	82.6	90.4	87.8	97.2	82.2	89.8	111.4	116.4	138.4	150.0	121.5	128.3
1930.....	73.4	76.1	85.8	93.0	72.4	74.8	(1)	(1)	(1)	(1)	96.6	88.7
1931.....	64.1	61.7	79.3	80.2	62.9	60.4	74.0	63.1	90.2	81.3	74.9	60.3
1932.....	52.5	42.0	70.0	64.3	51.1	40.4	60.4	40.3	73.0	46.7	62.5	39.1
1933.....	50.2	40.3	62.9	55.1	49.2	39.3	66.7	43.8	89.1	60.1	73.4	48.0
1934.....	53.5	46.5	62.4	58.0	52.8	45.8	81.1	54.8	91.8	66.3	84.9	61.7
1935.....	51.7	48.8	61.8	59.7	51.0	48.2	90.2	70.9	95.8	79.6	93.0	73.9
1936.....	58.3	59.4	62.5	62.9	58.0	59.3	99.6	85.2	108.7	98.6	103.8	89.7
1936												
January.....	54.0	50.5	61.5	60.8	53.4	49.8	95.0	76.1	99.5	86.9	99.6	81.6
February.....	56.1	55.9	61.9	62.5	55.7	55.5	94.9	76.0	100.3	89.4	99.1	80.5
March.....	58.0	60.9	62.2	63.6	57.7	60.8	94.6	77.6	104.3	93.2	98.8	80.0
April.....	57.8	58.6	62.5	62.5	57.4	58.4	94.4	77.8	103.2	91.8	98.7	81.1
May.....	58.0	59.5	62.3	62.7	57.7	59.4	94.7	79.0	103.6	91.8	99.7	83.9
June.....	58.5	60.1	62.0	61.9	58.2	60.1	95.5	79.9	107.2	94.3	99.9	83.8
July.....	56.9	56.0	62.2	61.7	56.5	55.7	94.5	77.4	110.5	96.1	100.1	82.8
August.....	58.4	57.7	62.4	61.3	58.1	57.5	98.4	82.9	111.0	100.4	102.7	89.4
September.....	59.3	59.2	62.4	61.3	59.1	59.1	102.9	88.0	111.5	98.9	107.1	95.2
October.....	60.4	63.9	63.4	63.5	60.2	61.0	108.3	99.7	117.2	110.6	111.3	102.9
November.....	60.6	65.2	63.3	65.5	60.4	65.4	110.0	102.0	118.8	114.9	112.9	103.8
December.....	61.2	65.5	63.4	67.4	61.0	65.6	111.6	105.5	117.7	114.7	116.2	111.6
Nonferrous metals and their products—Continued												
Month and year	Clocks, watches, and time-recording devices		Jewelry		Lighting equipment		Silverware and plated ware		Smelting and refining—copper, lead, and zinc		Stamped and enameled ware	
	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls
1923.....	97.6	95.7	105.1	105.9	101.3	96.7	100.6	98.1	102.8	103.2	110.1	111.2
1924.....	100.0	100.0	99.8	91.8	100.0	100.0	100.0	100.0	100.0	100.0	95.7	92.8
1925.....	102.4	104.3	95.1	102.3	98.7	103.3	99.4	101.9	97.2	96.8	94.2	96.0
1926.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	96.9	98.3
1927.....	102.9	108.1	96.2	106.9	92.9	97.3	98.4	102.3	89.9	90.4	93.0	95.7
1928.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	104.1	108.0
1929.....	98.2	102.2	111.4	113.3	104.2	110.6	92.6	96.5	91.3	99.4	120.5	125.6
1930.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	106.3	104.9
1931.....	74.3	62.2	74.1	65.6	65.3	60.4	65.3	54.3	54.4	45.9	85.4	76.8
1932.....	58.1	38.0	59.5	42.8	47.0	35.3	53.7	36.8	41.4	26.6	79.5	56.5
1933.....	58.9	39.7	59.3	37.7	46.5	31.6	54.1	35.1	42.9	27.4	97.2	66.7
1934.....	79.2	62.4	72.1	50.0	59.0	44.2	67.2	49.0	59.1	39.8	119.4	90.3
1935.....	94.6	80.1	78.4	54.9	68.2	55.9	68.7	53.0	70.2	50.8	132.2	110.3
1936.....	108.9	98.7	82.9	60.4	80.9	73.3	65.8	53.6	78.1	63.5	142.5	130.1
1936												
January.....	103.1	83.9	74.3	50.9	76.1	66.6	65.1	48.1	78.4	59.8	136.3	114.4
February.....	104.3	90.1	76.4	50.2	75.4	62.6	64.8	47.6	75.2	60.0	134.8	114.4
March.....	104.9	91.1	74.6	50.6	72.6	61.7	65.0	50.9	77.6	62.0	134.6	121.5
April.....	103.1	88.3	72.8	49.5	71.5	63.6	63.9	47.5	76.8	59.9	139.1	127.4
May.....	103.4	89.6	72.3	50.5	75.5	68.4	63.5	47.7	76.3	61.3	136.8	122.6
June.....	103.8	91.7	73.4	51.8	75.8	68.8	62.4	46.1	77.5	63.1	138.6	124.6
July.....	102.8	94.0	75.5	50.6	72.8	63.2	53.5	38.7	77.6	62.0	135.0	115.9
August.....	108.6	95.4	85.0	61.8	77.0	65.6	64.6	49.8	76.9	62.2	138.4	123.5
September.....	112.9	104.5	95.3	72.2	84.9	74.8	67.1	55.0	78.0	64.0	143.4	123.0
October.....	117.7	116.1	101.9	84.1	90.9	82.8	71.8	68.4	79.1	67.8	154.3	154.4
November.....	120.5	121.9	100.7	78.0	97.2	97.0	73.8	71.6	79.4	70.0	156.0	155.0
December.....	121.3	117.9	92.8	74.6	101.4	104.2	73.5	71.3	81.1	70.1	162.4	164.2

1 Data not available.

Table 6.—Employment and Pay-Roll Indexes, Manufacturing Industries—Con.

Month and year	Lumber and allied products								Stone, clay, and glass products	
	Group index		Furniture		Lumber, mill-work		Lumber, saw-mills		Group index	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1922	101.5	100.0	98.1	96.9	96.7	95.6	103.6	102.5	100.4	98.3
1924	98.3	98.5	96.2	96.4	98.8	99.3	98.8	99.2	98.9	100.5
1925	100.2	101.5	105.7	106.7	104.5	105.1	97.6	98.3	100.7	101.2
1926	100.3	102.4	110.3	113.4	102.7	103.3	95.5	96.6	103.8	104.2
1927	93.9	96.6	108.8	111.8	90.7	90.5	86.6	89.0	99.9	100.5
1928	92.1	94.1	106.7	107.5	86.7	86.1	84.4	87.2	95.7	96.2
1929	95.2	97.3	111.9	114.0	84.6	83.5	87.7	90.7	93.8	93.7
1930	75.8	72.5	89.0	80.7	64.4	61.1	67.6	67.6	80.2	76.9
1931	66.0	46.2	73.7	59.2	51.1	42.0	41.1	33.6	63.7	53.9
1932	43.6	26.6	57.4	34.6	35.0	21.4	31.7	18.4	46.7	30.6
1933	49.9	30.3	61.0	35.9	33.2	18.7	39.6	24.4	49.4	30.8
1934	54.5	36.9	62.4	41.5	35.4	22.3	45.0	30.9	57.6	39.5
1935	58.7	44.6	70.2	52.0	41.8	31.6	46.4	34.9	58.6	44.2
1936	64.7	55.3	78.2	63.6	49.3	43.2	50.2	42.6	64.2	54.2
1936										
January	59.2	45.9	70.9	51.3	43.7	34.6	46.5	36.4	55.2	41.9
February	59.2	45.8	71.8	53.8	43.9	34.4	46.2	35.2	55.3	42.4
March	61.3	50.3	71.6	55.1	45.2	37.6	48.8	40.4	58.9	48.2
April	62.8	52.3	71.3	55.6	46.6	39.5	50.6	42.9	63.0	52.4
May	64.1	54.4	72.2	56.1	47.8	42.0	51.9	45.1	65.3	55.6
June	64.8	55.8	73.6	58.7	49.7	44.0	52.0	45.4	66.4	56.8
July	65.6	54.5	76.9	59.9	49.5	42.3	51.9	43.3	67.0	55.3
August	66.6	58.9	81.7	68.4	52.2	46.9	50.9	44.8	68.0	58.3
September	68.2	60.3	85.0	71.1	52.6	46.5	51.9	45.8	68.2	58.2
October	69.2	63.5	86.9	76.9	53.4	49.8	52.4	47.1	69.1	62.5
November	67.8	60.8	88.3	77.6	53.4	49.6	49.9	42.7	67.3	61.1
December	67.1	60.5	87.8	78.3	54.1	50.7	49.0	41.6	67.1	59.1
Stone, clay, and glass products—Continued										
Month and year	Brick, tile, and terra cotta		Cement		Glass		Marble, granite, slate, and other products		Pottery	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923	100.6	98.1	95.0	94.6	105.1	103.4	104.5	101.7	98.5	97.8
1924	98.7	101.1	101.0	102.9	95.5	96.9	100.0	100.0	103.8	104.3
1925	100.7	100.8	104.0	102.5	99.4	99.7	95.5	93.3	97.7	97.9
1926	102.9	101.8	102.1	100.9	103.8	103.9	(1)	(1)	99.7	99.3
1927	99.0	96.7	98.3	101.1	94.3	93.6	105.6	113.0	98.0	94.5
1928	92.3	87.5	92.6	96.9	92.6	94.5	(1)	(1)	98.8	93.9
1929	91.5	84.7	90.3	92.9	96.7	100.9	98.7	104.0	94.7	91.4
1930	72.2	62.2	84.6	83.4	83.8	82.9	(1)	(1)	82.9	74.1
1931	50.2	35.2	65.8	56.9	71.5	66.5	72.2	68.8	72.3	56.4
1932	31.8	15.5	45.8	29.8	59.6	45.5	47.9	35.3	58.6	35.9
1933	31.3	15.0	42.8	26.4	71.3	52.0	43.1	27.7	63.2	37.4
1934	34.8	20.0	51.7	37.7	91.6	70.7	39.6	26.5	72.2	46.4
1935	36.3	24.2	52.0	39.7	96.3	81.6	34.2	24.5	72.6	51.1
1936	45.6	35.7	57.4	51.6	98.6	91.1	39.7	32.6	73.6	58.0
1936										
January	36.3	25.0	39.9	29.0	93.8	81.0	28.7	19.7	69.4	50.7
February	35.1	24.2	39.9	29.4	95.6	82.5	28.0	18.6	70.9	55.1
March	38.0	28.0	46.6	39.3	96.8	87.7	34.0	25.9	74.5	59.8
April	43.0	32.3	54.9	47.3	99.0	90.7	38.0	31.8	74.9	59.1
May	46.7	36.9	61.3	54.5	99.2	91.6	39.9	37.4	73.5	54.9
June	49.4	39.3	61.8	56.3	99.2	90.5	42.6	36.5	71.4	51.9
July	50.3	39.1	63.0	58.0	99.8	87.7	44.6	37.4	70.1	50.0
August	50.7	40.3	64.1	60.2	99.8	92.8	46.5	40.3	71.5	54.6
September	50.2	39.4	65.1	61.0	99.3	91.2	45.4	37.8	75.8	61.5
October	49.6	41.3	65.5	62.0	103.6	103.0	44.3	38.1	77.1	66.1
November	49.6	41.1	64.2	63.1	97.6	99.4	43.3	34.2	77.0	67.1
December	48.8	40.9	62.0	58.8	100.6	95.1	41.0	33.2	76.5	65.2

¹ Data not available.

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Table 6.—Employment and Pay-Roll Indexes, Manufacturing Industries—Con.

Month and year	Textiles and their products									
	Group index		Fabric (subgroup)		Carpets and rugs		Cotton goods		Cotton small wares	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923.....	105.2	105.8	105.4	106.0	103.8	109.2	106.7	110.1	104.4	105.5
1924.....	94.9	93.8	94.2	93.4	96.2	93.3	92.5	91.6	92.6	91.8
1925.....	99.9	100.4	100.4	100.6	100.0	97.5	100.8	93.8	103.0	102.7
1926.....	99.9	100.2	99.2	99.4	97.8	93.8	101.9	95.5	(1)	(1)
1927.....	104.0	106.8	101.3	103.8	96.9	94.5	105.8	105.7	95.3	101.3
1928.....	101.3	101.7	96.2	95.8	92.8	85.7	95.5	88.4	(1)	(1)
1929.....	104.8	105.2	99.2	99.4	96.2	90.1	96.1	90.1	97.4	102.1
1930.....	92.9	85.6	86.0	79.4	74.2	59.7	80.7	69.4	(1)	(1)
1931.....	87.2	75.2	80.3	70.2	67.5	54.3	74.5	61.0	81.7	76.8
1932.....	77.9	53.6	71.9	50.4	52.9	31.4	67.1	43.9	72.2	56.2
1933.....	90.5	61.8	86.4	61.4	62.8	41.0	85.9	60.2	84.3	66.5
1934.....	94.4	72.4	89.7	70.2	69.1	48.3	91.2	71.0	90.1	76.5
1935.....	98.4	81.0	93.2	78.2	82.2	69.7	87.8	72.0	94.4	85.0
1936.....	100.7	83.6	94.3	81.1	86.3	75.0	93.1	80.8	96.1	89.6
<i>1936</i>										
January.....	98.2	80.2	93.8	78.7	79.9	63.8	90.1	76.3	96.8	88.6
February.....	99.2	82.3	93.1	78.5	79.5	67.3	89.8	76.5	92.3	83.3
March.....	100.5	85.7	93.0	78.7	83.7	67.9	89.9	75.7	93.0	85.4
April.....	99.5	81.3	91.7	77.2	82.3	66.8	88.8	75.0	95.4	89.2
May.....	97.4	78.2	90.4	75.2	82.7	66.4	88.8	75.2	92.7	84.0
June.....	96.2	76.8	90.3	75.2	83.2	65.8	89.1	75.8	90.8	81.9
July.....	96.3	77.3	91.7	77.1	82.6	67.9	91.7	78.5	90.6	82.0
August.....	101.8	87.4	94.7	83.0	85.4	75.3	94.5	82.4	94.2	88.6
September.....	103.4	83.9	95.8	80.5	90.3	82.9	96.0	81.5	96.5	88.3
October.....	104.3	88.5	97.1	85.1	93.4	89.8	97.6	86.5	101.6	99.8
November.....	104.8	87.2	98.8	86.7	94.3	89.6	99.5	87.9	103.6	97.8
December.....	106.4	94.6	101.7	96.5	97.9	96.5	101.4	98.2	105.8	106.8
Textiles and their products—Continued										
Month and year	Dyeing and finishing textiles		Hats, fur-felt		Knit goods		Silk and rayon goods		Woolen and worsted goods	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923.....	97.4	96.1	106.4	107.4	104.8	103.7	99.7	97.4	109.3	109.1
1924.....	93.9	92.7	97.1	90.5	94.5	92.3	94.8	93.0	97.9	97.6
1925.....	108.7	111.2	96.5	102.1	100.7	104.0	105.5	109.6	92.8	93.3
1926.....	110.8	114.2	(1)	(1)	101.3	109.1	102.9	107.8	84.1	84.0
1927.....	113.5	121.5	101.2	114.1	102.6	116.0	101.5	107.6	86.7	84.7
1928.....	114.9	121.8	(1)	(1)	102.6	115.4	101.0	107.5	83.1	79.2
1929.....	121.8	124.8	105.3	112.3	112.5	129.8	103.8	105.6	82.6	80.1
1930.....	112.0	108.7	(1)	(1)	102.9	108.6	95.1	87.2	67.2	60.5
1931.....	103.3	101.2	89.6	82.5	96.0	92.2	86.9	74.8	67.1	57.3
1932.....	92.8	73.8	72.6	54.5	94.1	75.5	74.0	48.4	56.0	38.9
1933.....	101.8	77.5	79.8	59.5	102.3	81.4	87.8	56.9	71.4	49.7
1934.....	113.6	88.5	82.8	66.8	107.7	98.6	88.4	66.0	65.7	47.7
1935.....	118.1	94.4	85.8	70.5	112.5	108.2	86.5	68.8	86.5	68.5
1936.....	115.6	97.2	86.5	74.5	116.0	112.9	77.8	61.5	82.6	65.3
<i>1936</i>										
January.....	117.9	97.1	87.6	74.7	111.1	102.0	82.5	63.2	88.7	71.2
February.....	117.8	96.3	86.7	78.1	113.2	107.1	76.5	56.5	88.3	70.1
March.....	119.7	100.5	86.9	76.5	115.0	112.5	75.9	58.9	84.4	65.0
April.....	119.3	100.9	86.3	64.2	114.9	110.5	76.0	58.9	79.6	61.1
May.....	114.5	92.1	86.8	70.1	113.4	105.4	71.0	54.4	78.6	61.0
June.....	111.4	87.8	86.8	75.0	112.4	104.1	72.1	56.1	78.9	61.5
July.....	109.3	89.3	88.2	78.8	111.8	104.0	75.0	59.7	79.8	62.6
August.....	111.1	94.8	90.2	89.3	116.1	117.5	79.6	66.0	81.6	64.6
September.....	111.3	93.1	87.5	76.2	120.1	117.1	81.5	64.5	77.9	55.4
October.....	114.8	97.7	83.3	60.9	121.3	124.2	81.5	67.0	78.5	60.4
November.....	117.8	100.6	82.7	68.0	121.0	124.2	80.0	63.8	83.8	66.1
December.....	122.8	116.4	85.5	82.5	121.8	126.2	81.4	68.4	91.6	84.3

1 Data not available.

Table 6.—Employment and Pay-Roll Indexes, Manufacturing Industries—Con.

Month and year	Textiles and their products—Continued									
	Wearing apparel (subgroup)		Clothing, men's		Clothing, women's		Corsets and allied garments		Men's furnishings	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923	105.4	105.6	107.0	109.3	104.3	103.2	105.2	103.4	94.6	93.6
1924	96.1	94.0	97.3	96.1	96.6	94.3	100.0	100.0	100.1	96.1
1925	98.5	99.5	95.7	94.6	99.1	102.5	94.8	96.6	105.3	110.3
1926	99.8	99.6	97.4	94.8	104.2	104.7	(1)	(1)	(1)	(1)
1927	105.8	107.6	102.5	99.5	121.0	123.6	90.0	96.7	125.7	139.5
1928	108.3	107.5	101.3	95.5	133.7	132.5	(1)	(1)	(1)	(1)
1929	113.3	111.0	103.2	95.8	146.8	142.6	89.2	97.0	132.7	145.5
1930	105.0	93.6	91.4	74.7	142.2	127.9	(1)	(1)	(1)	(1)
1931	99.7	80.6	84.9	62.8	135.8	110.5	91.3	89.6	120.1	109.5
1932	89.1	57.2	79.4	44.8	116.9	76.4	89.3	74.8	103.8	75.2
1933	97.7	60.0	90.5	52.8	125.1	74.5	91.6	73.2	110.7	79.1
1934	102.9	74.0	95.8	65.4	136.0	94.8	93.1	84.3	113.1	92.5
1935	107.8	83.0	103.7	79.9	142.8	102.7	91.3	85.0	115.4	94.5
1936	112.8	85.2	106.8	81.7	152.0	105.5	87.8	85.5	127.4	100.1
<i>1936</i>										
January	105.8	79.9	104.1	79.6	141.7	99.3	86.1	79.3	108.8	81.7
February	110.8	86.5	108.4	86.9	147.5	105.5	87.4	88.6	116.7	92.2
March	115.3	96.0	109.6	91.3	156.6	121.4	88.8	91.8	121.5	98.2
April	115.0	86.2	106.2	76.7	159.5	112.9	90.0	90.1	124.4	93.0
May	110.9	80.9	100.8	71.6	155.2	106.3	87.4	85.1	127.0	95.7
June	107.6	76.6	104.4	79.4	140.0	86.0	86.3	81.9	126.2	96.6
July	104.6	74.3	106.9	80.6	128.5	81.0	84.8	77.3	123.8	91.2
August	115.8	92.4	109.5	87.1	157.0	118.7	85.6	80.4	127.0	97.5
September	118.4	87.0	109.2	80.5	162.9	109.5	88.1	84.5	131.5	97.4
October	118.3	91.5	108.0	82.1	163.3	119.1	89.6	90.5	138.3	117.6
November	116.0	84.6	106.5	79.3	158.1	102.7	90.4	88.1	143.0	125.5
December	114.8	86.3	107.8	84.9	154.0	103.6	89.3	88.0	140.6	115.1
Month and year	Textiles and their products—Continued				Leather and its manufactures					
	Millinery		Shirts and collars		Group index		Boots and shoes		Leather	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923	103.2	100.8	107.9	109.7	106.6	106.9	106.0	107.6	109.1	107.9
1924	94.8	94.5	93.0	91.9	96.3	95.3	96.7	95.3	95.4	95.8
1925	102.0	104.7	99.1	98.4	97.1	97.8	97.3	97.1	95.5	96.3
1926	98.0	103.6	101.7	101.9	96.6	98.9	95.6	96.1	96.7	99.5
1927	104.8	113.9	105.1	109.9	97.7	100.3	95.6	96.8	96.6	99.5
1928	105.7	112.3	106.3	107.1	95.6	95.8	92.7	91.3	94.3	95.5
1929	101.3	104.0	109.1	109.2	95.5	99.0	96.7	95.6	91.1	92.8
1930	91.3	83.6	102.7	90.3	91.2	82.3	90.2	78.3	84.6	83.0
1931	83.7	79.2	104.0	82.7	84.3	72.1	85.3	70.2	76.9	72.5
1932	73.9	60.9	91.0	58.0	81.2	57.6	84.5	58.3	68.8	54.0
1933	71.0	49.4	103.1	68.3	87.2	61.2	89.8	61.1	80.7	63.0
1934	64.9	49.0	104.4	85.2	92.4	71.7	94.1	71.2	90.5	76.1
1935	54.7	42.4	108.5	95.9	92.5	74.1	93.1	70.3	94.9	89.6
1936	54.9	41.7	114.0	100.7	91.9	72.8	92.1	67.3	95.8	94.2
<i>1936</i>										
January	52.4	39.5	98.3	81.4	92.9	76.7	93.1	72.2	97.0	94.7
February	54.1	41.9	107.8	91.9	94.4	77.4	95.3	74.1	95.6	91.7
March	65.2	61.7	110.4	99.4	95.6	73.1	94.5	69.2	95.0	89.0
April	62.0	51.0	113.4	100.5	90.8	67.7	91.2	62.0	94.3	89.7
May	57.9	43.9	109.9	96.7	88.2	63.8	88.1	56.5	93.6	91.0
June	50.7	35.1	110.8	94.6	86.8	64.6	86.3	57.8	92.9	89.8
July	44.3	29.8	109.7	89.3	91.4	74.2	92.1	70.3	93.8	89.9
August	59.1	48.2	116.5	104.9	94.1	80.3	95.4	77.2	95.6	94.0
September	63.4	50.8	120.6	104.7	94.1	75.7	94.5	70.7	97.4	95.5
October	56.6	38.3	123.5	115.9	92.8	74.0	92.9	67.4	97.2	99.0
November	47.8	31.2	124.7	116.4	89.0	67.3	87.8	58.2	98.4	100.8
December	44.9	29.2	122.8	112.1	94.0	78.3	94.1	71.4	98.4	105.0

¹ Data not available.

Table 6.—Employment and Pay-Roll Indexes, Manufacturing Industries—Con.

Month and year	Food and kindred products									
	Group index		Baking		Beverages		Butter		Canning and preserving	
	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls
1923.....	101.4	99.8	100.1	98.0	104.4	104.4	106.7	105.7	97.7	97.8
1924.....	88.3	99.3	101.1	101.7	97.0	95.8	100.0	100.0	86.9	86.9
1925.....	100.3	100.9	98.8	100.3	98.1	99.8	93.3	94.3	115.4	115.3
1926.....	99.7	102.0	101.4	104.1	(1)	(1)	(1)	(1)	(1)	(1)
1927.....	100.2	103.0	105.9	107.8	96.6	100.0	105.6	108.2	112.0	108.7
1928.....	103.8	106.3	112.2	113.3	(1)	(1)	(1)	(1)	(1)	(1)
1929.....	111.1	112.9	123.6	125.3	101.3	106.1	100.3	102.5	134.6	129.4
1930.....	107.8	108.0	121.5	123.7	(1)	(1)	(1)	(1)	138.8	126.7
1931.....	95.6	92.0	112.6	109.0	85.5	83.1	82.0	79.1	106.1	91.5
1932.....	88.6	75.0	106.8	92.3	79.1	71.2	80.6	68.3	86.1	65.0
1933.....	100.3	78.7	112.2	89.9	138.2	131.9	86.7	63.8	112.7	76.8
1934.....	114.5	95.1	125.5	103.6	175.8	173.7	91.4	65.8	140.8	101.9
1935.....	109.4	94.4	124.3	105.1	172.7	177.6	82.3	61.5	148.7	123.1
1936.....	111.1	101.3	128.5	114.3	188.2	202.8	83.8	64.9	141.3	123.3
1936										
January.....	98.4	89.8	123.2	107.5	161.3	163.4	77.1	57.5	85.0	72.1
February.....	96.7	87.4	123.8	108.4	159.5	159.3	76.7	58.0	78.3	67.7
March.....	97.7	90.2	125.1	109.5	170.8	180.5	77.8	60.8	78.3	72.6
April.....	100.3	90.3	125.8	108.9	176.5	186.7	81.2	61.7	94.2	80.7
May.....	102.7	95.7	127.3	112.9	192.7	214.3	85.7	66.6	94.2	87.2
June.....	107.9	98.9	128.4	115.1	199.1	220.7	91.1	71.0	126.3	102.7
July.....	116.9	107.0	129.2	116.1	220.0	266.4	92.4	71.7	174.0	138.3
August.....	127.9	114.0	130.1	116.2	214.5	237.1	90.5	70.5	252.5	231.1
September.....	135.9	116.5	131.3	117.9	206.6	227.1	86.4	67.5	305.4	258.9
October.....	124.2	111.5	132.6	119.0	190.7	198.9	82.7	65.1	197.3	179.2
November.....	114.1	108.3	133.0	120.4	183.0	191.3	82.0	65.1	113.1	98.2
December.....	110.6	105.7	132.2	119.8	181.0	187.6	81.6	62.9	96.8	90.8

Month and year	Food and kindred products—Continued											
	Confection- ery		Flour		Ice cream		Slaughtering and meat packing		Sugar, beet		Sugar refin- ing, cane	
	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls
1923.....	101.7	100.9	104.9	101.9	99.2	98.7	104.7	102.6	92.1	91.1	103.4	102.6
1924.....	96.5	97.7	99.7	101.0	102.0	99.7	100.3	99.9	100.0	100.0	98.2	100.4
1925.....	101.8	101.4	95.4	97.1	98.8	101.6	95.0	97.5	107.9	108.9	98.4	97.0
1926.....	105.8	106.8	91.8	94.4	96.3	103.2	93.2	97.8	(1)	(1)	94.8	91.5
1927.....	101.1	104.7	89.4	91.8	94.0	100.6	94.0	98.9	90.0	87.5	94.9	90.6
1928.....	98.9	101.0	85.5	89.7	95.5	103.2	94.8	100.1	(1)	(1)	89.4	87.5
1929.....	101.7	103.7	80.6	85.7	96.0	102.7	96.7	101.5	91.2	90.3	94.3	91.4
1930.....	92.1	93.3	73.9	78.7	89.0	93.0	92.1	96.3	(1)	(1)	92.3	89.7
1931.....	82.0	77.5	68.1	66.7	76.0	76.9	84.1	82.2	75.8	68.1	80.3	79.6
1932.....	74.8	60.6	65.7	56.4	64.6	56.7	80.6	65.7	90.4	68.5	73.9	66.5
1933.....	81.0	60.7	69.2	55.2	61.6	49.1	89.3	68.7	130.0	98.2	77.9	62.7
1934.....	81.3	69.7	78.2	64.9	69.7	57.0	105.7	91.7	94.9	70.6	85.5	65.0
1935.....	80.8	71.4	76.9	67.4	69.3	58.5	84.3	77.1	100.8	89.3	80.8	65.8
1936.....	78.1	70.3	75.1	70.1	70.4	62.0	88.8	84.7	99.5	92.5	77.2	64.9
1936												
January.....	74.7	67.0	75.2	68.7	57.1	49.6	86.4	82.6	42.1	42.8	75.6	63.4
February.....	74.4	65.5	75.5	69.8	56.7	49.2	83.2	74.8	31.8	36.6	77.9	62.2
March.....	75.1	67.9	75.3	69.3	60.4	53.8	81.9	75.0	35.3	41.5	78.8	70.2
April.....	71.7	61.6	73.9	65.3	67.2	58.3	82.2	74.6	40.3	42.2	80.9	68.5
May.....	70.2	61.1	72.0	66.7	80.1	70.2	84.3	78.6	43.9	45.6	80.9	68.5
June.....	68.6	59.7	72.3	67.0	84.4	72.5	85.8	81.2	48.6	50.1	80.0	66.6
July.....	66.8	56.1	77.7	75.5	88.3	80.2	90.8	86.7	53.1	53.2	79.8	69.3
August.....	73.5	66.1	77.1	74.6	83.9	73.6	91.5	87.5	86.8	80.4	80.7	66.6
September.....	88.1	81.4	76.9	70.9	77.4	67.9	90.9	85.1	94.2	94.9	78.3	64.1
October.....	91.0	86.3	76.8	72.9	65.8	57.8	91.8	88.7	271.7	201.9	75.9	61.4
November.....	91.9	84.6	74.7	70.4	62.2	56.3	96.9	99.8	273.6	268.8	68.0	58.6
December.....	90.6	86.3	74.3	69.7	61.2	55.1	99.4	101.5	172.5	151.8	69.0	59.3

¹ Data not available.

Table 6.—Employment and Pay-Roll Indexes, Manufacturing Industries—Con.

Month and year	Tobacco manufactures						Paper and printing	
	Group index		Chewing and smoking tobacco and snuff		Cigars and cigarettes		Group index	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923.....	105.7	104.1	102.7	101.4	106.2	104.5	99.2	96.2
1924.....	98.8	99.4	102.7	101.6	98.2	99.2	99.7	99.5
1925.....	95.5	96.5	94.6	97.0	95.6	96.3	101.1	104.3
1926.....	90.9	92.1	93.1	94.0	90.4	91.8	104.1	110.8
1927.....	93.4	91.0	82.6	84.8	94.9	91.8	104.1	111.0
1928.....	90.7	86.1	75.6	77.4	92.8	87.2	105.0	112.3
1929.....	83.9	81.8	68.0	71.3	86.0	83.1	111.3	119.5
1930.....	78.3	72.7	69.8	71.3	79.4	72.9	108.0	114.6
1931.....	72.1	60.1	71.9	69.0	72.1	58.9	96.3	97.3
1932.....	65.6	48.2	71.0	62.4	64.9	46.4	85.5	74.8
1933.....	63.1	44.1	64.2	56.0	62.9	42.6	86.7	68.3
1934.....	66.2	48.8	64.6	59.7	66.3	47.5	95.4	78.5
1935.....	61.3	47.7	57.9	58.7	61.6	46.4	97.6	84.2
1936.....	61.0	50.0	56.0	59.5	61.6	48.8	100.8	91.6
<i>1936</i>								
January.....	54.9	43.0	57.5	59.9	54.5	40.9	98.0	86.9
February.....	58.7	41.9	57.4	57.6	58.8	43.4	98.8	87.7
March.....	59.2	46.5	56.4	58.6	59.4	45.0	98.7	89.3
April.....	58.6	44.0	55.8	57.1	58.8	42.4	99.1	89.8
May.....	60.0	48.5	55.2	59.7	60.5	47.1	99.5	90.7
June.....	60.2	50.1	55.0	56.0	60.8	49.4	98.8	89.2
July.....	60.6	51.0	54.7	58.0	61.2	50.2	98.5	86.6
August.....	63.0	53.5	55.2	57.6	63.9	53.0	100.1	89.4
September.....	63.6	53.3	55.2	62.1	64.6	52.2	102.6	92.0
October.....	64.5	54.7	56.6	60.9	65.4	53.9	104.0	96.5
November.....	65.9	54.8	57.1	62.1	66.9	53.9	105.0	98.6
December.....	63.3	55.4	56.4	64.8	64.1	54.3	106.0	102.6
<i>Paper and printing—Continued</i>								
Month and year	Boxes, paper		Paper and pulp		Printing and publishing, book and job		Printing and publishing, newspapers and periodicals	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923.....	100.0	97.3	100.0	98.4	98.3	95.5	98.9	94.7
1924.....	99.5	99.7	97.3	97.5	100.7	100.0	101.0	100.6
1925.....	100.5	103.0	102.7	104.1	101.0	104.5	100.1	104.7
1926.....	102.1	106.9	105.8	109.1	104.9	112.5	101.7	110.3
1927.....	99.2	104.0	102.2	105.3	106.9	114.1	102.2	111.1
1928.....	96.3	102.0	100.8	105.3	107.4	113.6	104.5	113.6
1929.....	97.9	102.9	106.1	112.5	113.1	118.7	111.0	121.8
1930.....	90.7	91.6	102.5	104.6	110.9	115.6	109.9	119.4
1931.....	81.8	79.0	89.5	82.1	100.7	99.1	101.8	108.0
1932.....	73.5	62.4	81.9	61.4	85.3	72.4	92.9	88.6
1933.....	83.0	67.7	89.0	64.4	78.5	60.6	93.4	78.6
1934.....	91.5	81.1	103.8	78.6	84.7	70.0	98.6	85.9
1935.....	93.4	86.6	107.6	88.0	86.8	75.8	99.3	88.6
1936.....	96.2	92.5	109.4	97.0	91.0	81.7	102.9	96.8
<i>1936</i>								
January.....	91.4	82.2	107.2	91.0	87.9	79.1	101.1	92.5
February.....	90.9	83.4	107.7	92.8	89.5	79.3	101.8	93.1
March.....	91.2	85.8	108.1	94.2	88.0	79.6	102.6	95.8
April.....	90.8	84.9	108.8	95.5	88.0	79.5	103.6	96.9
May.....	91.5	86.4	109.4	96.3	88.8	80.7	103.0	97.2
June.....	91.3	85.9	108.8	95.1	87.8	78.1	102.6	96.5
July.....	92.3	85.5	108.3	92.5	88.9	76.7	100.0	91.9
August.....	95.7	92.5	109.1	96.9	92.1	79.8	100.0	92.3
September.....	101.6	98.8	110.4	95.2	93.2	81.7	103.5	97.6
October.....	105.5	108.0	110.7	101.9	94.3	84.8	104.8	100.6
November.....	106.2	108.8	111.9	104.5	95.6	87.6	105.3	101.8
December.....	106.3	108.3	112.8	108.6	97.4	93.2	106.0	105.4

Table 6.—Employment and Pay-Roll Indexes, Manufacturing Industries—Con.

Month and year	Chemicals and allied products									
	Group index		Other than petroleum refining (sub-group)		Chemicals		Cottonseed—oil, cake, and meal		Druggists' preparations	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923.....	102.9	102.2	102.8	102.1	105.7	101.8	87.8	83.9	97.7	91.8
1924.....	96.4	96.4	96.9	97.0	98.0	98.1	100.5	94.9	96.8	97.6
1925.....	100.3	101.4	100.2	100.9	96.3	100.1	111.7	121.2	105.5	110.7
1926.....	106.5	108.7	105.4	107.4	(1)	(1)	(1)	(1)	108.3	113.4
1927.....	104.2	107.8	102.8	106.8	(1)	(1)	127.0	151.3	110.4	119.2
1928.....	103.0	108.0	102.5	108.0	(1)	(1)	(1)	(1)	106.6	113.1
1929.....	115.7	120.9	113.6	118.4	109.2	120.0	109.0	118.9	116.4	124.4
1930.....	109.4	112.2	105.6	106.6	99.5	103.5	(1)	(1)	108.2	116.3
1931.....	95.4	92.0	92.7	87.7	85.1	84.2	84.5	88.5	103.2	105.3
1932.....	85.5	71.7	82.2	66.9	76.0	64.6	95.2	70.5	92.3	85.3
1933.....	97.5	76.2	95.4	72.5	93.3	75.2	98.1	57.1	94.7	86.7
1934.....	110.7	91.6	108.8	89.0	114.9	96.1	92.0	61.6	105.2	98.1
1935.....	111.9	98.9	110.7	96.9	113.7	101.7	78.0	57.8	102.9	102.0
1936.....	114.6	107.8	113.8	106.4	121.3	115.5	71.1	55.7	102.5	105.4
1936										
January.....	111.8	100.4	110.8	98.8	114.1	103.7	81.0	61.1	101.5	101.5
February.....	110.8	99.9	109.8	98.5	113.8	103.9	74.2	55.4	101.6	100.3
March.....	113.8	104.5	113.6	103.1	114.9	107.1	75.0	56.0	103.0	106.5
April.....	112.3	103.8	111.3	102.5	115.8	109.1	51.8	36.8	102.3	104.3
May.....	111.8	105.4	110.7	104.0	117.2	111.3	44.1	32.3	100.7	102.1
June.....	110.3	105.4	108.5	103.3	118.6	113.3	37.9	28.5	100.4	99.4
July.....	112.7	106.4	110.5	103.8	122.5	114.9	41.2	32.9	100.1	100.8
August.....	113.4	108.1	112.2	106.8	123.0	117.7	45.7	37.5	100.3	105.2
September.....	119.5	112.0	118.8	110.6	127.1	120.1	96.9	78.4	103.1	107.2
October.....	120.3	114.4	120.2	113.9	129.9	124.7	103.5	84.5	104.4	112.6
November.....	129.7	114.7	119.4	113.3	130.0	127.5	103.6	83.1	105.9	112.7
December.....	119.3	118.3	119.3	118.0	129.1	132.5	98.0	82.1	106.6	112.5

Month and year	Chemicals and allied products—Continued											
	Explosives		Fertilizers		Paints and varnishes		Rayon and allied products		Soap		Petroleum refining	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923.....	108.5	109.5	100.5	99.1	95.6	91.6	87.3	91.3	104.9	105.7	103.0	102.3
1924.....	94.8	97.6	93.1	93.6	97.6	99.8	93.1	95.5	100.0	100.0	96.1	94.6
1925.....	96.7	92.9	106.4	107.3	106.8	108.6	119.6	113.2	95.1	94.3	100.9	103.1
1926.....	98.7	92.2	112.8	118.4	(1)	(1)	(1)	(1)	(1)	(1)	110.8	112.7
1927.....	98.5	97.6	100.8	106.9	117.5	123.3	164.8	141.2	82.9	100.3	109.9	111.9
1928.....	95.4	92.2	107.6	109.1	(1)	(1)	(1)	(1)	(1)	(1)	104.7	108.3
1929.....	95.3	102.0	113.4	108.3	122.3	129.6	244.4	220.2	88.6	96.7	124.4	129.2
1930.....	79.7	74.7	111.0	104.2	(1)	(1)	242.2	214.1	(1)	(1)	124.9	130.4
1931.....	80.4	66.9	78.8	73.4	94.4	90.3	241.9	188.4	87.4	90.2	106.2	105.8
1932.....	63.6	43.9	56.5	43.7	87.3	71.1	214.3	146.2	82.7	74.4	98.7	87.5
1933.....	70.8	49.6	70.7	44.0	95.9	73.0	276.7	190.3	88.3	71.9	106.5	88.4
1934.....	87.6	68.2	92.4	64.8	112.2	89.5	302.3	227.3	98.6	85.5	118.3	100.3
1935.....	81.8	70.6	88.3	69.1	120.0	101.9	337.0	265.9	99.2	93.9	116.7	105.6
1936.....	86.3	85.0	82.1	72.2	125.1	114.5	348.7	289.4	98.5	97.0	118.3	112.4
1936												
January.....	81.3	72.2	80.6	65.0	119.8	104.1	347.6	279.0	95.5	93.1	115.8	105.9
February.....	82.9	77.1	81.8	62.8	119.9	106.0	341.3	275.1	94.7	92.7	115.0	104.8
March.....	83.7	82.0	122.8	101.0	120.8	108.7	346.0	282.0	94.7	93.2	114.5	109.6
April.....	79.8	74.0	119.8	101.3	125.2	114.2	325.4	269.0	95.1	91.8	116.5	108.2
May.....	77.7	76.7	96.2	93.1	128.0	120.2	335.6	273.3	95.8	93.9	116.5	110.0
June.....	82.7	83.5	59.1	54.9	128.9	120.9	336.2	276.8	96.3	94.9	117.8	112.3
July.....	86.2	84.2	58.6	52.4	126.2	113.8	347.3	287.8	93.0	91.7	121.5	114.7
August.....	88.3	88.3	60.8	55.4	124.4	113.5	356.7	300.1	101.7	100.6	118.3	112.2
September.....	91.4	89.3	77.9	76.1	126.7	114.0	360.1	302.4	106.8	100.9	122.3	116.3
October.....	93.2	96.2	76.9	69.7	128.6	119.6	361.5	307.6	107.1	105.3	120.6	115.9
November.....	95.4	98.3	69.8	63.1	125.3	116.8	364.0	298.2	102.5	101.6	121.1	119.1
December.....	93.2	98.0	80.4	71.6	127.5	121.6	362.4	321.3	98.8	104.3	119.5	119.5

1 Data not available.

Table 6.—Employment and Pay-Roll Indexes, Manufacturing Industries—Con.

Month and year	Rubber products							
	Group index		Rubber boots and shoes		Rubber goods, other than boots, shoes, tires, and inner tubes		Rubber tires and inner tubes	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923.....	102.6	101.0	117.0	118.7	103.1	100.1	97.7	96.8
1924.....	91.8	92.9	83.6	82.3	91.6	92.7	94.5	95.7
1925.....	105.6	106.1	99.4	99.0	105.3	107.2	107.8	107.5
1926.....	105.1	107.0	103.0	101.7	(1)	(1)	105.4	107.2
1927.....	105.7	110.0	106.8	113.2	110.3	115.5	103.3	107.0
1928.....	111.1	117.5	105.0	107.1	(1)	(1)	109.9	116.8
1929.....	111.0	115.1	102.1	105.6	120.3	126.4	110.0	113.2
1930.....	85.9	84.7	82.0	77.4	(1)	(1)	79.0	79.3
1931.....	73.9	62.5	63.2	48.6	102.3	89.9	64.9	56.2
1932.....	67.6	47.4	59.6	42.4	91.3	68.1	59.8	41.2
1933.....	79.1	55.0	72.0	51.0	105.3	75.3	69.9	48.8
1934.....	88.4	68.8	76.8	55.4	114.3	87.7	80.9	65.5
1935.....	85.6	74.2	67.5	51.2	116.6	98.3	77.9	71.4
1936.....	90.8	87.6	74.0	59.9	124.7	114.4	81.5	85.1
<i>1936</i>								
January.....	85.6	78.0	71.0	56.6	118.4	102.8	75.9	74.6
February.....	85.1	74.9	69.3	52.9	119.3	102.6	75.3	70.6
March.....	75.4	66.7	70.7	55.7	120.1	105.7	57.2	55.6
April.....	87.9	82.8	71.8	55.4	123.3	111.0	77.7	79.8
May.....	88.9	86.4	70.7	54.2	123.2	110.4	79.8	86.1
June.....	89.8	89.0	68.9	56.6	121.5	110.5	82.8	89.5
July.....	90.8	87.1	72.0	54.8	120.6	106.2	83.9	88.5
August.....	92.2	90.8	75.2	60.5	119.2	110.3	86.0	91.6
September.....	94.3	92.2	77.3	61.5	124.6	114.9	86.6	91.9
October.....	97.9	96.8	78.4	64.8	132.9	128.1	89.0	93.8
November.....	100.0	101.2	79.9	69.2	135.6	130.5	90.9	98.9
December.....	101.9	104.8	82.5	76.9	137.8	139.2	92.5	99.7

¹ Data not available.

Trend of Industrial and Business Employment, by States

A COMPARISON of employment and pay rolls, by States and geographic divisions, in November and December 1936, is shown in table 7 for all groups combined, and for all manufacturing industries combined, based on data supplied by reporting establishments. The percentage changes shown, unless otherwise noted, are unweighted—that is, the industries included in the manufacturing group and in the grand total have not been weighted according to their relative importance.

The totals for all manufacturing industries combined include figures for miscellaneous manufacturing industries in addition to the 89 manufacturing industries presented in table 3. The totals for all groups combined include all manufacturing industries and each of the nonmanufacturing industries presented in table 3 except building construction.

Table 7.—Comparison of Employment and Pay Rolls in Identical Establishments in November and December 1936, by Geographic Divisions and by States

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

Geographic division and State	Total—All groups				Manufacturing					
	Number of establishments	Number on pay roll December 1936	Percentage change from November 1936	Amount of pay roll (1 week) December 1936	Percentage change from November 1936	Number of establishments	Number on pay roll December 1936	Percentage change from November 1936	Amount of pay roll (1 week) December 1936	Percentage change from November 1936
				<i>Dollars</i>					<i>Dollars</i>	
New England.....	14, 089	944, 762	+3.4	21, 739, 976	+8.1	3, 525	650, 183	+3.0	14, 745, 636	+11.0
Maine.....	823	59, 621	+6.3	1, 237, 631	+20.4	287	48, 485	+8.0	984, 852	+27.1
New Hampshire.....	626	38, 442	+4.1	802, 386	+15.1	209	31, 084	+4.3	630, 903	+19.6
Vermont.....	481	18, 469	+1.6	410, 443	+8.4	149	11, 835	+2.5	263, 082	+13.1
Massachusetts.....	<i>1, 626</i>	<i>513, 394</i>	<i>+5.1</i>	<i>11, 850, 916</i>	<i>+5.9</i>	<i>1, 694</i>	<i>303, 475</i>	<i>+2.5</i>	<i>6, 839, 256</i>	<i>+8.6</i>
Rhode Island.....	1, 264	101, 434	+5.3	2, 249, 530	+18.8	434	79, 703	+4.6	1, 727, 331	+24.1
Connecticut.....	2, 269	213, 402	+2.5	5, 189, 070	+5.6	762	175, 601	+1.7	4, 300, 262	+6.1
Middle Atlantic.....	34, 210	2, 266, 009	+3.4	59, 437, 046	+6.4	5, 075	1, 218, 363	+1.1	31, 334, 597	+5.4
New York.....	21, 930	1, 029, 517	+3.4	27, 740, 242	+5.6	<i>2, 002</i>	<i>449, 269</i>	<i>+3.9</i>	<i>12, 056, 552</i>	<i>+5.4</i>
New Jersey.....	4, 026	335, 567	+2.4	8, 525, 303	+5.2	<i>3 777</i>	<i>250, 364</i>	<i>+1.6</i>	<i>6, 308, 332</i>	<i>+5.6</i>
Pennsylvania.....	8, 254	900, 925	+2.8	23, 171, 501	+7.8	<i>2, 296</i>	<i>518, 730</i>	<i>+4.8</i>	<i>12, 969, 713</i>	<i>+4.8</i>
East North Central.....	20, 109	2, 346, 392	+3.9	63, 367, 362	+5.0	7, 532	1, 790, 009	+2.5	50, 109, 638	+5.0
Ohio.....	8, 080	666, 030	+3.7	17, 812, 860	+5.0	2, 592	486, 636	+1.6	13, 590, 000	+4.2
Indiana.....	<i>2, 263</i>	<i>255, 069</i>	<i>+2.6</i>	<i>6, 718, 465</i>	<i>+6.1</i>	<i>865</i>	<i>214, 675</i>	<i>+1.9</i>	<i>5, 779, 287</i>	<i>+6.2</i>
Illinois.....	<i>4, 981</i>	<i>619, 422</i>	<i>+2.2</i>	<i>15, 729, 387</i>	<i>+3.7</i>	<i>2, 394</i>	<i>413, 957</i>	<i>+1.4</i>	<i>10, 548, 009</i>	<i>+3.7</i>
Michigan.....	3, 801	617, 586	+7.1	18, 434, 966	+6.5	<i>950</i>	<i>524, 878</i>	<i>+5.0</i>	<i>16, 380, 797</i>	<i>+6.8</i>
Wisconsin.....	<i>984</i>	<i>188, 285</i>	<i>+1.9</i>	<i>4, 671, 684</i>	<i>+1.8</i>	<i>731</i>	<i>149, 863</i>	<i>+4.1</i>	<i>3, 811, 565</i>	<i>+1.0</i>
West North Central.....	11, 412	444, 129	+2.2	10, 209, 189	+2.6	2, 473	219, 934	+1.1	5, 087, 314	+3.8
Minnesota.....	2, 167	92, 840	+ ⁽⁸⁾	2, 226, 224	—	440	43, 841	—3.1	1, 063, 658	—2.5
Iowa.....	1, 755	66, 744	+2.4	1, 533, 058	+4.5	420	37, 718	+2.5	901, 208	+7.9
Missouri.....	3, 133	179, 977	+4.4	4, 069, 248	+4.9	902	97, 472	+4.2	2, 147, 434	+7.4
North Dakota.....	491	5, 295	+8	120, 580	—2.6	42	683	+9	18, 653	+4.2
South Dakota.....	438	7, 755	—3.3	191, 437	—1.6	39	2, 248	—10.9	53, 436	—2.4
Nebraska.....	1, 541	35, 533	—4	797, 653	—3.6	166	13, 149	—7.2	310, 149	—10.0
Kansas.....	<i>1, 881</i>	<i>56, 465</i>	<i>+1.4</i>	<i>1, 270, 989</i>	<i>+3.8</i>	<i>464</i>	<i>24, 823</i>	<i>+5.5</i>	<i>592, 776</i>	<i>+6.5</i>
South Atlantic.....	11, 194	850, 621	+2.7	16, 948, 806	+5.3	2, 731	549, 306	+3.9	10, 160, 248	+5.4
Delaware.....	209	15, 876	+3	388, 269	+2.3	88	11, 763	—5	286, 157	+2.4
Maryland.....	<i>1, 443</i>	<i>124, 979</i>	<i>+3.2</i>	<i>2, 894, 153</i>	<i>+5.8</i>	<i>516</i>	<i>80, 554</i>	<i>+4.4</i>	<i>1, 874, 353</i>	<i>+2.9</i>
District of Columbia.....	1, 087	47, 727	+8.5	1, 160, 311	+4.8	42	3, 951	+6	132, 147	+1.3
Virginia.....	2, 277	110, 136	+1.8	2, 171, 166	+4.9	474	72, 497	+2	1, 409, 487	+5.0
West Virginia.....	1, 248	152, 461	+9	3, 907, 836	+3.1	251	59, 312	—1.3	1, 519, 947	+1.9
North Carolina.....	1, 479	160, 887	+1.9	2, 527, 477	+6.0	580	146, 078	+1.5	2, 274, 591	+6.4
South Carolina.....	791	73, 240	+1.5	1, 119, 740	+9.5	226	65, 322	+1.3	974, 769	+10.8
Georgia.....	1, 536	115, 137	+1.4	1, 899, 852	+4.2	356	87, 602	+4	1, 328, 774	+5.0
Florida.....	1, 124	50, 178	+13.2	882, 002	+11.8	198	22, 227	+10.5	360, 023	+9.2
East South Central.....	4, 550	302, 142	+1.5	5, 710, 240	+4.2	1, 020	185, 015	—2	3, 340, 171	+3.8
Kentucky.....	1, 387	93, 446	+2.4	2, 004, 926	+4.3	317	39, 696	—3	839, 249	+4.2
Tennessee.....	1, 350	103, 591	+1.1	1, 866, 305	+2.6	383	76, 129	—2	1, 346, 907	+2.4
Alabama.....	1, 267	90, 490	+1.3	1, 589, 924	+6.5	237	61, 373	+2	1, 032, 770	+5.9
Mississippi.....	546	14, 615	—4	249, 085	+1.1	83	7, 817	—2.4	121, 245	+5
West South Central.....	4, 409	199, 394	+1.8	4, 264, 299	+1.9	1, 117	98, 973	+2	1, 998, 564	+1.3
Arkansas ¹⁰	<i>462</i>	<i>21, 851</i>	<i>+8</i>	<i>372, 880</i>	<i>+2.9</i>	<i>171</i>	<i>14, 688</i>	<i>—1.2</i>	<i>233, 026</i>	<i>+2.2</i>
Louisiana.....	928	48, 338	+4.0	897, 116	+1.3	238	24, 311	+1.5	394, 997	—4
Oklahoma.....	1, 380	41, 211	+4	953, 253	+7	140	11, 642	—1.1	264, 253	+1.8
Texas ¹¹	<i>1, 639</i>	<i>87, 994</i>	<i>+1.9</i>	<i>2, 041, 050</i>	<i>+2.5</i>	<i>568</i>	<i>48, 332</i>	<i>+3</i>	<i>1, 106, 288</i>	<i>+1.8</i>

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

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

³ Includes laundries.

⁴ Weighted percentage change.

⁵ Includes automobile and miscellaneous services, restaurants, and building and contracting.

⁶ Includes construction but not hotels and restaurants, or public works.

⁷ Does not include logging.

⁸ Less than 1/10 of 1 percent.

⁹ Includes financial institutions, miscellaneous services, and restaurants.

¹⁰ Includes automobile dealers and garages, and sand, gravel, and building stone.

¹¹ Includes business and personal service and real estate.

Table 7.—Comparison of Employment and Pay Rolls in Identical Establishments in November and December 1936, by Geographic Divisions and by States—Con.

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

Geographic division and State	Total—All groups					Manufacturing				
	Number of establishments	Number on pay roll December 1936	Percentage change from November 1936	Amount of pay roll (1 week) December 1936	Percentage change from November 1936	Number of establishments	Number on pay roll December 1936	Percentage change from November 1936	Amount of pay roll (1 week) December 1936	Percentage change from November 1936
Mountain	4,409	138,764	+0.5	<i>\$3,520,686</i>	+0.2	605	43,481	-7.1	<i>\$1,073,569</i>	-5.9
Montana.....	669	20,039	-4.4	573,875	-(*)	86	5,582	-4.8	147,918	-5.3
Idaho.....	477	10,954	-9.2	263,891	-8.9	54	3,524	-28.2	78,823	-29.0
Wyoming.....	327	9,637	-2.0	280,328	-3.4	38	2,056	-9.4	58,349	-8.5
Colorado.....	1,254	49,154	+1.6	1,213,380	+1.6	204	19,787	-2.1	501,684	+1.0
New Mexico.....	324	6,706	+1.7	153,946	+4.8	32	700	+1.0	13,377	+2.1
Arizona.....	511	17,146	+6.9	442,455	+7.2	44	3,145	+1.2	74,103	+2.0
Utah.....	631	21,850	+6.6	500,182	-2.7	117	7,491	-12.6	164,979	-14.4
Nevada.....	216	3,278	-2.2	92,629	-1.1	30	1,196	+2.1	34,336	-1.8
Pacific	8,932	424,092	+1.8	<i>\$11,353,511</i>	+1.1	2,315	233,543	-2.8	<i>\$6,362,324</i>	+1.3
Washington.....	3,058	95,582	-2.1	2,390,117	-1.4	565	50,520	-6.9	1,235,065	-4.1
Oregon.....	1,283	49,690	-1.0	1,206,023	-1.2	295	27,156	-4.9	627,368	-3.1
California ¹²	4,591	278,820	+2.1	7,757,371	+2.3	1,455	155,867	-1.1	4,499,891	+2.0

⁸ Less than 1/10 of 1 percent.¹² Includes banks, insurance, and office employment.**Industrial and Business Employment and Pay Rolls in Principal Cities**

A COMPARISON of December employment and pay rolls with the November totals in 13 cities of the United States having a population of 500,000 or over is made in table 8. The changes are computed from reports received from identical establishments in both months.

In addition to reports included in the several industrial groups regularly covered in the survey by the Bureau, reports have also been secured from establishments in other industries for inclusion in these city totals. As information concerning employment in building construction is not available for all cities at this time, figures for this industry have not been included in these city totals.

Table 8.—Comparison of Employment and Pay Rolls in Identical Establishments in November and December 1936, by Principal Cities

City	Number of establishments	Number on pay roll December 1936	Percentage change from November 1936	Amount of pay roll (1 week) December 1936	Percentage change from November 1936
New York, N. Y.....	16,213	724,749	+4.1	\$19,364,230	+5.1
Chicago, Ill.....	4,487	479,140	+2.5	12,912,078	+4.5
Philadelphia, Pa.....	2,577	240,783	+2.4	6,205,710	+3.5
Detroit, Mich.....	1,616	407,088	+8.4	12,546,421	+5.2
Los Angeles, Calif.....	2,554	149,946	+8.2	3,916,159	+4.5
Cleveland, Ohio.....	1,721	150,505	+5.2	4,067,784	+5.6
St. Louis, Mo.....	1,621	138,005	+5.2	3,282,490	+6.6
Baltimore, Md.....	1,225	100,624	+4.5	2,386,899	+5.2
Boston, Mass.....	1,580	112,615	+3.0	2,892,758	+4.2
Pittsburgh, Pa.....	1,396	218,284	+3.2	6,113,686	+8.1
San Francisco, Calif.....	1,682	87,226	-4.4	2,425,639	+7.5
Buffalo, N. Y.....	954	78,614	+2.5	2,122,823	+6.2
Milwaukee, Wis.....	700	84,745	+3.2	2,233,621	+5.7

¹ Data relate to "industrial area."

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Public Employment

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

Construction projects financed by the Public Works Administration are those projects authorized by title II of the National Industrial Recovery Act of June 16, 1933. This program of public works has been extended to June 30, 1937, by the Emergency Relief Appropriation Act of 1935 and title II of the First Deficiency Appropriation Act of 1936.

By authority of Public Resolution No. 11, Seventy-fourth Congress, approved April 8, 1935, the President, in a series of Executive orders, inaugurated a broad program of works to be carried out by 61 units of the Federal Government. The Works Program has been continued by title II of the First Deficiency Appropriation Act of 1936, cited as the Emergency Relief Appropriation Act of 1936. Employment created by this program includes employment on Federal projects and employment on projects operated by the Works Progress Administration. Federal projects are those conducted by Federal agencies which have received allotments from The Works Program fund. Projects operated by the Works Progress Administration are those projects conducted under the supervision of the Works Progress Administration through State, city, or county agencies.

The emergency conservation program (Civilian Conservation Corps) created in April 1933 was further extended under authority of the Emergency Relief Appropriation Act of 1935. Since July 1, 1936, emergency conservation work has been continued from appropriations authorized by the First Deficiency Appropriation Act of 1936.

With the following exceptions, statistics on public employment refer to the month ending on the 15th.

Employment statistics for the Federal service and for emergency conservation work refer to the number employed on the last day of the month; pay-roll data are for the entire month. The value of material orders placed for projects operated by the Works Progress Administration are for the calendar month. All statistics on National Youth Administration projects are for the calendar month.

Executive Service of the Federal Government

STATISTICS of employment in the executive service of the Federal Government in November and December 1936 and December 1935 are given in table 9.

Table 9.—Employees in the Executive Service of the U. S. Government, November and December 1936 and December 1935 ¹

[Subject to revision]

Item	District of Columbia ²			Outside District of Columbia			Entire service ²		
	Permanent	Temporary	Total	Permanent	Temporary ³	Total	Permanent	Temporary ³	Total
Number of employees:									
December 1936.....	107,898	8,457	116,355	618,663	96,468	715,131	726,561	104,925	⁴ 831,486
November 1936.....	107,777	7,408	115,185	621,364	102,897	724,261	729,141	110,305	839,446
December 1935.....	104,285	7,806	112,091	607,060	97,075	704,135	711,345	104,881	816,226
Percentage change:									
November to December 1936.....	+0.11	+14.16	+1.02	-0.43	-6.25	-1.26	-0.35	-4.88	-0.95
December 1935 to December 1936.....	+3.46	+8.34	+3.80	+1.91	-0.63	+1.56	+2.14	+0.04	+1.87
Labor turn-over December 1936:									
Number of separations ⁵	1,010	668	1,678	11,809	16,200	28,009	12,819	16,868	29,687
Number of accessions ⁵	1,052	1,837	2,889	7,959	10,492	18,451	9,011	12,329	21,340
Turn-over rate per 100:									
Separation rate.....	.94	8.42	1.45	1.90	16.25	3.89	1.76	15.67	3.55
Accession rate.....	.98	23.16	2.50	1.28	10.53	2.56	1.24	11.46	2.35

¹ Data on number of employees refer to employment on last day of month.² Includes employees of Columbia Institution for the Deaf and Howard University.³ Not including field employees of Post Office Department or 22,346 employees hired under letters of authorization by the Department of Agriculture, with a pay roll of \$1,027,198.⁴ Includes 387 employees by transfer previously reported as separations, not actual additions for December.⁵ Not including employees transferred within the Government service, as such transfers should not be regarded as labor turn-over.

The monthly record of employment in the executive service of the United States Government from December 1935 to December 1936, inclusive, is shown in table 10.

Table 10.—Employment in the Executive Service of the U. S. Government, by Months, December 1935 to December 1936 ¹

[Subject to revision]

Month	District of Columbia	Outside District of Columbia	Total	Month	District of Columbia	Outside District of Columbia	Total
1935				1936—Continued			
December.....	112,091	704,135	816,226	June.....	117,470	707,156	824,626
1936				July.....	116,261	714,600	830,861
January.....	111,800	689,499	801,299	August.....	115,807	718,697	834,504
February.....	112,708	687,626	800,334	September.....	115,061	721,093	836,154
March.....	112,739	693,665	806,404	October.....	114,794	726,507	841,301
April.....	115,422	695,345	810,767	November.....	115,185	724,261	839,446
May.....	117,229	700,999	818,228	December.....	116,355	715,131	831,486

¹ Data on number of employees refer to employment on last day of month.

Construction Projects Financed by the Public Works Administration

DETAILS concerning employment, pay rolls, and man-hours worked during December on construction projects financed by Public Works Administration funds are given in table 11, by type of project.

Table 11.—Employment and Pay Rolls on Projects Financed from Public Works Administration Funds, December 1936 ¹

[Subject to revision]

Type of project	Wage earners		Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
	Maximum number employed ²	Weekly average				
Federal projects financed from N. I. R. A. funds						
All projects ³	4 62, 671	57, 073	\$5, 869, 353	7, 415, 869	\$0. 791	\$6, 571, 205
Building construction ⁴	23, 462	20, 018	2, 173, 785	2, 395, 712	. 907	2, 880, 963
Naval vessels.....	13, 503	13, 104	1, 741, 555	2, 184, 364	. 797	800, 441
Public roads ⁵	(⁶)	11, 037	488, 508	1, 003, 800	. 487	860, 000
Reclamation.....	1, 508	1, 389	171, 898	229, 898	. 748	707, 439
River, harbor, and flood control.....	10, 825	9, 555	1, 154, 221	1, 350, 275	. 855	1, 211, 383
Streets and roads.....	1, 383	1, 121	58, 472	130, 845	. 447	67, 019
Water and sewerage.....	384	316	20, 575	40, 058	. 514	12, 571
Miscellaneous.....	569	533	60, 339	80, 917	. 746	31, 389
Non-Federal projects financed from N. I. R. A. funds						
All projects.....	39, 853	33, 321	\$2, 994, 125	3, 388, 535	\$0. 884	\$6, 284, 140
Building construction.....	20, 159	16, 679	1, 486, 102	1, 592, 576	. 933	3, 513, 475
Streets and roads.....	3, 245	2, 529	205, 632	230, 207	. 893	326, 741
Water and sewerage.....	13, 648	11, 708	1, 153, 334	1, 275, 684	. 904	1, 855, 992
Miscellaneous.....	2, 801	2, 408	149, 057	290, 068	. 514	587, 932
Non-Federal "transportation loan" projects financed from N. I. R. A. funds						
All projects.....	1, 226	(⁷)	\$66, 441	108, 721	\$0. 611	(⁷)
Railroad construction.....	120	101	5, 535	10, 505	. 527	0
Railroad car and locomotive shops.....	1, 106	(⁷)	60, 906	98, 216	. 620	(⁷)
Operated by railroads.....	1, 067	971	57, 218	91, 681	. 624	0
Operated by commercial firms.....	39	(⁷)	3, 688	6, 535	. 564	(⁷)
Non-Federal projects financed from E. R. A. A. 1935 funds ⁸						
All projects.....	139, 068	115, 574	\$9, 645, 700	12, 201, 105	\$0. 791	\$17, 897, 642
Building construction.....	82, 277	67, 965	5, 821, 416	6, 741, 737	. 863	9, 772, 167
Electrification.....	698	571	44, 063	59, 733	. 738	494, 283
Heavy engineering.....	2, 114	1, 827	200, 613	236, 726	. 847	767, 827
Reclamation.....	2, 895	2, 701	266, 293	368, 459	. 723	292, 083
River, harbor, and flood control.....	1, 140	921	73, 549	111, 173	. 662	74, 485
Streets and roads.....	17, 166	13, 779	759, 369	1, 436, 668	. 529	1, 649, 909
Water and sewerage.....	31, 905	27, 105	2, 419, 651	3, 179, 079	. 761	4, 735, 961
Miscellaneous.....	873	705	60, 746	67, 530	. 900	110, 927

¹ Data are for the month ending on the 15th.² Maximum number employed during any 1 week of the month by each contractor and Government agency doing force-account work.³ Includes a maximum of 15,777 and an average of 13,738 employees working on low-cost housing projects financed from E. R. A. A. 1935 funds, who were paid \$1,498,902 for 1,680,430 man-hours of labor. Material orders in the amount of \$2,010,136 were placed for these projects. These data are also included in separate tables covering projects financed from The Works Program.⁴ Includes weekly average for public roads.⁵ Estimated by the Bureau of Public Roads.⁶ Not available; average included in total.⁷ Data not available.⁸ These data, excluding figures for projects financed from F. D. A. 1936 funds, are also included in separate tables covering projects financed by The Works Program. These data include a maximum of 149 and an average of 117 employees working on non-Federal projects financed from F. D. A. 1936 funds, who were paid \$7,714 for 8,453 man-hours of labor. Material orders in the amount of \$32,504 were placed for these projects.

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

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

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

Monthly Trend

A summary of employment, pay rolls, and man-hours worked on projects financed from Public Works Administration funds from July 1933 to December 1936 is given in table 12.

Table 12.—Employment and Pay Rolls, July 1933 to December 1936, Inclusive, on Projects Financed from Public Works Administration Funds ¹

[Subject to revision]

Year and month	Maximum number of wage earners ²	Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
July 1933 to December 1936, inclusive ^{3 4}	-----	\$854, 519, 921	1, 294, 017, 130	\$0. 660	\$1, 526, 070, 852
July to December 1933, inclusive ⁴	-----	33, 244, 066	62, 209, 479	. 534	75, 524, 702
January to December 1934, inclusive	-----	308, 311, 143	523, 561, 666	. 589	⁵ 610, 051, 090
January to December 1935, inclusive ⁵	-----	270, 195, 762	391, 579, 803	. 690	⁵ 439, 152, 426
<i>1936 ⁵</i>					
January	197, 820	14, 399, 381	19, 195, 535	. 750	22, 796, 818
February	176, 764	12, 220, 479	16, 404, 771	. 745	23, 460, 743
March	202, 236	13, 981, 176	18, 519, 649	. 755	29, 068, 402
April	264, 427	18, 915, 663	25, 203, 010	. 751	32, 459, 393
May	315, 393	22, 590, 878	30, 377, 869	. 744	⁵ 39, 778, 571
June	349, 572	25, 840, 926	34, 418, 037	. 751	37, 803, 419
July	336, 047	24, 841, 359	32, 749, 131	. 759	40, 589, 226
August	330, 784	24, 676, 121	32, 235, 040	. 766	38, 088, 931
September	311, 361	23, 582, 444	30, 254, 704	. 779	38, 152, 624
October	284, 903	22, 290, 424	28, 140, 040	. 792	34, 144, 005
November	269, 167	20, 854, 480	26, 054, 166	. 800	⁴ 34, 246, 615
December	242, 818	18, 575, 619	23, 114, 230	. 804	30, 752, 987

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

² Maximum number employed during any 1 week of the month by each contractor and Government agency doing force-account work. Includes weekly average for public-road projects.

³ Includes employees working on non-Federal projects and low-cost housing projects financed from E. R. A. A. 1935 funds. These data are also included in separate tables covering projects financed by The Works Program.

⁴ Revised.

⁵ Includes orders placed by railroads for new equipment.

The Works Program

A DETAILED record of employment, pay rolls, and man-hours worked on projects financed by The Works Program in December is shown in table 13, by type of project.

Table 13.—Employment and Pay Rolls on Projects Financed by The Works Program, December 1936 ¹

(Subject to revision)

Type of project	Wage earners		Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
	Maximum number employed ²	Weekly average				
Federal projects						
All projects.....	370,911	331,838	\$18,595,253	37,894,672	\$0.491	\$9,966,206
Building construction.....	49,142	44,574	2,943,644	5,120,066	.575	1,461,343
Electrification.....	4,046	3,781	131,714	301,433	.437	758,243
Forestry.....	30,380	27,669	1,435,698	3,210,154	.447	327,877
Grade-crossing elimination.....	33,219	26,338	1,853,582	3,030,032	.612	2,427,614
Heavy engineering.....	144	137	10,114	11,480	.881	4,526
Hydroelectric power plants ³	1,627	1,627	21,957	87,922	.250	12,716
Plant, crop, and livestock conservation.....	34,875	31,237	1,399,148	4,174,722	.335	29,890
Professional, technical, and clerical.....	18,179	18,124	1,322,395	2,234,214	.592	66,784
Public roads.....	69,772	56,111	2,840,448	6,317,373	.450	2,047,041
Reclamation.....	80,852	78,138	4,028,468	8,878,786	.454	1,215,035
River, harbor, and flood control.....	18,335	15,992	1,510,657	2,116,916	.714	1,263,173
Streets and roads.....	12,475	12,143	299,776	923,787	.325	37,555
Water and sewerage.....	1,855	1,676	73,693	157,473	.468	28,973
Miscellaneous.....	16,010	14,291	723,959	1,330,314	.544	285,436
P. W. A. projects financed from E. R. A. A. 1935 and 1936 funds ⁴						
All projects.....	154,696	129,195	\$11,136,888	13,873,082	\$0.803	\$19,875,274
Building construction.....	97,966	81,626	7,313,546	8,415,551	.869	11,751,151
Electrification.....	698	571	44,063	59,733	.738	494,283
Heavy engineering.....	2,114	1,827	200,613	236,726	.847	767,827
Reclamation.....	2,895	2,701	266,293	368,459	.723	292,083
River, harbor, and flood control.....	1,140	921	73,549	111,173	.662	74,485
Streets and roads.....	17,141	13,760	758,746	1,435,462	.529	1,648,609
Water and sewerage.....	31,869	27,084	2,419,332	3,178,448	.761	4,735,909
Miscellaneous.....	873	705	60,746	67,530	.900	110,927
Projects operated by Works Progress Administration						
All projects.....	2,593,569	-----	\$136,135,774	273,022,576	\$0.499	(⁵)
Conservation.....	129,665	-----	6,326,633	13,800,310	.458	-----
Highway, road, and street.....	933,528	-----	45,927,969	102,745,869	.447	-----
Housing.....	4,882	-----	334,317	517,926	.645	-----
National Youth Administration ⁶	167,567	-----	2,925,952	7,800,338	.375	-----
Professional, technical, and clerical.....	249,249	-----	19,137,018	28,398,052	.674	-----
Public building.....	269,829	-----	13,269,536	21,282,068	.624	-----
Publicly owned or operated utilities.....	200,777	-----	10,742,408	20,618,583	.521	-----
Recreational facilities ⁷	214,792	-----	12,988,959	22,173,390	.586	-----
Sanitation and health.....	66,646	-----	3,119,089	7,199,914	.433	-----
Sewing, canning, gardening, etc.....	288,789	-----	13,975,397	34,193,539	.409	-----
Transportation.....	53,085	-----	3,062,455	5,754,233	.532	-----
Not elsewhere classified.....	74,760	-----	4,327,041	8,538,354	.507	-----

¹ Unless otherwise noted data are for the month ending on the 15th.² Maximum number employed during any 1 week of the month by each contractor and Government agency doing force-account work.³ These data are for projects under construction in Puerto Rico.⁴ Includes data for 138,919 employees working on non-Federal projects and 15,777 employees working on low-cost housing projects. These data are included in tables covering projects under the jurisdiction of P. W. A.⁵ Data on a monthly basis are not available.⁶ These data are for the month ending Nov. 30, 1936, and exclude student-aid projects.⁷ Exclusive of buildings.

Monthly Trend

Employment, pay rolls, and man-hours worked on projects financed by The Works Program from the beginning of the program in July 1935 to December 1936 are given in table 14.

Table 14.—Employment and Pay Rolls July 1935 to December 1936, Inclusive, on Projects Financed by The Works Program ¹

[Subject to revision]

Month and year	Maximum number employed ²	Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
Federal projects					
July 1935 to December 1936, inclusive.....	-----	\$262,008,806	576,810,180	\$0.454	\$176,703,349
July to December 1935.....	-----	36,951,974	80,745,958	.458	34,763,337
1936					
January.....	248,929	11,179,541	25,955,820	.431	8,988,622
February.....	298,589	12,529,207	29,173,914	.429	9,684,578
March.....	325,505	14,431,789	35,243,886	.409	8,028,299
April.....	375,865	16,563,885	38,563,300	.430	12,903,903
May.....	401,298	19,160,510	43,267,437	.443	12,668,052
June.....	453,012	22,657,507	50,680,511	.447	14,431,802
July.....	451,570	22,699,760	48,849,680	.465	16,198,583
August.....	451,960	22,794,588	48,559,862	.469	13,191,899
September.....	439,897	22,585,121	47,786,683	.473	13,095,741
October.....	437,839	21,785,609	47,141,554	.462	12,270,703
November.....	404,671	20,074,062	42,946,903	.467	10,511,624
December.....	370,911	18,595,253	37,894,672	.491	9,966,206
P. W. A. projects financed from E. R. A. A. 1935 and 1936 funds ³					
September 1935 to December 1936, inclusive.....	-----	\$107,317,327	143,400,319	\$0.748	\$214,882,697
September to December 1935.....	-----	883,741	1,326,721	.666	2,061,700
1936					
January.....	23,740	1,128,635	1,621,349	.696	3,632,378
February.....	39,848	1,794,866	2,609,270	.688	8,611,717
March.....	64,223	3,032,280	4,525,546	.670	10,548,343
April.....	112,345	6,346,433	9,211,679	.689	14,725,726
May.....	149,334	9,101,702	13,011,674	.700	20,112,332
June.....	176,184	11,435,825	15,843,765	.722	20,454,214
July.....	188,076	12,277,476	16,574,227	.741	23,404,501
August.....	191,433	12,892,537	17,159,189	.757	24,067,345
September.....	184,518	12,794,471	16,597,561	.771	23,150,164
October.....	171,203	12,356,655	15,818,125	.781	21,896,051
November.....	166,178	12,135,818	15,228,131	.797	22,842,952
December.....	154,696	11,136,888	13,873,082	.803	19,875,274
Projects operated by Works Progress Administration					
August 1935 to December 1936, inclusive.....	-----	\$1,767,465,844	3,846,253,479	\$0.460	⁴ \$521,309,408
August to December 1935.....	-----	170,911,331	367,589,041	.465	-----
1936					
January.....	2,812,391	128,383,000	314,664,210	.408	-----
February.....	2,950,481	137,182,000	332,966,010	.412	-----
March.....	3,095,261	144,471,000	341,539,000	.423	-----
April.....	2,875,299	144,988,000	333,305,740	.435	-----
May.....	2,579,937	132,820,000	297,136,460	.447	-----
June.....	2,395,423	126,253,000	275,661,570	.458	-----
July.....	2,412,462	122,774,427	265,669,182	.462	-----
August.....	2,462,590	124,731,158	247,539,090	.504	-----
September.....	2,560,701	127,380,456	253,720,345	.502	-----
October.....	2,637,742	132,892,258	264,853,832	.502	-----
November.....	2,726,361	138,543,440	278,586,423	.497	-----
December.....	2,593,569	136,135,774	273,022,576	.499	-----

¹ Data are for the month ending on the 15th with exceptions noted in the preceding table.

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

³ These data are included in tables covering projects under the jurisdiction of the Public Works Administration. The data for December include 138,919 employees working on non-Federal projects and 15,777 employees working on low-cost housing projects.

⁴ Data on a monthly basis are not available.

Emergency Conservation Work

STATISTICS concerning employment and pay rolls in emergency conservation work in November and December 1936 are presented in table 15.

Table 15.—Employment and Pay Rolls in Emergency Conservation Work, November and December 1936 ¹

[Subject to revision]

Group	Number of employees		Amount of pay rolls	
	December	November	December	November
All groups.....	376, 953	391, 296	\$18, 112, 149	\$18, 604, 821
Enrolled personnel ²	327, 056	341, 097	10, 183, 844	10, 620, 628
Reserve officers.....	8, 079	8, 159	2, 055, 177	2, 063, 459
Educational advisers ³	2, 179	2, 174	373, 184	372, 430
Supervisory and technical ⁴	⁵ 39, 639	⁶ 39, 866	⁵ 5, 499, 944	⁶ 5, 548, 304

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

² December data include 2,976 enrollees and pay roll of \$62,828 outside continental United States; November, 2,819 enrollees and pay roll of \$56,206.

³ Included in executive service, tables 9 and 10.

⁴ Includes carpenters, electricians, and laborers.

⁵ 37,942 employees and pay roll of \$5,318,635 also included in executive service, tables 9 and 10.

⁶ 38,174 employees and pay roll of \$5,379,003 also included in executive service, tables 9 and 10.

Employment and pay-roll data for emergency conservation workers are collected by the Bureau of Labor Statistics from the War Department, the Department of Agriculture, the Department of Commerce, the Treasury Department, and the Department of the Interior. The monthly pay of the enrolled personnel is distributed as follows: 5.0 percent are paid \$45; 8.0 percent, \$36; and the remaining 87.0 percent, \$30. The enrolled men, in addition to their pay, are provided with board, clothing, and medical services.

Monthly statistics of employment and pay rolls on the emergency conservation program from December 1935 to December 1936, inclusive, are given in table 16.

Table 16.—Employment and Pay Rolls in Emergency Conservation Work, by Months, December 1935 to December 1936 ¹

[Subject to revision]

Month	Number of employees	Monthly pay-roll disbursements	Month	Number of employees	Monthly pay-roll disbursements
<i>1935</i>			<i>1936—Continued</i>		
December.....	509, 126	\$21, 958, 301	June.....	383, 279	\$17, 973, 962
<i>1936</i>			July.....	404, 422	18, 417, 372
January.....	478, 751	21, 429, 044	August.....	383, 554	17, 840, 653
February.....	454, 231	20, 484, 493	September.....	320, 821	16, 367, 897
March.....	356, 273	17, 249, 609	October.....	404, 826	17, 662, 545
April.....	391, 002	18, 063, 534	November.....	391, 296	18, 604, 821
May.....	407, 621	18, 598, 026	December.....	376, 953	18, 112, 149

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

Construction Projects Financed by Reconstruction Finance Corporation

STATISTICS of employment, pay rolls, and man-hours worked on construction projects financed by the Reconstruction Finance Corporation in December are presented in table 17, by type of project.

Table 17.—Employment and Pay Rolls on Projects Financed by the Reconstruction Finance Corporation, by Type of Project, December 1936 ¹

[Subject to revision]

Type of project	Number of wage earners	Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
All projects.....	9, 189	\$1, 106, 816	1, 514, 355	\$0. 731	\$1, 433, 075
Bridges.....	149	16, 104	15, 972	1. 008	8, 436
Building construction ²	1, 026	77, 541	157, 537	.492	157, 148
Reclamation.....	42	3, 820	6, 606	.578	5, 792
Water and sewerage.....	7, 615	968, 788	1, 278, 102	.758	1, 250, 060
Miscellaneous.....	357	40, 563	56, 138	.723	11, 639

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

² Includes 61 employees; pay-roll disbursements of \$3,533; 3,659 man-hours worked; and material orders placed during the month amounting to \$13,082 on projects financed by RFC Mortgage Co.

A monthly summary of employment, pay rolls, and man-hours worked on construction projects financed by the Reconstruction Finance Corporation from December 1935 to December 1936, inclusive, is given in table 18.

Table 18.—Employment and Pay Rolls on Projects Financed by the Reconstruction Finance Corporation, December 1935 to December 1936 ¹

[Subject to revision]

Month	Number of wage earners	Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
<i>1935</i>					
December.....	7, 792	\$870, 129	1, 161, 473	\$0. 749	\$1, 383, 330
<i>1936</i>					
January.....	7, 560	850, 271	1, 093, 350	.778	1, 355, 520
February.....	7, 961	905, 455	1, 179, 431	.768	1, 436, 119
March.....	8, 134	916, 059	1, 193, 145	.768	1, 385, 640
April.....	10, 021	1, 133, 880	1, 479, 182	.767	1, 292, 063
May.....	10, 988	962, 280	1, 244, 097	.773	1, 441, 248
June.....	8, 501	941, 680	1, 252, 193	.752	2, 527, 262
July.....	9, 843	1, 063, 728	1, 436, 201	.741	2, 050, 370
August.....	9, 658	1, 065, 744	1, 441, 791	.739	1, 314, 692
September.....	10, 290	1, 085, 642	1, 510, 109	.719	1, 420, 444
October.....	8, 864	1, 002, 648	1, 347, 317	.744	1, 298, 643
November.....	9, 611	1, 108, 258	1, 502, 460	.738	3, 008, 077
December.....	9, 189	1, 106, 816	1, 514, 355	.731	1, 433, 075

¹ Includes projects financed by RFC Mortgage Co. Data are for month ending on the 15th.

Construction Projects Financed from Regular Governmental Appropriations

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

The following tables present data concerning construction projects for which contracts have been awarded since July 1, 1934. The Bureau does not have statistics covering projects financed from regular governmental appropriations for which contracts were awarded previous to that date.

Data concerning employment, pay rolls, and man-hours worked on construction projects financed from regular governmental appropriations during December are given in table 19, by type of project.

Table 19.—Employment on Construction Projects Financed From Regular Governmental Appropriations, by Type of Project, December 1936 ¹

[Subject to revision]

Type of project	Number of wage earners		Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
	Maximum number employed ²	Weekly average				
All projects.....	³ 144, 274	135, 984	\$13, 491, 223	19, 164, 694	\$0. 704	\$16, 009, 255
Building construction.....	28, 269	25, 283	2, 455, 924	3, 288, 411	. 747	3, 586, 501
Electrification.....	146	87	4, 881	9, 062	. 539	28, 068
Forestry.....	46	43	3, 572	7, 459	. 479	1, 239
Naval vessels.....	37, 002	36, 088	4, 734, 422	5, 391, 645	. 878	4, 080, 005
Public roads ⁴	(⁵)	41, 103	2, 970, 373	5, 143, 068	. 578	5, 229, 230
Reclamation.....	894	864	141, 317	176, 798	. 799	-----
River, harbor, and flood control.....	31, 403	27, 739	2, 874, 746	4, 587, 579	. 627	2, 698, 022
Streets and roads.....	2, 689	2, 448	133, 181	285, 251	. 467	135, 347
Water and sewerage.....	279	164	12, 462	19, 675	. 633	49, 455
Miscellaneous.....	2, 443	2, 165	160, 345	255, 746	. 627	201, 388

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

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

³ Includes weekly average for public roads.

⁴ Estimated by the Bureau of Public Roads.

⁵ Not available; average number included in total.

Employment, pay rolls, and man-hours worked on construction projects financed from regular governmental appropriations from December 1935 to December 1936 are shown, by months, in table 20.

Table 20.—Employment on Construction Projects Financed from Regular Governmental Appropriations, December 1935 to December 1936 ¹

[Subject to revision]

Month	Number of wage earners	Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
December..... 1935	56, 780	\$3, 707, 963	5, 980, 118	\$0. 620	\$6, 155, 840
January..... 1936	46, 895	3, 990, 725	6, 246, 418	. 639	5, 584, 611
February.....	43, 915	3, 619, 025	6, 545, 115	. 653	6, 669, 016
March.....	47, 538	3, 674, 896	5, 814, 569	. 632	7, 185, 019
April.....	60, 107	5, 205, 353	8, 375, 190	. 622	9, 861, 378
May.....	79, 789	6, 242, 763	10, 262, 637	. 608	12, 559, 367
June.....	102, 376	8, 631, 104	13, 692, 884	. 630	12, 347, 453
July.....	137, 475	13, 552, 299	20, 552, 261	. 659	25, 670, 217
August.....	158, 939	14, 663, 201	22, 023, 669	. 666	18, 787, 905
September.....	167, 745	15, 272, 860	23, 044, 847	. 663	21, 301, 074
October.....	168, 657	16, 370, 857	24, 708, 818	. 663	19, 998, 984
November.....	155, 839	14, 307, 158	21, 061, 396	. 679	16, 844, 360
December.....	144, 274	13, 491, 223	19, 164, 694	. 704	16, 009, 255

¹ Data are for the month ending on the 15th.**State-Roads Projects**

A RECORD of employment and pay-roll disbursements in the construction and maintenance of State roads from December 1935 to December 1936 is presented in table 21.

Table 21.—Employment on Construction and Maintenance of State Roads, December 1935 to December 1936 ¹

[Subject to revision]

Month	Number of employees working on—			Total pay roll
	New roads	Maintenance	Total	
December..... 1935	27, 046	121, 690	148, 736	\$6, 139, 581
January..... 1936	14, 358	105, 795	120, 153	7, 481, 502
February.....	10, 256	119, 777	130, 033	7, 572, 614
March.....	8, 150	133, 386	141, 536	7, 689, 770
April.....	11, 339	143, 305	154, 644	8, 918, 024
May.....	16, 566	164, 356	180, 922	10, 560, 866
June.....	20, 773	165, 363	186, 136	11, 488, 253
July.....	21, 744	164, 956	186, 700	11, 839, 215
August.....	26, 810	158, 882	185, 692	11, 937, 585
September.....	34, 459	151, 772	186, 231	11, 806, 481
October.....	34, 136	149, 717	183, 853	11, 566, 892
November.....	27, 988	153, 688	181, 676	11, 330, 509
December.....	21, 394	138, 540	159, 934	10, 000, 371

¹ Excluding employment furnished by projects financed from Public Works Administration funds and Works Progress Administration funds. Data are for the month ending on the 15th.**Material Orders Placed**

THE value of material orders placed on construction projects financed by Federal funds in the fourth quarter of 1936,¹ is presented in table 22.

¹ Unless otherwise specified, data presented in this section are of the 15th of the month.

In the fourth quarter of 1936 on the Public Works Administration program, orders have been placed for materials valued at approximately \$99,145,000. Of this amount, \$30,317,000 has been expended for iron and steel products, \$7,683,000 for cement, \$7,760,000 for forest products, and \$11,243,000 for machinery.

On The Works Program, material orders placed in the fourth quarter of 1936 amounted to \$123,297,000. Previous sections of this report have shown the number of workers employed at the site of construction projects financed from Federal funds. The direct employment, however, is only a partial picture, as the manufacture of the materials used on the projects also creates a large amount of employment.

It is estimated that in fabricating the materials listed in table 22 approximately 961,000 man-months of labor have been, or will be created. This includes only the labor required in the fabrication of material in the form in which it is to be used. No estimate is made of the labor required in producing the raw material or in transporting it to the point of manufacture. In manufacturing structural steel, for example, the only labor included is that occurring in the fabricating mills. No estimate is made for the labor created in mining, smelting, and transporting the ore; nor for the labor in the blast furnaces, the open hearth furnaces, and the blooming mills.

Table 22.—Value of Material Orders Placed on Construction Projects Financed by Federal Funds for the Fourth Quarter of 1936

[Subject to revision]

Type of material	Total	Projects				
		Public Works Administration ¹	Reconstruction Finance Corporation ²	Regular Governmental ³	The Works Program ⁴	
					Federal construction	Operated by W. P. A. ⁵
All materials.....	\$280,686,062	\$99,144,507	\$5,739,795	\$52,852,599	\$32,400,924	\$90,548,237
Textiles and their products.....	⁶ 17,635,431	134,064	333	46,426	43,192	⁶ 17,411,416
Awnings, tents, canvas, etc.....	36,448	19,388	333	5,101	11,626	-----
Carpets and rugs.....	11,183	11,183	-----	-----	-----	-----
Cordage and twine.....	29,854	4,429	-----	16,139	9,286	-----
Cotton goods.....	4,182	3,196	-----	287	699	-----
Felt goods.....	12,812	7,374	-----	4,300	1,138	-----
Jute goods.....	3,330	3,280	-----	-----	50	-----
Linoleum.....	115,249	83,922	-----	14,009	17,318	-----
Sacks and bags.....	6,206	912	-----	3,186	2,108	-----
Upholstering materials, n. e. c.....	175	-----	-----	-----	175	-----
Waste.....	4,576	380	-----	3,404	792	-----
Forest products.....	⁶ 21,704,494	7,760,161	214,709	2,720,816	3,128,553	⁶ 7,880,255
Cork products.....	61,050	50,355	-----	7,001	3,694	-----
Lumber and timber products, n. e. c.....	10,546,727	5,387,087	213,382	2,285,354	2,660,904	-----
Planing-mill products.....	3,164,043	2,274,934	1,327	424,716	463,066	-----
Window and door screens and weatherstrip.....	52,419	47,785	-----	3,745	889	-----

See footnotes at end of table.

Table 22.—Value of Material Orders Placed on Construction Projects Financed by Federal Funds for the Fourth Quarter of 1936—Continued

[Subject to revision]

Type of material	Total	Projects				The Works Program	
		Public Works Administration	Reconstruction Finance Corporation	Regular Governmental		Federal construction	Operated by W. P. A.
Chemicals and allied products.....	\$ 4,368,771	\$890,403	\$160,349	\$398,041		\$689,416	\$2,230,562
Ammunition and related products.....	17,631	17,631					
Chemicals, miscellaneous.....	146,748	13,229		39,094		94,425	
Compressed and liquefied gases.....	89,850	24,649	15,685	12,980		36,536	
Explosives.....	925,857	266,050	143,466	222,909		293,432	
Paints and varnishes.....	2,236,067	568,844	1,198	123,058		265,023	1,277,944
Stone, clay, and glass products.....	\$ 83,313,178	30,435,175	1,536,904	14,900,612		9,436,666	\$ 27,003,821
Asbestos, products, n. e. c.....	107,665	73,970	30,905	2,598		192	
Brick, hollow tile, and other clay products.....	9,760,538	5,522,163	6,379	550,282		364,853	3,316,861
Cement.....	26,276,648	7,682,747	1,281,691	6,317,830		3,453,692	7,540,688
Concrete products.....	10,649,673	5,486,862	7,846	367,712		1,276,986	3,510,267
Crushed stone.....	9,463,315	1,636,204	511	2,594,348		941,573	4,290,679
Glass.....	606,876	469,086	3,048	85,673		49,069	
Lime.....	81,318	54,513	60	8,175		18,570	
Marble, granite, slate, and other stone products.....	3,709,415	2,241,499	238	1,125,356		342,322	
Minerals and earth, ground or otherwise treated.....	46,098	33,918		9,696		2,484	
Sand and gravel.....	17,072,443	4,988,257	203,937	3,637,956		2,775,153	5,467,140
Tiling, floor and wall, and terrazzo.....	1,016,308	850,491	130	81,716		83,971	
Wall plaster, wallboard, insulating board, and floor composition.....	1,644,695	1,395,465	2,159	119,270		127,801	
Iron and steel and their products, not including machinery.....	\$ 62,493,932	30,316,502	1,157,987	9,869,273		7,827,912	\$ 13,322,258
Bolts, nuts, washers, etc.....	625,220	287,087	7,797	186,689		143,647	
Cast-iron pipe and fittings.....	8,329,422	3,843,189	36,643	394,780		259,742	3,795,068
Doors, shutters, and window sash and frames, molding and trim (metal).....	2,545,582	1,796,051	4,344	621,316		123,871	
Forgings, iron and steel.....	875,266	207,944	4,382	505,046		157,894	
Hardware, miscellaneous.....	2,199,990	1,342,470	85,119	389,672		382,729	
Heating and ventilating equipment.....	7,143,813	5,601,320	30,731	447,944		203,842	859,976
Nails and spikes.....	325,834	183,154	3,221	44,279		95,180	
Rail fastenings, excluding spikes.....	51,984	27,632	1,335	22,264		703	
Rails, steel.....	202,484	174,737	16,802	10,102		843	
Steel-works and rolling-mill products, n. e. c.....	5,837,243	3,297,843	127,053	1,463,792		948,555	
Stoves and ranges, other than electric.....	8,790	7,155		1,496		139	
Structural and reinforcing steel.....	25,015,833	10,722,618	775,686	4,650,489		4,896,243	3,970,797
Switches, railway.....	535					535	
Tools, other than machine tools.....	1,575,930	86,003	30,680	283,530		248,206	927,511
Wire products, n. e. c.....	1,464,828	475,579	32,926	635,473		320,850	
Wrought pipe.....	2,522,272	2,263,720	1,218	212,401		44,933	
Nonferrous metals and their products.....	\$ 2,145,885	1,072,559	5,049	238,457		497,972	\$ 331,848
Aluminum manufactures.....	92,135	56,539	342	34,760		494	
Copper products.....	240,508	139,615	1,866	20,112		79,415	
Lead products.....	48,605	44,525		930		3,150	
Nonferrous-metal alloys and products, n. e. c.....	263,496	123,364		131,262		8,870	
Sheet-metal work.....	1,167,094	706,824	3,341	51,176		405,753	
Zinc products.....	2,199	1,692		217		290	

See footnotes at end of table.

Table 22.—Value of Material Orders Placed on Construction Projects Financed by Federal Funds for the Fourth Quarter of 1936—Continued

[Subject to revision]

Type of material	Total	Projects				
		Public Works Administration	Reconstruction Finance Corporation	Regular Governmental	The Works Program	
					Federal construction	Operated by W. P. A.
Machinery, not including transportation equipment.....	\$35,978,657	\$11,242,643	\$1,736,911	\$16,359,187	\$3,359,102	\$3,280,814
Electrical machinery, apparatus, and supplies.....	9,466,041	2,373,501	174,975	4,365,976	1,012,279	1,539,310
Elevators and elevator equipment.....	1,068,042	889,245	5,358	167,961	5,478	-----
Engines, turbines, tractors, and waterwheels.....	5,423,328	1,108,627	189,913	3,571,573	553,215	-----
Foundry and machine shop products, n. e. c.....	16,804,805	5,398,936	1,335,902	6,837,425	1,628,005	1,604,537
Machine tools.....	397,875	161,842	10,076	194,657	31,300	-----
Meters (gas, water, etc.) and gas generators.....	112,474	111,456	-----	-----	1,018	-----
Pumps and pumping equipment.....	2,375,288	1,071,062	20,687	1,157,419	126,120	-----
Refrigerators and refrigerating and ice-making apparatus.....	193,837	127,974	-----	64,176	1,687	-----
Transportation equipment—air, land, and water.....	1,544,896	178,165	64,383	62,158	209,700	1,030,490
Boats, steel and wooden (small).....	18,856	410	-----	17,918	528	-----
Carriages and wagons.....	13,264	12,721	-----	63	480	-----
Locomotives, steam.....	1,000	-----	-----	-----	1,000	-----
Motor vehicles, passenger.....	34,446	11,975	13,409	594	8,468	-----
Motor vehicles, trucks.....	1,476,328	152,057	50,974	43,583	199,224	1,030,490
Railway cars, freight.....	1,002	1,002	-----	-----	-----	-----
Miscellaneous.....	51,500,818	17,114,835	863,170	8,257,629	7,208,411	18,056,773
Belting, miscellaneous.....	11,273	124	225	9,964	960	-----
Coal.....	596,876	35,205	213	142,081	83,524	335,853
Creosote.....	7,783	338	-----	162	7,283	-----
Electric wiring and fixtures.....	5,531,151	3,810,313	104,078	982,332	634,428	-----
Furniture, including store and office fixtures.....	2,716,365	1,715,009	2,026	54,255	54,166	890,909
Instruments, professional and scientific.....	123,506	37,892	-----	28,259	57,355	-----
Mattresses and bed springs.....	19,452	18,494	-----	562	396	-----
Models and patterns.....	3,804	3,514	-----	246	44	-----
Paper products.....	19,906	17,778	-----	1,194	934	-----
Paving materials and mixtures, n. e. c.....	11,135,929	1,482,775	14,964	1,060,967	1,224,263	7,352,960
Petroleum products.....	9,134,640	1,883,698	292,830	2,901,520	2,234,531	1,822,061
Photographic apparatus and materials.....	7,747	4,533	-----	1,870	1,344	-----
Plumbing supplies, n. e. c.....	4,797,373	3,369,486	20,334	364,399	325,885	717,269
Radio apparatus and supplies.....	7,868	4,287	-----	2,961	620	-----
Roofing materials, n. e. c.....	1,344,851	983,303	4,434	127,431	229,683	-----
Rubber goods.....	436,659	59,766	75,139	21,389	106,677	173,688
Steam and other packing, pipe and boiler covering, and gaskets.....	272,709	240,887	87	28,271	3,464	-----
Theatrical scenery and stage equipment.....	40,042	40,042	-----	-----	-----	-----
Window shades and fixtures.....	53,677	48,339	-----	135	5,203	-----
Other materials.....	15,239,207	3,359,052	348,840	2,529,631	2,237,651	6,764,033

¹ Includes material orders placed on P. W. A. projects financed by the Emergency Relief Appropriation Act of 1935.

² Does not include material orders placed on projects for which contracts were awarded before Mar. 15, 1934. Includes projects financed by RFC Mortgage Co.

³ Does not include material orders placed on projects for which contracts were awarded before July 1, 1934.

⁴ Material orders placed on P. W. A. projects, financed by E. R. A. A. 1935, included under P. W. A.

⁵ For quarterly period ending Dec. 31, 1936. Includes National Youth Administration projects for quarterly period ending Nov. 30, 1936.

⁶ Includes material orders placed for projects operated by W. P. A. which are not classified in detail.

The information concerning man-months of labor created in fabricating materials is obtained by sending a questionnaire to each firm receiving an award for materials to be financed from Federal or State funds. The manufacturer is requested to make an estimate of the number of man-hours created in his plant in manufacturing the materials specified in the contract. For materials purchased directly by contractors the Bureau estimates the man-months of labor created. This estimate is based upon the findings of the Census of Manufactures for 1933.

The value of material orders placed on Federal professional, technical, and clerical projects financed by The Works Program, by type of material, for the year 1935 and for the first, second, third, and fourth quarters of 1936 is shown in table 23.

Table 23.—Value of Material Orders Placed on Federal Professional, Technical, and Clerical Projects Financed by The Works Program

[Subject to revision]

Type of material	Year 1935	Year 1936				
		Total	First quarter	Second quarter	Third quarter	Fourth quarter
Total.....	\$329, 212	\$1, 376, 250	\$202, 211	\$419, 501	\$406, 929	\$347, 609
Computing machines.....	23, 505	50, 571	13, 073	14, 219	17, 780	5, 499
Furniture.....	122, 983	80, 699	12, 605	20, 035	34, 985	13, 074
Office supplies.....	68, 184	189, 782	40, 602	51, 364	72, 184	25, 632
Stationery.....	41, 460	33, 289	6, 645	8, 580	5, 925	12, 139
Typewriters.....	28, 881	21, 323	9, 354	6, 260	4, 506	1, 203
Other office machines.....	8, 075	46, 856	9, 334	6, 090	30, 484	948
Other materials.....	15, 525	657, 897	77, 218	201, 134	133, 367	246, 178
Rental of machinery and equipment.....	20, 599	295, 833	33, 380	111, 819	107, 698	42, 936

A cumulative total for rentals and services supplied to work projects operated by the Works Progress Administration from July 1935 to December 1936, inclusive, is shown below, by type of service.

Table 24.—Rentals and Services Supplied to Work Projects Operated by the Works Progress Administration July 1935 to December 1936, Inclusive ¹

[Subject to revision]

Type of service	Total	Type of service	Total
All services.....	\$212, 105, 768	Paving, road building, and other construction equipment.....	\$54, 855, 178
Busses and autos.....	2, 660, 632	Other equipment (including office equipment).....	5, 844, 836
Teams and wagons.....	15, 660, 403	Space rentals and services.....	5, 812, 968
Trucks and vans.....	115, 957, 483	Other services (including utilities) ..	6, 662, 445
Other transportation and travel.....	4, 651, 823		

¹ Data are cumulative to Dec. 31, 1936.

The value of material orders placed on the various programs financed by Federal funds for the year 1935 and for the first, second, third, and fourth quarters of 1936 is given in table 25.

Table 25.—Value of Material Orders Placed on Projects Financed by Federal Funds

[Subject to revision]

Program	Year 1935	Year 1936				
		Total	First quarter	Second quarter	Third quarter	Fourth quarter
Total.....	\$595,760,067	\$1,015,469,234	\$180,993,443	\$254,395,694	\$299,046,426	\$281,033,671
P. W. A., including E. R. A. A.....	439,152,426	401,342,634	75,325,963	110,041,383	116,830,781	99,144,507
R. F. C. ¹	26,371,035	19,963,153	4,177,279	5,260,573	4,785,506	5,739,795
R. G. A. ²	49,430,966	172,818,639	19,438,646	34,768,198	65,759,196	52,852,599
The Works Program:						
Federal construction.....	34,434,125	140,563,762	26,499,288	39,584,256	42,079,294	32,400,924
Professional, technical, and clerical.....	329,212	1,376,250	202,211	419,501	406,929	347,609
Operated by W. P. A.....	46,042,303	279,404,796	55,350,056	64,321,783	69,184,720	90,548,237

¹ Includes RFC Mortgage Co. Does not include orders placed on projects for which contracts were awarded before Mar. 15, 1934.² Does not include orders placed on projects for which contracts were awarded before July 1, 1934.

A summary of the man-months of employment created in the final fabrication of the materials used on the various programs, for the year 1935 and for the first, second, third, and fourth quarters of 1936 is presented in table 26.

Table 26.—Number of Man-Months of Labor Created in Final Fabrication of Materials Purchased from Federal Funds

[Subject to revision]

Program	Year 1935	Year 1936				
		Total	First quarter	Second quarter	Third quarter	Fourth quarter
Total.....	1,840,033	3,486,249	634,069	889,095	1,001,654	961,431
P. W. A., including E. R. A. A.....	1,329,546	1,398,039	259,602	393,169	402,310	342,958
R. F. C. ¹	79,913	65,392	12,034	15,872	20,452	17,034
R. G. A. ²	154,472	538,193	59,528	108,972	202,025	167,668
The Works Program:						
Federal construction.....	109,252	449,972	88,068	126,208	133,417	102,279
Professional, technical, and clerical.....	1,289	5,225	795	1,727	1,427	1,276
Operated by W. P. A.....	165,561	1,029,428	214,042	243,147	242,023	330,216

¹ Includes RFC Mortgage Co. Does not include projects for which contracts were awarded before Mar. 15, 1934.² Does not include projects for which contracts were awarded before July 1, 1934.