

**UNITED STATES DEPARTMENT OF LABOR**

FRANCES PERKINS, *Secretary*

**BUREAU OF LABOR STATISTICS**

ISADOR LUBIN, *Commissioner*

**TREND OF EMPLOYMENT**

**OCTOBER 1933**



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**Prepared by Division of Employment Statistics**

**LEWIS E. TALBERT, Chief**

**UNITED STATES**

**GOVERNMENT PRINTING OFFICE**

**WASHINGTON : 1933**

# TREND OF EMPLOYMENT

October 1933

**T**HE Bureau of Labor Statistics of the United States Department of Labor presents herewith data compiled from pay-roll reports supplied by representative establishments in 89 of the principal manufacturing industries of the country and 16 nonmanufacturing industries, covering the pay period ending nearest the 15th of the month. Additional information is presented concerning employment on public-works projects, public roads, the executive civil service, and class I steam railroads.

## Employment in Selected Manufacturing Industries in October 1933

Comparison of Employment and Pay-Roll Totals in October 1933 with September 1933 and October 1932

**E**MPLOYMENT in manufacturing industries increased 0.1 percent in October 1933 as compared with September 1933 and pay rolls increased 0.6 percent over the month interval, according to reports received from representative establishments in 89 important manufacturing industries of the country. Comparing the changes in employment and pay rolls over the year interval, it is seen that the level of employment in October 1933 is 23.5 percent above the level of October 1932, and pay rolls in October 1933 showed a gain of 34.3 percent over the year interval.

The index of employment in October 1933 was 74, as compared with 73.9 in September 1933, 71.6 in August 1933, and 59.9 in October 1932; the pay-roll index in October 1933 was 53.6, as compared with 53.3 in September 1933, 51.9 in August 1933, and 39.9 in October 1932. The 12-month average for 1926 equals 100.

These changes in employment and pay rolls in October 1933 are based on reports supplied by 18,602 establishments in 89 of the principal manufacturing industries of the United States. These establishments reported 3,358,960 employees on their pay rolls during the pay period ending nearest October 15 whose combined weekly earnings were \$63,195,865. The employment reports received from these cooperating establishments cover approximately 50 percent of the total wage earners in all manufacturing industries of the country.

The increases in employment and pay rolls between September and October 1933, while small, indicate a continuation of the gains in employment and pay roll which occurred during the preceding 6-month interval. The fact that 56 industries, or nearly two thirds of the 89 manufacturing industries surveyed, reported increased employment in October would give reason to expect a greater expansion:

over the month interval than was shown. Those increases, however, were practically offset by the decreases reported in the remaining 33 industries. Among the decreases which largely affected the final result were losses of over 10 percent in employment in automobiles and a similar decline in silk goods where labor difficulties prevailed throughout the period covered. Smaller declines were recorded in iron and steel, boots and shoes, woolen and worsted goods, steam fittings, hardware, plumbers' supplies, and men's clothing, and seasonal shrinkage in the brick, cement, beverage, and ice-cream industries.

The average percentage of change in employment between September and October over the preceding 10-year period has been a decrease of less than one tenth of 1 percent and pay rolls have shown an average gain of 2 percent over this interval. The small percentage gain in employment in October of the present year therefore indicates a change slightly better than average, while the pay-roll increase of 0.6 percent in October of the current year is appreciably less than the average increase shown in October over the preceding 10-year interval.

The gain of 0.1 percent in employment in manufacturing industries between September and October 1933 represents an estimated gain of approximately 7,000 workers over the month interval, and the increase of 0.6 percent in factory pay rolls indicates that the total weekly pay rolls of factory employees in October were approximately two thirds of a million dollars greater than the total weekly pay rolls disbursed in September in all manufacturing industries combined.

The index (74) of factory employment in October shows a gain of 34.3 percent over the employment index (55.1) of March 1933, which was the low point of employment recorded in manufacturing industries. The pay-roll index (53.6) in October is 60.5 percent above the level of the March pay-roll index of 33.4. Measured by these percentage gains there was an increase in employment in manufacturing industries of approximately 1,700,000 workers between March and October 1933 and an increase of \$44,500,000 in weekly wages in October over the total amount paid in 1 week in March 1933.

The most pronounced increases in employment between September and October were seasonal gains in the beet-sugar and radio industries. The beet-sugar industry, marking the beginning of its active season, reported a gain of 171.1 percent in employment and the radio industry reported an increase of 21.6 percent. The locomotive industry showed a gain of over 20 percent in number of workers and the cottonseed oil-cake-meal and fertilizer industries reported seasonal gains of 15.6 percent and 10.6 percent, respectively. Fifteen industries reported gains ranging from 5 percent to 9.8 percent, among which were the agricultural implement, confectionery, machine tool, jewelry, stove, shirt and collar, and cigar and cigarette industries. Other industries of major importance reporting increased employment over the month interval were petroleum refining, electrical machinery, shipbuilding, chemicals, foundries, sawmills, furniture, women's clothing, knit goods, and cotton goods.

Seven of the 14 groups into which the 89 manufacturing industries are classified reported increased employment between September and October. The tobacco group reported the largest percentage gain over the month, 4.6 percent, both the cigar and cigarette and the chewing and smoking tobacco industries reporting increases. The machin-

ery group reported an increase of 3.7 percent, substantial gains being shown in radios, agricultural implements, machine tools, typewriters, electrical machinery, and foundries. The food group reported a gain of 3.6 percent, the beet sugar, confectionery, cane-sugar refining, and flour industries reporting the largest percentage increases. The gain of 2.9 percent in employment in the chemical group was due largely to seasonal increases in fertilizers and cottonseed oil-cake-meal combined with smaller increases in the chemical, petroleum refining, and explosive industries. The paper group reported a gain of 2 percent. The nonferrous metal and the lumber groups reported increases in employment of 1.7 and 1.4 percent, respectively.

The most pronounced decline in employment (7.9 percent) was reported in the transportation group in which the decrease of 10.4 percent in the automobile industry contributed largely to the decline reported in the group. The stone, clay, and glass products group reported a decrease of 2.3 percent, seasonal decreases in the cement and brick industries offsetting small gains reported in the glass, marble, and pottery industries. The decline in employment in 8 of the 13 industries comprising the iron and steel group was reflected in the loss of 2.1 percent in employment in this group over the month interval. The iron and steel industry reported 2.2 percent fewer employees in October than September and larger decreases were shown in the tin can, forging, steam fitting, plumbers' supplies, and hardware industries. The decreases in both the boot and shoe and the leather industries resulted in a decrease of 1.9 percent in the leather group. The decreases in the remaining 3 groups (textiles, rubber, and railroad repair shops) were 0.7 percent or less.

Strikes continued to affect employment in factories in a number of localities. A large number of silk-goods plants reported decreased employment due to strikes in New Jersey and Pennsylvania. These strikes affected a number of plants in the dyeing and finishing textile industry which were forced to close or operate part time due to lack of material. Strikes in establishments in the furniture, flour, knit goods, and leather industries were also reported over the month interval.

A comparison of the indexes of employment and pay roll in manufacturing industries in October 1933 with October 1932 shows that all but 8 of the 89 industries surveyed reported increased employment over the year interval and a similar number reported increased pay-roll totals. Decreases in both items were reported in 6 industries—dyeing and finishing textiles, corsets, millinery, electric-railroad repair shops, cement, and marble-granite-slate. The newspaper and the book and job printing industries each reported small losses in pay rolls coupled with increased employment over the year interval, and the men's furnishings and cigar and cigarette industries reported losses in employment coupled with increased pay-roll totals.

In table 1, which follows, are shown the number of identical establishments reporting in both September and October 1933 in the 89 manufacturing industries, together with the total number of employees on the pay rolls of these establishments during the pay period ending nearest October 15, the amount of their earnings for 1 week in October, the percents of change over the month and year intervals, and the indexes of employment and pay roll in October 1933.

The monthly percents of change for each of the 89 separate industries are computed by direct comparison of the total number of employees and of the amount of weekly pay roll reported in identical establishments for the 2 months considered. The percents of change over the month interval in the several groups and in the total of the 89 manufacturing industries are computed from the index numbers of these groups, which are obtained by weighting the index numbers of the several industries in the groups by the number of employees or wages paid in the industries. The percents of change over the year interval in the separate industries, in the groups and in the totals, are computed from the index numbers of employment and pay-roll totals.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY ROLLS IN MANUFACTURING ESTABLISHMENTS IN OCTOBER 1933 WITH SEPTEMBER 1933 AND OCTOBER 1932

Industry	Estab- lish- ments report- ing in both Sep- tember and October	Employment		Pay-roll totals		Index numbers October 1933 (average 1926=100)			
		Number on pay roll October 1933	Percent of change	Amount of pay roll (1 week) October 1933	Percent of change		Em- ploy- ment	Pay- roll totals	
					Sep- tember to Oc- tober 1933	Oc- tober 1932 to Oc- tober 1933			Sep- tember to Oc- tober 1933
<b>Food and kindred prod- ucts</b>	<b>3, 145</b>	<b>322, 300</b>	<b>+3.6</b>	<b>+19.1</b>	<b>\$6, 528, 685</b>	<b>+2.0</b>	<b>+17.2</b>	<b>103.7</b>	<b>81.7</b>
Baking.....	1, 030	73, 420	+1.2	+10.0	1, 599, 105	+4	+5.8	89.0	72.5
Beverages.....	413	26, 154	-6.5	+107.9	701, 269	-9.8	+131.3	150.9	127.7
Butter.....	307	5, 966	-1.2	+9.5	121, 301	+1.5	+2.8	106.0	80.7
Confectionery.....	302	43, 619	+8.1	+5.2	644, 122	+5.9	+8.8	102.4	80.1
Flour.....	417	17, 646	+2.4	+13.6	362, 281	+6.4	+4.1	96.2	75.3
Ice cream.....	356	11, 377	-8.4	+12.1	284, 990	-5.9	+4.5	76.8	57.5
Slaughtering and meat packing.....	244	112, 501	-8	+26.0	2, 218, 244	-6	+22.9	110.5	87.0
Sugar, beet.....	63	21, 913	+171.1	+16.3	398, 033	+143.9	+29.7	248.8	163.0
Sugar refining, cane.....	13	9, 704	+7.6	+19.8	199, 340	+4.4	+5.1	93.2	68.0
<b>Textiles and their products</b>	<b>3, 316</b>	<b>773, 495</b>	<b>-7</b>	<b>+17.7</b>	<b>11, 820, 893</b>	<b>-1.7</b>	<b>+29.9</b>	<b>87.9</b>	<b>67.7</b>
<b>Fabrics</b>	<b>1, 965</b>	<b>628, 243</b>	<b>-7</b>	<b>+23.0</b>	<b>9, 324, 044</b>	<b>-3</b>	<b>+36.0</b>	<b>93.6</b>	<b>74.4</b>
Carpets and rugs.....	27	16, 632	+5.5	+52.8	322, 810	+7.3	+89.9	82.8	65.7
Cotton goods.....	689	309, 034	+1.2	+35.2	4, 046, 645	+1.0	+61.2	102.6	86.4
Cotton small wares.....	116	11, 621	-2.2	+23.0	133, 573	-1.3	+25.9	99.6	77.4
Dyeing and finishing textiles.....	153	33, 600	-2.3	-2.8	610, 731	+2.5	-6.2	75.7	54.0
Hats, fur-felt.....	36	6, 248	-9.4	+3.6	140, 024	-9.7	+11.4	76.8	57.6
Knit goods.....	466	124, 945	+1.6	+11.3	1, 974, 332	+5.5	+19.2	96.6	79.5
Silk and rayon goods.....	238	50, 798	-10.1	+5	762, 239	-7.2	+12.5	65.2	50.5
Woolen and worsted goods.....	240	75, 365	-3.1	+29.5	1, 283, 690	-4.9	+37.7	99.6	78.1
<b>Wearing apparel</b>	<b>1, 351</b>	<b>145, 252</b>	<b>-4</b>	<b>+3.9</b>	<b>2, 496, 849</b>	<b>-5.2</b>	<b>+16.0</b>	<b>74.3</b>	<b>54.5</b>
Clothing, men's.....	396	70, 604	-2.1	+8.7	1, 215, 149	-2.0	+26.0	77.1	55.3
Clothing, women's.....	593	34, 458	+1.6	+1.6	693, 297	-7.5	+13.3	71.7	54.5
Corsets and allied gar- ments.....	32	5, 453	-9.7	-5.4	84, 166	-8.5	-5.8	95.5	80.6
Men's furnishings.....	73	7, 242	+7.1	-2.5	102, 798	+16.0	+7.7	67.1	48.9
Millinery.....	135	8, 845	-3.6	-9.3	151, 447	-23.5	-12.0	69.6	43.9
Shirts and collars.....	122	18, 650	+5.5	+15.0	249, 992	+15.0	+49.5	73.4	62.8
<b>Iron and steel and their products, not including machinery</b>	<b>1, 419</b>	<b>417, 746</b>	<b>-2.1</b>	<b>+37.9</b>	<b>7, 939, 979</b>	<b>+4</b>	<b>+77.8</b>	<b>73.2</b>	<b>47.3</b>
Bolts, nuts, washers, and rivets.....	79	14, 406	-2.1	+42.5	263, 139	+2	+75.0	88.8	58.8
Cast-iron pipe.....	44	6, 630	+3.1	+18.6	85, 221	+3.9	+27.5	35.1	19.0
Cutlery (not including sil- ver and plated cutlery) and edge tools.....	132	11, 292	+4.8	+22.7	208, 291	+6.4	+24.0	79.0	54.3
Forgings, iron and steel.....	66	7, 214	-7.9	+38.9	134, 941	+1.7	+91.5	76.7	49.6
Hardware.....	99	28, 269	-6.3	+12.4	462, 411	-7.8	+25.9	55.3	30.6
Iron and steel.....	206	254, 363	-2.2	+44.2	5, 012, 991	+4	+113.4	76.4	49.5
Plumbers' supplies.....	73	9, 314	-6.9	+59.4	149, 430	-12.8	+62.0	81.6	46.5
Steam and hot-water heat- ing apparatus and steam fittings.....	98	16, 843	-7.6	+19.6	302, 493	-8.3	+17.8	44.6	27.8

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY ROLLS IN MANUFACTURING ESTABLISHMENTS IN OCTOBER 1933 WITH SEPTEMBER 1933 AND OCTOBER 1932—Continued

Industry	Estab- lish- ments report- ing in both Sep- tember and October	Employment			Pay-roll totals			Index num- bers October 1933 (average 1926=100)	
		Number on pay roll October 1933	Percent of change		Amount of pay roll (1 week) October 1933	Percent of change		Em- ploy- ment	Pay- roll totals
			Sep- tember to Oc- tober 1933	Oc- tober 1932 to Oc- tober 1933		Sep- tember to Oc- tober 1933	Oc- tober 1932 to Oc- tober 1933		
<b>Iron and steel and their products, not including machinery—Continued.</b>									
Stoves.....	162	25,346	+5.6	+49.3	500,488	+12.4	+51.6	82.7	56.4
Structural and ornamental metalwork.....	202	17,045	+1.2	+24.3	314,477	+6.2	+39.8	51.2	33.0
Tin cans and other tinware.....	60	10,238	-8.0	+11.8	191,985	-7.7	+8.6	85.9	51.5
Tools (not including edge tools, machine tools, files, and saws).....	127	8,950	+3.6	+38.0	163,327	+5.0	+53.8	83.1	54.0
Wirework.....	71	7,836	-5	+40.1	150,785	+1.7	+61.3	128.2	103.9
<b>Machinery, not including transportation equip- ment</b>	<b>1,826</b>	<b>359,650</b>	<b>+3.7</b>	<b>+40.4</b>	<b>7,207,029</b>	<b>+6.9</b>	<b>+60.9</b>	<b>64.0</b>	<b>43.6</b>
Agricultural implements.....	79	9,118	+8.5	+94.3	162,663	+14.2	+122.1	37.7	31.1
Cash registers, adding machines, and calculating machines.....	35	16,366	+2.4	+34.3	416,492	+4.6	+44.0	85.7	67.4
Electrical machinery, apparatus and supplies.....	291	112,500	+3.6	+27.6	2,278,501	+4.8	+43.0	62.9	46.9
Engines, turbines, trac- tors, and water wheels.....	92	21,167	+4	+39.2	440,053	+6.7	+46.2	55.4	36.4
Foundry and machine- shop products.....	1,075	125,024	+2.0	+37.3	2,382,122	+4.8	+62.2	60.4	37.8
Machine tools.....	143	15,601	+7.9	+62.2	329,929	+9.9	+93.6	48.0	33.1
Radios and phonographs.....	43	37,148	+21.6	+103.5	725,960	+37.3	+99.0	162.4	125.2
Textile machinery and parts.....	52	10,768	-9	+67.9	235,143	+3	+103.8	90.0	69.3
Typewriters and supplies.....	16	11,988	+6.7	+45.3	236,166	+11.4	+101.6	81.2	61.3
<b>Nonferrous metals and their products</b>	<b>632</b>	<b>108,188</b>	<b>+1.7</b>	<b>+35.2</b>	<b>2,022,181</b>	<b>+4.9</b>	<b>+38.9</b>	<b>73.0</b>	<b>51.4</b>
Aluminum manufactures.....	27	6,949	-1.5	+34.6	124,245	+4.6	+47.8	64.2	43.6
Brass, bronze, and copper products.....	212	39,185	-9	+41.7	736,801	-2.9	+57.1	72.4	49.5
Clocks and watches and time-recording devices.....	27	9,606	+5.4	+26.4	177,741	+13.1	+39.2	52.6	43.7
Jewelry.....	130	9,487	+5.6	+8.6	188,516	+11.0	+6.4	47.8	34.7
Lighting equipment.....	52	3,642	+2.4	+26.3	64,388	+1.4	+26.9	84.1	59.4
Silverware and plated ware.....	56	9,247	+9.8	+21.7	191,859	+20.0	+21.3	77.5	55.2
Smelting and refining— copper, lead, and zinc.....	42	14,140	+2.3	+46.8	267,831	+3.8	+42.2	86.3	55.9
Stamped and enameled ware.....	86	15,932	+9	+37.6	270,800	+6.1	+39.4	83.1	55.9
<b>Transportation equip- ment</b>	<b>424</b>	<b>270,106</b>	<b>-7.9</b>	<b>+44.1</b>	<b>5,697,293</b>	<b>-10.4</b>	<b>+66.8</b>	<b>56.9</b>	<b>41.2</b>
Aircraft.....	25	6,445	+3.6	+48.3	174,599	+7.3	+27.9	247.3	222.6
Automobiles.....	239	221,612	-10.4	+52.4	4,641,844	-13.3	+85.9	58.2	42.2
Cars, electric and steam railroad.....	49	8,876	-2.1	+1.4	177,037	+5.0	+1.6	21.4	12.6
Locomotives.....	11	2,851	+20.9	+47.1	54,008	+28.6	+40.4	20.3	13.2
Shipbuilding.....	100	30,322	+2.8	+16.8	649,805	+3.6	+10.3	79.1	57.8
<b>Railroad repair shops</b>	<b>920</b>	<b>96,065</b>	<b>-2</b>	<b>+4.9</b>	<b>2,435,699</b>	<b>+8.0</b>	<b>+23.5</b>	<b>51.0</b>	<b>44.7</b>
Electric railroad.....	380	19,631	+1.1	-3.5	487,588	+2.4	-3.5	63.2	50.0
Steam railroad.....	540	76,434	-3	+5.9	1,948,111	+8.5	+26.6	50.1	44.3
<b>Lumber and allied prod- ucts</b>	<b>1,610</b>	<b>167,364</b>	<b>+1.4</b>	<b>+32.8</b>	<b>2,541,181</b>	<b>+1.5</b>	<b>+49.5</b>	<b>51.8</b>	<b>33.2</b>
Furniture.....	468	60,655	+1.8	+32.4	975,283	+4.2	+45.3	64.1	41.7
Lumber:									
Millwork.....	494	21,348	-3.0	+17.8	320,347	-2.8	+22.4	40.3	24.6
Sawmills.....	621	83,438	+1.8	+35.7	1,219,705	+4	+62.3	49.0	31.0
Turpentine and rosin.....	27	1,923	+6.5	+42.9	25,846	+11.7	+48.4	64.6	55.8

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY ROLLS IN MANUFACTURING ESTABLISHMENTS IN OCTOBER 1933 WITH SEPTEMBER 1933 AND OCTOBER 1932—Continued

Industry	Estab-lishments reporting in both Sep-tember and October	Employment			Pay-roll totals			Index numbers October 1933 (average 1926=100)	
		Num-ber on pay roll October 1933	Percent of change		Amount of pay roll (1 week) October 1933	Percent of change		Em-ploy-ment	Pay-roll totals
			Sep-tember to Oc-tober 1933	Oc-tober 1932 to Oc-tober 1933		Sep-tember to Oc-tober 1933	Oc-tober 1932 to Oc-tober 1933		
<b>Stone, clay, and glass products</b> .....	<b>1,325</b>	<b>105,477</b>	<b>-2.3</b>	<b>+15.9</b>	<b>1,831,971</b>	<b>+ .9</b>	<b>+19.3</b>	<b>51.7</b>	<b>32.8</b>
Brick, tile, and terra cotta.....	662	20,469	-8.5	+9.4	257,175	-9.4	+13.1	31.5	14.7
Cement.....	131	13,119	-13.7	-11.4	240,984	-4.5	-9.1	38.0	22.9
Glass.....	177	46,900	+1.0	+41.4	874,310	+2.0	+51.3	80.6	59.6
Marble, granite, slate, and other products.....	235	5,982	+1.8	-12.4	117,204	+4.3	-22.7	45.4	27.3
Pottery.....	120	19,007	+3.8	+24.1	342,298	+7.9	+33.9	74.7	50.2
<b>Leather and its manufac-tures</b> .....	<b>506</b>	<b>153,033</b>	<b>-1.9</b>	<b>+7.7</b>	<b>2,646,616</b>	<b>-6.6</b>	<b>+16.8</b>	<b>84.1</b>	<b>62.0</b>
Boots and shoes.....	348	120,806	-2.2	+3.0	2,006,690	-9.1	+11.4	82.5	58.5
Leather.....	158	32,227	-1.2	+29.5	639,926	+ .7	+33.8	90.5	74.1
<b>Paper and printing</b> .....	<b>1,990</b>	<b>248,821</b>	<b>+2.0</b>	<b>+12.8</b>	<b>5,793,681</b>	<b>+1.9</b>	<b>+5.8</b>	<b>90.5</b>	<b>70.6</b>
Boxes, paper.....	327	27,785	+1.8	+25.8	486,336	- .4	+19.1	92.6	76.0
Paper and pulp.....	416	101,951	+1.0	+26.1	1,899,065	- .1	+27.5	94.8	66.3
Printing and publishing: Book and job.....	784	48,202	+1.6	+1.2	1,212,937	+2.1	-2.9	73.5	57.8
Newspapers and pe-riodicals.....	463	70,883	+3.3	+6.9	2,195,343	+3.4	- .1	104.1	85.3
<b>Chemicals and allied prod-ucts</b> .....	<b>1,102</b>	<b>184,419</b>	<b>+2.9</b>	<b>+30.7</b>	<b>4,015,109</b>	<b>+4.9</b>	<b>+27.8</b>	<b>98.7</b>	<b>77.8</b>
Chemicals.....	106	26,471	+2.0	+42.7	632,490	+6.4	+41.0	120.9	87.0
Cottonseed—oil, cake, and meal.....	104	6,677	+15.6	+16.3	71,476	+21.1	+34.3	62.9	60.3
Druggists' preparations.....	50	8,930	+5.0	+12.7	181,208	+6.5	+14.1	80.8	80.3
Explosives.....	31	4,569	+2.1	+59.9	97,945	+7.9	+51.2	105.9	77.4
Fertilizers.....	175	8,957	+10.6	+59.9	115,577	+12.9	+59.5	72.1	48.0
Paints and varnishes.....	363	17,680	- .1	+17.9	371,345	+3.0	+11.7	80.4	61.0
Petroleum refining.....	140	56,180	+3.8	+17.6	1,517,153	+3.9	+14.6	72.7	59.8
Rayon and allied products.....	24	37,681	+ .3	+41.3	668,793	+2.4	+45.7	197.3	172.4
Soap.....	109	17,274	+ .6	+20.4	359,122	+ .8	+9.7	116.7	92.6
<b>Rubber products</b> .....	<b>149</b>	<b>96,368</b>	<b>- .3</b>	<b>+39.4</b>	<b>1,934,556</b>	<b>+1.9</b>	<b>+52.8</b>	<b>89.1</b>	<b>62.8</b>
Rubber boots and shoes.....	9	10,400	+1.9	+31.9	195,221	+4.0	+55.4	68.6	61.7
Rubber goods, other than boots, shoes, tires, and inner tubes.....	98	27,300	+1.9	+43.4	492,991	+7.5	+35.0	120.9	82.6
Rubber tires and inner tubes.....	42	58,668	-2.1	+39.3	1,246,374	-1.3	+62.9	82.2	56.2
<b>Tobacco manufactures</b> .....	<b>238</b>	<b>55,898</b>	<b>+4.6</b>	<b>-2.2</b>	<b>780,962</b>	<b>+6.1</b>	<b>+5.7</b>	<b>72.3</b>	<b>59.0</b>
Chewing and smoking to-bacco and snuff.....	30	9,491	+2.4	+2.1	130,914	(1)	+5.0	91.7	77.0
Cigars and cigarettes.....	208	46,407	+5.1	-2.9	650,048	+7.2	+5.8	69.8	56.8
<b>Total, 89 industries</b> .....	<b>18,602</b>	<b>3,358,960</b>	<b>+ .1</b>	<b>+23.5</b>	<b>63,195,865</b>	<b>+ .6</b>	<b>+34.3</b>	<b>74.0</b>	<b>53.6</b>

<sup>1</sup> Less than one tenth of 1 percent.

### Per Capita Earnings in Manufacturing Industries

PER capita weekly earnings in October 1933 for each of the 89 manufacturing industries surveyed by the Bureau of Labor Statistics and for all industries combined, together with the percents of change in October 1933 as compared with September 1933 and October 1932, are shown in table 2.

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

TABLE 2.—PER CAPITA WEEKLY EARNINGS IN MANUFACTURING INDUSTRIES IN OCTOBER 1933 AND COMPARISON WITH SEPTEMBER 1933 AND OCTOBER 1932

Industry	Per capita weekly earnings in October 1933	Percent of change compared with—	
		September 1933	October 1932
<b>Food and kindred products:</b>			
Baking.....	\$21.78	-0.8	-3.6
Beverages.....	26.81	-3.6	+11.2
Butter.....	20.33	+2.8	-6.0
Confectionery.....	14.77	-2.0	+3.3
Flour.....	20.53	+3.9	-8.0
Ice cream.....	25.05	+2.8	-6.4
Slaughtering and meat packing.....	19.72	+2	-2.4
Sugar, beet.....	18.16	-10.1	+11.4
Sugar refining, cane.....	20.54	-3.0	-11.9
<b>Textiles and their products:</b>			
Fabrics:			
Carpets and rugs.....	19.41	+1.7	+23.8
Cotton goods.....	13.09	-.2	+18.4
Cotton small wares.....	15.80	+9	+2.0
Dyeing and finishing textiles.....	18.18	+4.8	-3.4
Hats, fur-felt.....	22.41	-.3	+7.6
Knit goods.....	15.80	+3.8	+7.1
Silk and rayon goods.....	15.01	+3.2	+12.0
Woolen and worsted goods.....	17.03	-1.9	+5.8
Wearing apparel:			
Clothing, men's.....	17.21	+2	+15.9
Clothing, women's.....	20.12	-8.9	+11.9
Corsets and allied garments.....	15.43	+1.2	-.2
Men's furnishings.....	14.19	-8.3	+10.4
Millinery.....	17.12	-20.6	-3.1
Shirts and collars.....	13.40	+9.0	+29.6
<b>Iron and steel and their products, not including machinery:</b>			
Bolts, nuts, washers, and rivets.....	18.27	+2.4	+22.6
Cast-iron pipe.....	12.85	+8	+7.4
Cutlery (not including silver and plated cutlery) and edge tools.....	18.45	+1.5	+7
Forgings, iron and steel.....	18.71	+10.4	+38.1
Hardware.....	16.36	-1.6	+12.0
Iron and steel.....	19.71	+2.7	+48.4
Plumbers' supplies.....	16.04	-6.4	+1.7
Steam and hot-water heating apparatus and steam fittings.....	17.96	-.8	-1.4
Stoves.....	19.75	+6.5	+1.8
Structural and ornamental metal work.....	18.45	+4.9	+12.6
Tin cans and other tinware.....	18.75	+3	-3.1
Tools (not including edge tools, machine tools, files, and saws).....	18.25	+1.3	+11.5
Wirework.....	19.24	+2.2	+15.3
<b>Machinery, not including transportation equipment:</b>			
Agricultural implements.....	17.84	+5.2	+13.7
Cash registers, adding machines, and calculating machines.....	25.45	+2.2	+7.1
Electrical machinery, apparatus, and supplies.....	20.25	+1.1	+12.3
Engines, turbines, tractors, and water wheels.....	20.79	+6.3	+5.1
Foundry and machine-shop products.....	19.05	+2.7	+18.1
Machine tools.....	21.15	+1.9	+18.8
Radios and phonographs.....	19.54	+12.9	-2.2
Textile machinery and parts.....	21.84	+1.3	+21.3
Typewriters and supplies.....	19.70	+4.5	+39.1
<b>Nonferrous metals and their products:</b>			
Aluminum manufactures.....	17.88	+6.2	+9.6
Brass, bronze, and copper products.....	18.80	-2.0	+11.0
Clocks and watches and time-recording devices.....	18.50	+7.3	+10.1
Jewelry.....	19.87	+5.2	-2.6
Lighting equipment.....	17.68	-1.0	+4
Silverware and plated ware.....	20.75	+9.3	-.3
Smelting and refining—copper, lead, and zinc.....	18.94	+1.4	-2.9
Stamped and enameled ware.....	17.00	+5.1	+1.3
<b>Transportation equipment:</b>			
Aircraft.....	27.09	+3.6	-13.7
Automobiles.....	20.95	-3.2	+22.3
Cars, electric and steam railroad.....	19.95	+7.3	+4
Locomotives.....	18.94	+6.4	-5.4
Shipbuilding.....	21.43	+8	-5.5
<b>Railroad repair shops:</b>			
Electric railroad.....	24.84	+1.3	(1)
Steam railroad.....	25.49	-8.7	+19.2
<b>Lumber and allied products:</b>			
Furniture.....	16.08	+2.4	+9.4
Lumber:			
Millwork.....	15.01	+2	+4.1
Sawmills.....	14.62	-1.3	+18.6
Turpentine and rosin.....	13.44	+4.8	+3.7
<b>Stone, clay, and glass products:</b>			
Brick, tile, and terra cotta.....	12.56	-1.1	+3.2
Cement.....	18.37	+10.7	+2.1
Glass.....	18.64	+9	+6.7

(1) No change.

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TABLE 2.—PER CAPITA WEEKLY EARNINGS IN MANUFACTURING INDUSTRIES IN OCTOBER 1933 AND COMPARISON WITH SEPTEMBER 1933 AND OCTOBER 1932—Con\*

Industry	Per capita weekly earnings in October 1933	Percent of change compared with—	
		September 1933	October 1932
Stone, clay, and glass products—Continued.			
Marble, granite, slate, and other products.....	\$19.59	+2.4	-11.7
Pottery.....	18.01	+3.9	+7.9
Leather and its manufactures:			
Boots and shoes.....	16.61	-7.1	+8.0
Leather.....	19.86	+2.0	+3.5
Paper and printing:			
Boxes, paper.....	17.50	-2.2	-5.3
Paper and pulp.....	18.63	-1.1	+9
Printing and publishing:			
Book and job.....	25.16	+4	-4.0
Newspapers and periodicals.....	30.97	+1	-7.1
Chemicals and allied products:			
Chemicals.....	23.89	+4.4	-1.0
Cottonseed oil, cake, and meal.....	10.70	+4.6	+15.7
Druggists' preparations.....	20.29	+1.4	+1.4
Explosives.....	21.44	+5.8	+8.0
Fertilizers.....	12.90	+2.1	+4
Paints and varnishes.....	21.00	+3.1	-5.1
Petroleum refining.....	27.01	+1	-2.3
Rayon and allied products.....	17.75	+2.1	+2.7
Soap.....	20.79	+2	-9.2
Rubber products:			
Rubber boots and shoes.....	18.77	+2.0	+17.4
Rubber goods, other than boots, shoes, tires, and inner tubes.....	18.06	+5.5	-5.7
Rubber tires and inner tubes.....	21.24	+7	+16.5
Tobacco manufactures:			
Chewing and smoking tobacco and snuff.....	13.79	-2.3	+2.8
Cigars and cigarettes.....	14.01	+2.0	+9.0
Total, 89 industries.....	18.81	<sup>2</sup> +4	<sup>2</sup> +8.7

\* Weighted.

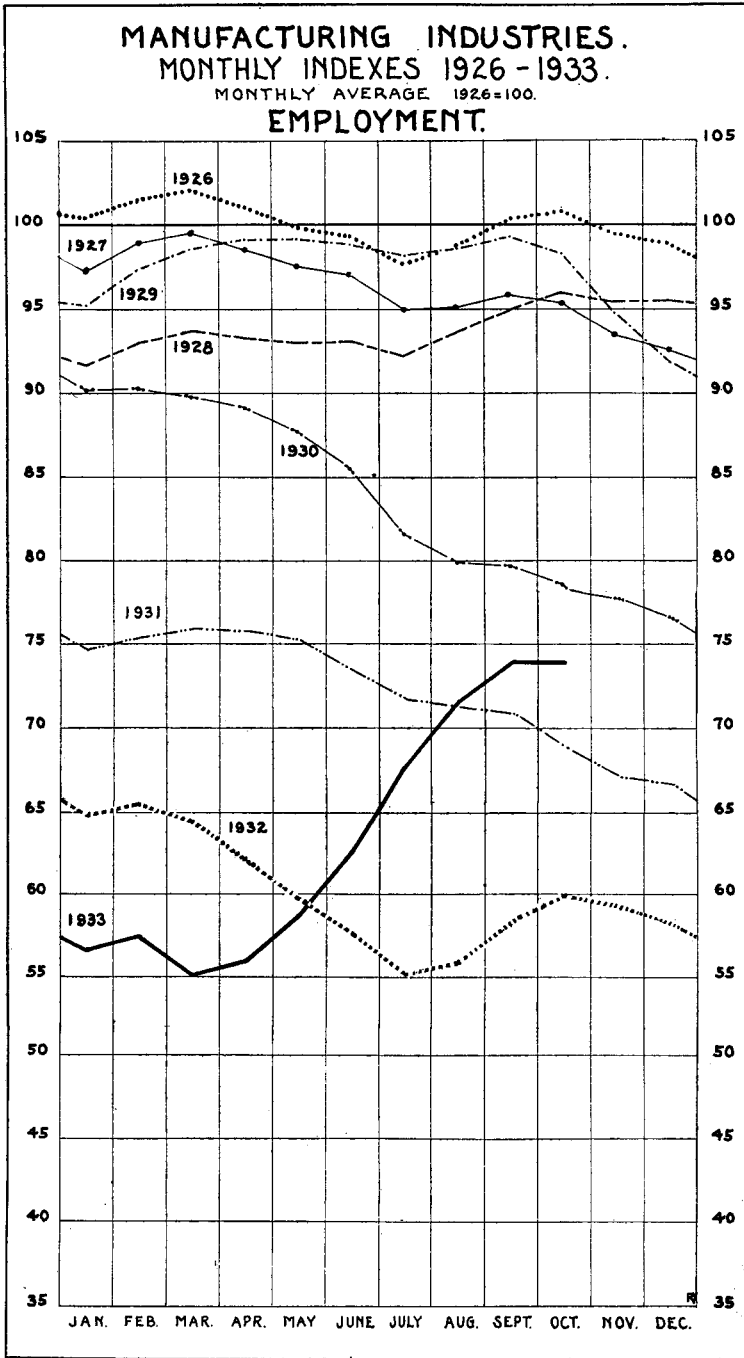
### General Index Numbers of Employment and Pay-Roll Totals in Manufacturing Industries

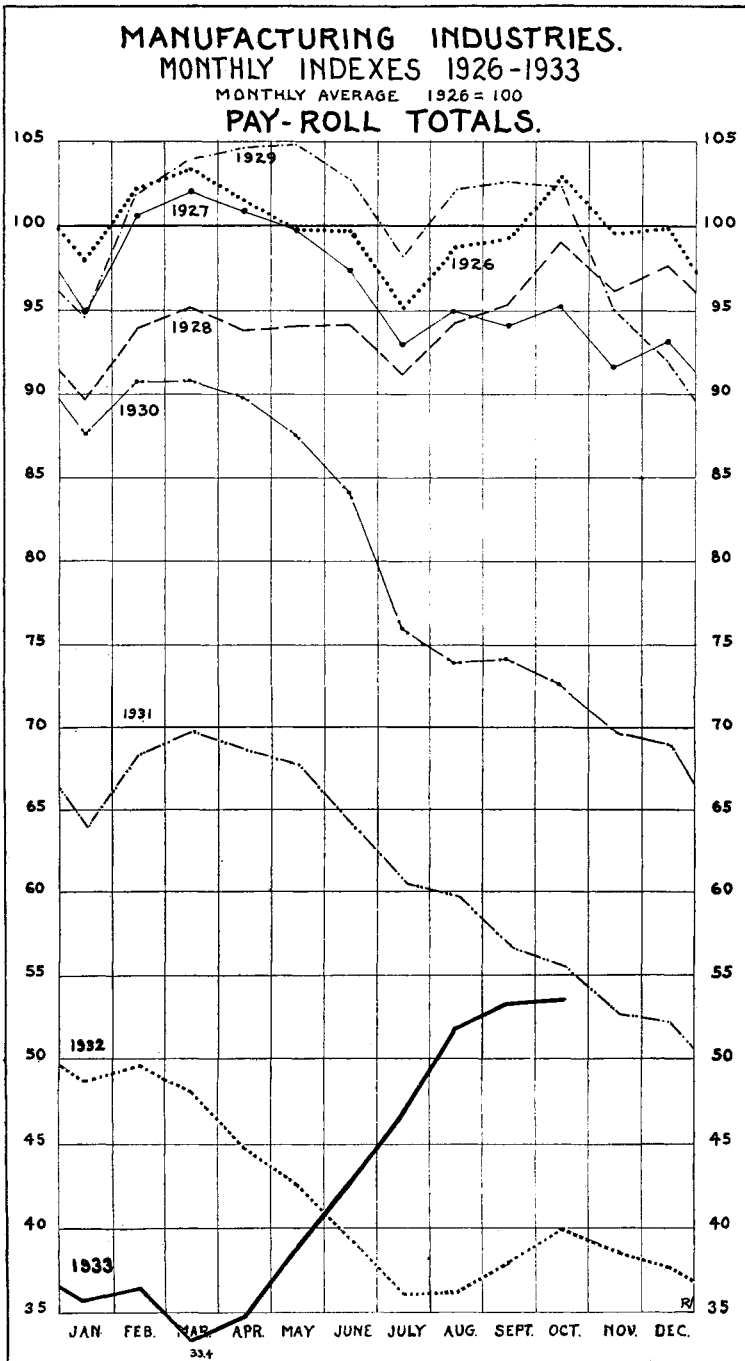
GENERAL index numbers of employment and pay-roll totals in manufacturing industries by months, from January 1926 to October 1933, together with average indexes for each of the years from 1926 to 1932 and for the 10-month period, January to October 1933, inclusive, are shown in the following table. In computing these general indexes the index numbers of each of the separate industries are weighted according to their relative importance in the total. Following this table are two charts prepared from these general indexes showing the course of employment and pay rolls from January 1926 to October 1933, inclusive.

TABLE 3.—GENERAL INDEXES OF EMPLOYMENT AND PAY ROLLS IN MANUFACTURING INDUSTRIES, JANUARY 1926 TO OCTOBER 1933  
[12-month average, 1926=100]

Month	Employment								Pay rolls							
	1926	1927	1928	1929	1930	1931	1932	1933	1926	1927	1928	1929	1930	1931	1932	1933
January.....	100.4	97.3	91.6	95.2	90.7	74.6	64.8	56.6	98.0	94.9	89.6	94.5	88.1	63.7	48.6	35.8
February.....	101.5	99.0	93.0	97.4	90.9	75.3	65.6	57.5	102.2	100.6	93.9	101.8	91.3	68.1	49.6	36.4
March.....	102.0	99.5	93.7	98.6	90.5	75.9	64.5	55.1	103.4	102.0	95.2	103.9	91.6	69.6	48.2	33.4
April.....	101.0	98.6	93.3	99.1	89.9	75.7	62.2	56.0	101.5	100.8	93.8	104.6	90.7	68.5	44.7	34.9
May.....	99.8	97.6	93.0	99.2	88.6	75.2	59.7	58.7	99.8	99.8	94.1	104.8	88.6	67.7	42.5	38.9
June.....	99.3	97.0	93.1	98.8	86.5	73.4	57.5	62.8	99.7	97.4	91.2	102.8	85.2	63.8	39.3	43.1
July.....	97.7	95.0	92.2	98.2	82.7	71.7	55.2	67.3	95.2	93.0	91.2	98.2	77.0	60.3	36.2	46.5
August.....	98.7	95.1	92.6	98.3	81.0	71.2	56.0	71.6	98.7	95.0	94.2	102.1	75.0	59.7	36.3	51.9
September.....	100.3	95.8	95.0	99.3	80.9	70.0	58.5	73.9	99.3	94.1	95.4	102.6	75.4	56.7	38.1	53.3
October.....	100.3	95.3	95.9	98.4	79.9	68.9	59.9	74.0	102.9	95.2	99.0	102.4	74.0	55.3	39.9	53.6
November.....	99.5	93.5	95.4	95.0	77.9	67.1	59.4	-----	99.6	91.6	96.1	95.4	69.6	52.5	38.6	-----
December.....	98.9	92.6	95.5	92.3	76.6	66.7	58.3	-----	99.8	93.2	97.7	92.4	68.8	52.2	37.7	-----
Average.....	100.0	96.4	93.8	97.5	84.7	72.2	60.1	63.4	100.0	96.5	94.5	100.5	81.3	61.5	41.6	42.8

<sup>1</sup> Average for 10 months.





## Time Worked in Manufacturing Industries in October 1933

REPORTS as to working time in October were received from 14,883 establishments in 89 manufacturing industries. Two percent of these establishments were idle, 70 percent operated on a full-time basis, and 28 percent worked on a part-time schedule.

An average of 93 percent of full-time operation in October was shown by reports received from all the operating establishments included in table 4. The establishments working part time in October averaged 76 percent of full-time operation.

TABLE 4.—PROPORTION OF FULL TIME WORKED IN MANUFACTURING INDUSTRIES BY ESTABLISHMENTS REPORTING IN OCTOBER 1933

Industry	Establishments reporting—		Percent of establishments operating—		Average percent of full time reported by—	
	Total number	Percent idle	Full time	Part time	All operating establishments	Establishments operating part time
<b>Food and kindred products</b> .....	<b>2,665</b>	<b>1</b>	<b>77</b>	<b>22</b>	<b>96</b>	<b>80</b>
Baking.....	937	(1)	84	15	98	87
Beverages.....	301	1	59	41	91	78
Butter.....	250	2	65	33	93	78
Confectionery.....	263	2	70	27	94	77
Flour.....	381	(1)	87	13	96	70
Ice cream.....	264	2	72	27	95	81
Slaughtering and meat packing.....	198	—	77	23	96	84
Sugar, beet.....	60	—	98	2	100	80
Sugar refining, cane.....	11	—	64	36	90	73
<b>Textiles and their products</b> .....	<b>2,695</b>	<b>4</b>	<b>81</b>	<b>15</b>	<b>95</b>	<b>71</b>
Fabrics:						
Carpets and rugs.....	20	10	85	5	97	40
Cotton goods.....	644	1	83	16	95	70
Cotton small wares.....	99	2	70	28	92	74
Dyeing and finishing textiles.....	130	5	84	12	97	73
Hats, fur-felt.....	20	—	30	70	82	74
Knit goods.....	419	1	92	7	99	79
Silk and rayon goods.....	209	21	72	7	98	76
Woolen and worsted goods.....	230	3	83	14	96	69
Wearing apparel:						
Clothing, men's.....	286	3	81	15	96	71
Clothing, women's.....	374	6	76	18	93	65
Corsets and allied garments.....	24	4	46	50	91	82
Men's furnishings.....	55	4	58	38	92	80
Millinery.....	89	—	81	19	93	61
Shirts and collars.....	96	2	85	13	97	75
<b>Iron and steel and their products, not including machinery</b> .....	<b>1,130</b>	<b>2</b>	<b>50</b>	<b>48</b>	<b>87</b>	<b>74</b>
Bolts, nuts, washers, and rivets.....	68	1	43	57	84	71
Cast-iron pipe.....	41	20	17	63	67	59
Cutlery (not including silver and plated cutlery) and edge tools.....	113	1	36	63	84	76
Forgings, iron and steel.....	41	—	29	71	83	76
Hardware.....	77	—	61	39	90	74
Iron and steel.....	133	8	67	25	93	74
Plumbers' supplies.....	56	—	34	66	80	70
Steam and hot-water heating apparatus and steam fittings.....	87	5	41	54	81	67
Stoves.....	144	—	64	36	92	78
Structural and ornamental metal work.....	158	2	69	29	95	82
Tin cans and other tinware.....	55	—	51	49	89	78
Tools (not including edge tools, machine tools, files, and saws).....	108	1	29	70	81	74
Wirework.....	49	—	41	59	86	76
<b>Machinery, not including transportation equipment</b> .....	<b>1,491</b>	<b>1</b>	<b>62</b>	<b>37</b>	<b>91</b>	<b>74</b>
Agricultural implements.....	46	—	80	20	97	83
Cash registers, adding machines, and calculating machines.....	25	4	44	52	89	78
Electrical machinery, apparatus, and supplies.....	242	—	69	31	95	84
Engines, turbines, tractors, and water wheels.....	71	1	34	65	80	70
Foundry and machine-shop products.....	901	1	62	37	90	72
Machine tools.....	124	1	58	41	88	71

<sup>1</sup> Less than one half of 1 percent.

TABLE 4.—PROPORTION OF FULL TIME WORKED IN MANUFACTURING INDUSTRIES BY ESTABLISHMENTS REPORTING IN OCTOBER 1933—Continued

Industry	Establishments reporting—		Percent of establishments operating—		Average percent of full time reported by—	
	Total number	Percent idle	Full time	Part time	All operating establishments	Establishments operating part time
<b>Machinery—Continued.</b>						
Radios and phonographs.....	38	-----	87	13	98	82
Textile machinery and parts.....	37	-----	54	46	91	81
Typewriters and supplies.....	7	-----	71	29	97	91
<b>Nonferrous metals and their products</b>	<b>529</b>	<b>1</b>	<b>49</b>	<b>50</b>	<b>88</b>	<b>77</b>
Aluminum manufactures.....	22	-----	36	64	85	77
Brass, bronze, and copper products.....	187	1	56	43	89	76
Clocks and watches and time-recording devices.....	20	-----	15	85	81	78
Jewelry.....	110	3	30	67	87	81
Lighting equipment.....	43	-----	30	70	82	74
Silverware and plated ware.....	48	2	42	56	84	71
Smelting and refining—copper, lead, and zinc.....	24	4	79	17	96	75
Stamped and enameled ware.....	75	-----	80	20	95	77
<b>Transportation equipment</b>	<b>327</b>	<b>2</b>	<b>72</b>	<b>27</b>	<b>95</b>	<b>76</b>
Aircraft.....	25	-----	72	28	95	82
Automobiles.....	163	-----	83	17	98	72
Cars, electric and steam railroad.....	39	8	13	79	78	74
Locomotives.....	7	-----	29	71	77	67
Shipbuilding.....	93	2	80	18	98	88
<b>Railroad repair shops</b>	<b>718</b>	<b>(1)</b>	<b>47</b>	<b>53</b>	<b>90</b>	<b>81</b>
Electric railroad.....	297	-----	74	26	96	84
Steam railroad.....	421	<b>(1)</b>	28	72	86	81
<b>Lumber and allied products</b>	<b>1, 271</b>	<b>1</b>	<b>73</b>	<b>25</b>	<b>94</b>	<b>76</b>
Furniture.....	393	1	85	13	97	76
Lumber:						
Millwork.....	375	2	67	31	93	79
Sawmills.....	483	1	71	29	92	74
Turpentine and rosin.....	20	10	20	70	84	80
<b>Stone, clay, and glass products</b>	<b>764</b>	<b>12</b>	<b>59</b>	<b>29</b>	<b>91</b>	<b>74</b>
Brick, tile, and terra cotta.....	230	21	60	19	92	67
Cement.....	88	19	63	18	90	58
Glass.....	151	3	82	15	97	83
Marble, granite, slate, and other products.....	193	9	26	64	84	77
Pottery.....	102	3	81	16	95	70
<b>Leather and its manufactures</b>	<b>413</b>	<b>2</b>	<b>84</b>	<b>14</b>	<b>96</b>	<b>71</b>
Boots and shoes.....	284	2	82	16	95	70
Leather.....	129	1	88	11	97	77
<b>Paper and printing</b>	<b>1, 701</b>	<b>(1)</b>	<b>80</b>	<b>20</b>	<b>96</b>	<b>78</b>
Boxes, paper.....	272	-----	78	22	95	78
Paper and pulp.....	334	1	67	32	92	76
Printing and publishing:						
Book and job.....	688	<b>(1)</b>	83	16	96	75
Newspapers and periodicals.....	407	-----	86	14	98	88
<b>Chemicals and allied products</b>	<b>845</b>	<b>1</b>	<b>69</b>	<b>30</b>	<b>94</b>	<b>80</b>
Chemicals.....	69	1	90	9	99	86
Cottonseed oil, cake, and meal.....	66	-----	80	20	93	65
Druggists' preparations.....	28	-----	50	50	90	81
Explosives.....	14	-----	29	71	86	81
Fertilizers.....	161	1	97	2	100	80
Paints and varnishes.....	308	1	49	50	90	81
Petroleum refining.....	98	2	90	8	99	91
Rayon and allied products.....	14	-----	93	7	99	80
Soap.....	87	-----	53	47	91	80
<b>Rubber products</b>	<b>125</b>	<b>-----</b>	<b>44</b>	<b>56</b>	<b>87</b>	<b>76</b>
Rubber boots and shoes.....	9	-----	89	11	99	90
Rubber goods, other than boots, shoes, tires, and inner tubes.....	85	-----	31	69	84	77
Rubber tires and inner tubes.....	31	-----	68	32	92	74
<b>Tobacco manufactures</b>	<b>209</b>	<b>6</b>	<b>54</b>	<b>40</b>	<b>89</b>	<b>75</b>
Chewing and smoking tobacco and snuff.....	28	4	50	46	89	76
Cigars and cigarettes.....	181	7	55	39	89	74
<b>Total, 89 Industries</b>	<b>14, 883</b>	<b>2</b>	<b>70</b>	<b>28</b>	<b>93</b>	<b>76</b>

<sup>1</sup> Less than one half of 1 percent.

## Employment in Nonmanufacturing Industries in October 1933

**E**MPLOYMENT increased in October as compared with September 1933 in 10 of the 15 nonmanufacturing industries appearing in the following table, and increased pay-roll totals were reported in 12 of these 15 industries. Data for the building-construction industry are not presented here but are shown in more detail under the section "Building construction."

The estimated gains in employment in 10 of these 15 nonmanufacturing industries more than offset the declines in the remaining 5 industries. Reports from retail-trade establishments indicate an estimated gain of approximately 117,000 workers in that industry between September and October.

The wholesale-trade industry showed an increase of approximately 13,000 workers and the crude-petroleum-producing industry reported an estimated expansion of approximately 7,000 workers over the month interval. Employment gains in the power and light group were estimated at 6,000. The number returned to employment in the telephone and telegraph, electric-railroad, anthracite-mining, metalliferous-mining, and quarrying and nonmetallic-mining industries was smaller.

The decrease of 28.1 percent in the canning and preserving industry represents an estimated drop of over 55,000 employees between September and October. This decrease, of course, is expected following the peak month of September. The bituminous-coal-mining industry, due largely to strikes in certain localities, also reported a sharp decline. The decreases in number of workers in the remaining three industries (hotels, laundries, and dyeing and cleaning) were much less pronounced.

The crude-petroleum-producing industry reported the largest percentage gains in both items, 6.7 percent in employment and 12.8 percent in pay rolls. The metalliferous-mining industry reported an increase of 4.6 percent in employment over the month interval, and retail-trade establishments showed a gain of 4.2 percent. The power and light industry reported an increase of 2.4 percent in number of workers between September and October, wholesale-trade establishments reported a gain of 1.7 percent, electric-railroad and motor-bus operation showed an increase of 1.4 percent, and the quarrying and nonmetallic-mining industry reported a gain of 1.1 percent. The increases in employment in the remaining four industries in which increased employment was reported were as follows: Telephone and telegraph, 0.5 percent; banks, brokerage, insurance, real estate, 0.4 percent; and anthracite mining, 0.2 percent.

In the five industries in which decreased employment was reported over the month interval, the most pronounced decline was a seasonal decrease of 28.1 percent in the canning and preserving industry, which reached its peak of employment in September and regularly shows a sharp decline in October. Employment in the bituminous-coal-mining industry was affected by strikes in various localities, the industry reporting a decline of 5.3 percent. Increased earnings, however, in a large number of mines not affected by the labor disturbances resulted in a net decline of only one tenth of 1 percent in weekly pay rolls over the month interval. The hotel industry reported a falling off of 2.1 percent in employment in October due entirely to the closing

of seasonal resort hotels, which were open during the first half of September and were closed in October. The laundry industry reported 1.6 percent fewer employees in October than in September, and the dyeing and cleaning industry reported a decrease of 0.3 percent.

With the exception of 3 industries (telephone and telegraph, electric-railroad and motor-bus operation, and anthracite mining), each of these 15 nonmanufacturing industries reported more employees on their pay rolls in October 1933 than in October 1932.

In the following table are presented employment and pay-roll data for the nonmanufacturing industries surveyed, exclusive of building construction:

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY ROLLS IN NONMANUFACTURING ESTABLISHMENTS IN OCTOBER 1933 WITH SEPTEMBER 1933 AND OCTOBER 1932

Industrial group	Estab-lishments reporting in both Sep-tember and Oc-tober 1933	Employment			Pay-roll totals			Index num-bers, October 1933 (average 1929=100)	
		Number on pay roll Oc-tober 1933	Percent of change		Amount of pay roll (1 week) Oc-tober 1933	Percent of change		Em-ploy-ment	Pay-roll totals
			Sep-tember to Oc-tober 1933	Oc-tober 1932 to Oc-tober 1933		Sep-tember to Oc-tober 1933	Oc-tober 1932 to Oc-tober 1933		
Coal mining:									
Anthracite.....	159	77,833	+0.2	-11.0	\$2,450,825	+1.5	-7.6	56.9	61.6
Bituminous.....	1,514	210,835	-5.3	+1.5	3,514,092	-1	+16.7	68.0	44.1
Metalliferous mining.....	297	27,974	+4.6	+33.4	573,642	+8.5	+43.9	40.7	25.9
Quarrying and nonmetallic mining.....	1,202	36,894	+1.1	+1.5	566,803	+6.4	+3.7	53.2	31.2
rude petroleum producing..	260	29,053	+6.7	+24.3	804,187	+12.8	+17.9	70.6	50.1
Public utilities:									
Telephone and telegraph..	8,294	246,416	+5	-9.8	6,504,292	+3.8	-11.5	68.7	67.0
Power and light.....	3,132	204,268	+2.4	+2.9	5,978,638	+6.1	+2.4	82.2	76.2
Electric-railroad and motor-bus operation and maintenance.....	557	133,244	+1.4	-2.4	3,601,938	+3.6	-2.8	70.6	59.8
Trade:									
Wholesale.....	3,039	91,276	+1.7	+7.3	2,447,059	+6.0	+3.3	83.5	66.0
Retail.....	18,588	437,841	+4.2	+10.2	8,597,146	+4.4	+7.7	89.6	72.3
Hotels (cash payments only) <sup>1</sup> .....	2,706	140,128	-2.1	+2.1	1,790,048	+1.0	-4.1	77.0	56.2
Canning and preserving.....	888	96,778	-28.1	+55.7	1,044,743	-31.4	+68.1	126.3	87.1
Laundries.....	965	57,152	-1.6	+6	863,414	-1.5	-2.5	78.0	59.7
Dyeing and cleaning.....	377	11,863	-3	+7.4	208,481	+5	+3.1	88.4	60.6
Banks, brokerage, insurance, and real estate.....	4,569	178,777	+4	+8	5,790,015	+2	-1.9	99.4	84.7

<sup>1</sup> The additional value of board, room, and tips cannot be computed.

<sup>2</sup> Weighted.

Per capita weekly earnings in October 1933 for 15 nonmanufacturing industries included in the Bureau's monthly trend-of-employment survey, together with the percents of change in October 1933 as compared with September 1933 and October 1932, are given in the table following. These per capita weekly earnings must not be confused with full-time weekly rates of wages; they are per capita weekly earnings computed by dividing the total amount of pay roll for the week by the total number of employees (part-time as well as full-time workers).

TABLE 2.—PER CAPITA WEEKLY EARNINGS IN 15 NONMANUFACTURING INDUSTRIES IN OCTOBER 1933 AND COMPARISON WITH SEPTEMBER 1933 AND OCTOBER 1932

Industrial group	Per capita weekly earnings in October 1933	Percent of change October 1933 compared with—	
		September 1933	October 1932
Coal mining:			
Anthracite.....	\$31.49	+1.3	+3.7
Bituminous.....	16.67	+5.5	+15.1
Metalliferous mining.....	20.51	+3.8	+7.8
Quarrying and nonmetallic mining.....	15.36	+5.2	+2.1
Crude-petroleum producing.....	27.68	+5.8	-5.1
Public utilities:			
Telephone and telegraph.....	26.40	+3.3	-1.8
Power and light.....	29.27	+3.6	-4
Electric-railroad and motor-bus operation and maintenance.....	27.03	+2.2	-5
Trade:			
Wholesale.....	26.81	+4.3	-3.8
Retail.....	19.64	+3	-2.2
Hotels (cash payments only) <sup>1</sup> .....	12.77	+3.2	-6.0
Canning and preserving.....	10.80	-4.4	+8.0
Laundries.....	15.11	+1	-3.2
Dyeing and cleaning.....	17.57	+8	-3.9
Banks, brokerage, insurance, and real estate.....	32.39	<sup>2</sup> -2	<sup>2</sup> -2.6

<sup>1</sup> The additional value of board, room, and tips cannot be computed.

<sup>2</sup> Weighted.

### Indexes of Employment and Pay-Roll Totals for Nonmanufacturing Industries

INDEX numbers of employment and pay-roll totals for 15 non-manufacturing industries are presented in the following table. These index numbers show the variation in employment and pay rolls by months, from January 1930 to October 1933, in all nonmanufacturing industries with the exception of the laundry, dyeing and cleaning, and the banks, brokerage, insurance, and real-estate industries for which information over the entire period is not available. The Bureau has secured data concerning employment and pay rolls for the index base year 1929 from establishments in these industries and has computed index numbers for those months for which data are available from the Bureau's files. These indexes are shown in this tabulation.



TABLE 3.—INDEXES OF EMPLOYMENT AND PAY ROLLS FOR **NONMANUFACTURING** INDUSTRIES, JANUARY TO DECEMBER 1930, 1931, AND 1932, AND JANUARY TO OCTOBER 1933

[12-month average, 1929=100]

Month	Anthracite mining								Bituminous-coal mining							
	Employment				Pay rolls				Employment				Pay rolls			
	1930	1931	1932	1933	1930	1931	1932	1933	1930	1931	1932	1933	1930	1931	1932	1933
January.....	102.1	90.6	76.2	52.5	105.8	89.3	61.5	43.2	102.5	93.9	80.8	69.8	101.4	73.3	47.0	36.1
February.....	106.9	89.5	71.2	58.7	121.5	101.9	57.3	56.8	102.4	91.5	77.4	69.3	102.1	68.3	47.0	37.2
March.....	82.6	82.0	73.7	54.6	78.5	71.3	61.2	48.8	98.6	88.8	75.2	67.6	86.4	65.2	46.8	30.7
April.....	84.1	85.2	70.1	51.6	75.0	75.2	72.0	37.4	94.4	85.9	65.5	63.7	81.7	58.6	33.9	26.6
May.....	93.8	80.3	66.9	43.2	98.8	76.1	58.0	30.0	82.4	62.6	61.2	77.5	54.4	30.7	26.9	
June.....	90.8	76.1	53.0	39.5	94.3	66.7	37.4	34.3	88.4	78.4	60.5	61.3	75.6	52.4	27.3	29.2
July.....	91.6	65.1	44.5	43.8	84.0	53.7	34.5	38.2	88.0	76.4	58.6	63.2	68.9	50.4	24.4	33.6
August.....	80.2	67.3	49.2	47.7	78.8	56.4	41.4	46.6	89.2	77.0	59.4	68.6	71.1	50.6	26.4	43.3
September.....	93.8	80.0	55.8	56.8	91.6	64.9	47.0	60.7	90.5	80.4	62.4	71.8	74.9	53.6	30.2	44.1
October.....	99.0	86.8	63.9	56.9	117.2	91.1	66.7	61.6	91.8	81.3	67.0	68.0	79.4	56.2	37.8	44.1
November.....	97.2	83.5	62.7	-----	98.0	79.5	51.0	-----	92.5	81.1	69.4	-----	79.1	54.6	38.0	-----
December.....	99.1	79.8	62.3	-----	100.0	78.4	56.2	-----	92.5	81.2	70.0	-----	77.7	52.3	37.7	-----
Average.....	93.4	80.5	62.5	50.5	95.3	75.4	53.7	45.8	93.4	83.2	67.4	66.5	81.3	57.5	35.6	35.2
Month	Metalliferous mining								Quarrying and nonmetallic mining							
	Employment				Pay rolls				Employment				Pay rolls			
	1930	1931	1932	1933	1930	1931	1932	1933	1930	1931	1932	1933	1930	1931	1932	1933
January.....	95.7	68.3	49.3	32.4	92.7	55.0	29.7	18.1	79.6	64.4	43.9	35.1	71.9	50.4	30.2	18.1
February.....	92.3	65.3	46.9	31.5	92.5	54.6	27.8	17.8	79.8	66.6	47.4	34.8	73.5	54.4	29.6	17.4
March.....	90.9	63.5	45.0	30.0	90.8	52.8	26.5	17.4	83.0	70.0	46.0	35.1	80.0	58.2	28.7	17.8
April.....	89.3	63.9	43.3	29.4	88.3	51.4	25.0	16.4	87.4	76.1	48.6	39.3	85.4	62.6	30.0	20.2
May.....	87.5	62.4	38.3	30.0	85.6	49.3	23.8	17.0	90.8	75.0	50.6	43.4	90.2	62.3	32.3	23.8
June.....	84.6	60.0	32.2	31.5	81.6	46.1	20.1	18.3	90.3	72.3	49.5	47.3	90.9	60.1	30.0	27.5
July.....	80.5	56.2	29.5	33.0	71.9	41.3	16.9	19.0	89.9	71.0	49.5	49.5	85.5	57.3	30.1	28.4
August.....	79.0	55.8	28.6	36.8	71.0	40.2	16.5	21.9	89.3	68.9	51.1	51.6	85.8	55.1	29.7	29.9
September.....	78.1	55.5	29.3	38.9	69.9	40.0	17.0	23.9	87.7	66.6	52.4	52.6	82.5	51.2	30.5	29.3
October.....	77.2	53.8	30.5	40.7	68.6	37.4	18.0	25.9	84.7	64.5	52.4	53.2	79.3	48.7	30.1	31.2
November.....	72.8	52.8	31.9	-----	63.4	35.1	18.7	-----	78.3	59.3	49.4	-----	66.8	43.3	27.1	-----
December.....	70.1	51.2	33.3	-----	59.9	34.3	18.7	-----	70.2	53.9	42.3	-----	59.9	36.9	22.1	-----
Average.....	83.2	59.1	36.5	33.4	78.0	44.8	21.6	19.6	84.3	67.4	49.0	44.2	79.3	53.4	29.1	24.4
Month	Crude-petroleum producing								Telephone and telegraph							
	Employment				Pay rolls				Employment				Pay rolls			
	1930	1931	1932	1933	1930	1931	1932	1933	1930	1931	1932	1933	1930	1931	1932	1933
January.....	92.7	74.8	54.9	57.2	94.0	71.5	46.5	39.9	101.6	90.5	83.0	74.6	105.1	96.3	89.1	71.7
February.....	90.8	73.2	54.4	57.0	88.6	70.0	46.9	41.7	100.2	89.2	82.0	73.9	101.9	94.8	89.6	71.9
March.....	89.3	72.2	51.4	56.5	91.3	73.2	43.2	42.5	99.4	88.6	81.7	73.2	105.8	97.9	88.2	71.6
April.....	86.8	69.8	54.9	56.8	86.6	66.3	44.5	40.1	98.9	88.1	81.2	72.3	103.4	95.0	83.4	67.8
May.....	89.8	67.8	54.5	56.9	85.4	64.7	47.1	41.6	99.7	87.4	80.6	70.1	103.2	94.1	82.8	68.5
June.....	90.2	65.0	54.2	58.0	87.1	62.7	44.8	40.6	99.8	86.9	79.9	69.2	103.4	95.0	82.1	66.6
July.....	89.9	65.3	55.4	59.5	88.5	59.2	44.6	42.2	100.0	86.6	79.1	68.5	106.6	93.3	79.6	66.7
August.....	87.7	62.4	57.4	60.8	86.0	56.3	42.9	42.5	98.8	85.9	78.1	68.1	102.5	92.3	79.1	66.1
September.....	85.0	61.2	56.2	66.2	84.0	55.2	41.9	44.4	96.8	85.0	77.4	68.3	102.2	92.1	75.9	64.6
October.....	85.2	60.4	56.8	70.6	82.6	54.4	42.5	50.1	94.5	84.1	76.2	68.7	100.9	91.6	75.7	67.0
November.....	83.6	57.6	56.5	-----	80.0	52.0	42.4	-----	93.0	83.5	75.5	-----	97.9	89.7	74.3	-----
December.....	77.4	58.2	57.2	-----	77.2	54.9	41.7	-----	91.6	83.1	74.8	-----	101.3	92.7	73.5	-----
Average.....	87.4	65.7	55.3	60.0	85.9	61.7	44.1	42.6	97.9	86.6	79.1	70.7	102.9	93.7	81.1	68.3
Month	Power and light								Electric-railroad and motor-bus operation and maintenance <sup>2</sup>							
	Employment				Pay rolls				Employment				Pay rolls			
	1930	1931	1932	1933	1930	1931	1932	1933	1930	1931	1932	1933	1930	1931	1932	1933
January.....	99.6	99.2	89.3	77.7	99.7	98.6	88.4	73.0	97.1	86.9	79.5	70.6	97.8	85.6	75.4	60.9
February.....	98.8	97.8	87.2	77.4	100.4	99.7	86.0	71.6	95.1	86.6	78.9	70.4	95.7	87.1	74.8	60.6
March.....	99.7	96.7	85.5	76.9	102.1	102.4	85.4	71.9	94.4	86.4	77.6	69.8	95.4	88.1	73.6	59.4
April.....	100.7	97.1	84.8	76.9	102.6	97.6	82.4	69.4	95.2	86.8	78.0	69.5	97.1	86.6	71.8	58.1
May.....	103.4	97.6	84.0	76.9	104.5	98.7	84.2	69.9	95.2	85.9	76.9	69.1	96.0	85.1	72.2	58.2
June.....	104.6	97.2	83.2	77.3	107.8	98.3	80.5	69.9	94.8	85.3	76.5	69.3	97.0	84.8	70.2	58.0
July.....	105.9	96.7	82.3	77.5	106.7	97.4	78.7	70.0	95.3	85.6	75.6	69.4	95.6	83.3	66.4	57.4
August.....	106.4	95.9	81.5	78.1	106.6	96.2	76.7	70.9	92.9	84.8	74.1	69.5	92.1	81.9	63.8	58.2
September.....	105.2	94.7	81.0	80.3	106.1	94.3	74.7	71.8	91.8	84.0	73.5	69.7	90.5	81.2	62.5	57.8
October.....	104.8	92.7	79.9	82.2	105.6	93.2	74.4	76.2	91.0	82.7	73.6	66.6	88.9	79.0	61.5	58.8
November.....	103.4	91.3	79.1	-----	103.7	93.3	73.2	-----	89.3	81.5	71.8	-----	87.7	79.7	61.7	-----
December.....	103.2	90.3	78.4	-----	106.3	91.2	73.2	-----	88.8	79.9	71.4	-----	88.6	78.7	61.9	-----
Average.....	103.0	95.6	83.0	78.1	104.3	96.7	79.8	71.5	93.4	84.7	75.5	69.8	93.5	83.4	68.0	58.8

<sup>1</sup> Average for 10 months.

<sup>2</sup> Not including electric-railroad-car building and repairing; see transportation equipment and railroad repair-shop groups, manufacturing industries, table 1.

TABLE 3.—INDEXES OF EMPLOYMENT AND PAY ROLLS FOR **NONMANUFACTURING** INDUSTRIES, JANUARY TO DECEMBER 1930, 1931, AND 1932, AND JANUARY TO OCTOBER 1933—Continued

[12-month average, 1929=100]

Month	Wholesale trade								Retail trade							
	Employment				Pay rolls				Employment				Pay rolls			
	1930	1931	1932	1933	1930	1931	1932	1933	1930	1931	1932	1933	1930	1931	1932	1933
January.....	100.0	89.5	81.8	75.3	100.0	87.5	74.1	61.7	98.9	90.0	84.3	76.9	99.7	89.4	78.0	62.7
February.....	98.5	88.2	80.9	74.1	98.3	88.4	72.5	58.6	94.4	87.1	80.5	73.4	96.0	86.7	73.7	58.4
March.....	97.7	87.4	79.8	73.1	99.7	89.1	71.3	57.1	93.9	87.8	81.4	71.4	95.5	87.5	73.4	55.1
April.....	97.3	87.4	78.9	73.3	97.9	85.2	68.9	56.0	97.3	90.1	81.6	78.6	97.5	88.3	72.7	60.4
May.....	96.8	87.1	77.9	74.0	97.4	84.7	69.7	57.4	96.7	89.9	80.9	77.0	97.3	88.0	71.1	59.5
June.....	96.5	87.1	77.0	75.7	98.6	84.1	66.2	57.3	93.9	89.1	79.4	78.3	96.8	87.6	68.2	60.5
July.....	96.0	86.8	76.6	76.9	96.0	83.3	64.7	59.1	89.0	83.9	74.6	74.6	91.7	83.3	63.3	58.1
August.....	95.0	86.5	76.4	79.7	93.6	82.1	63.2	60.8	85.6	81.8	72.6	78.1	87.6	80.3	60.7	62.7
September.....	94.8	86.1	77.1	82.1	93.6	81.4	63.1	62.3	92.0	86.6	77.8	86.0	92.4	83.5	64.6	69.2
October.....	94.2	85.2	77.8	83.5	92.9	79.9	63.9	66.0	95.5	89.8	81.3	89.6	95.1	84.6	67.1	72.3
November.....	92.6	84.1	77.6	-----	91.0	79.7	63.3	-----	98.4	90.9	81.7	-----	96.8	85.4	66.9	-----
December.....	92.0	83.7	77.0	-----	91.3	77.8	62.6	-----	115.1	106.2	95.2	-----	107.7	94.1	73.6	-----
Average.....	96.0	86.6	78.2	76.8	95.9	83.6	67.0	59.6	95.9	89.4	80.9	78.4	96.2	86.6	69.4	61.9
Month	Hotels								Canning and preserving							
	Employment				Pay rolls				Employment				Pay rolls			
	1930	1931	1932	1933	1930	1931	1932	1933	1930	1931	1932	1933	1930	1931	1932	1933
January.....	100.4	95.0	83.2	73.8	100.3	91.0	73.9	55.7	46.1	48.9	35.0	34.1	50.3	46.1	31.8	24.8
February.....	102.4	96.8	84.3	73.8	103.8	93.7	73.9	55.9	45.7	48.3	37.1	35.1	51.5	48.6	32.7	25.9
March.....	102.4	96.8	84.0	72.4	104.4	93.4	72.4	53.5	49.7	53.0	36.3	33.2	50.8	50.3	31.9	24.2
April.....	100.1	95.9	82.7	71.9	100.3	89.9	69.6	51.7	74.8	59.6	47.0	49.2	72.6	57.1	37.9	33.5
May.....	98.0	92.5	80.1	71.9	98.4	87.7	67.0	51.8	65.7	56.0	40.5	45.5	66.9	56.0	36.0	31.8
June.....	98.0	91.6	78.0	73.6	98.1	85.4	63.8	52.3	83.0	70.6	55.5	55.6	81.5	58.6	40.5	36.7
July.....	101.3	93.3	78.4	75.6	99.8	85.2	61.8	53.3	126.3	102.2	73.0	76.6	112.7	74.2	47.5	46.2
August.....	101.6	92.8	77.6	77.1	98.6	83.8	59.6	54.0	185.7	142.9	99.0	112.7	172.0	104.7	65.6	68.3
September.....	100.1	90.6	77.0	78.7	97.1	81.9	59.1	55.6	246.6	180.1	125.3	175.6	214.8	129.4	75.1	127.0
October.....	97.5	87.4	75.4	77.0	95.5	79.7	58.6	56.2	164.7	108.1	81.1	126.3	140.0	77.6	51.8	87.1
November.....	95.2	84.9	74.3	-----	93.6	77.1	57.5	-----	96.7	60.8	50.5	-----	82.9	48.1	34.4	-----
December.....	93.5	83.1	73.2	-----	91.5	75.4	56.6	-----	61.6	40.7	33.7	-----	57.4	36.9	25.6	-----
Average.....	99.2	91.7	79.0	74.6	98.5	85.4	64.5	54.0	103.9	80.9	59.5	74.4	96.1	65.6	42.6	50.6
Month	Laundries						Dyeing and cleaning						Banks, brokerage, insurance, and real estate			
	Employment			Pay rolls			Employment			Pay rolls			Employment		Pay rolls	
	1931	1932	1933	1931	1932	1933	1931	1932	1933	1931	1932	1933	1932	1933	1932	1933
January.....	90.5	84.7	75.4	86.6	76.4	57.9	88.9	82.1	73.0	77.7	65.8	46.6	98.3	97.5	93.5	85.2
February.....	90.0	82.9	74.4	85.6	73.3	55.5	87.4	80.5	70.9	75.1	62.2	42.4	98.3	96.8	93.0	84.3
March.....	89.5	82.0	73.0	85.6	71.6	52.9	88.0	80.6	71.2	75.6	61.7	41.0	98.9	96.5	92.9	83.7
April.....	90.5	82.0	73.4	86.8	71.4	54.0	95.7	83.3	81.1	86.3	65.9	54.6	98.6	96.2	92.1	82.0
May.....	90.3	81.4	73.5	86.5	70.6	54.5	96.7	84.5	82.0	86.6	67.3	53.9	98.0	96.2	92.7	83.2
June.....	91.0	81.0	76.0	87.1	68.6	56.7	99.0	85.1	85.6	89.1	65.8	56.7	97.9	97.3	90.0	84.4
July.....	91.8	80.3	76.3	87.4	66.3	56.1	98.6	82.4	82.9	86.2	60.0	52.8	98.4	97.7	89.8	84.8
August.....	90.2	78.9	77.9	84.6	63.9	57.6	93.5	79.5	83.1	80.0	66.3	52.8	98.5	98.3	88.2	84.4
September.....	89.3	78.6	79.3	84.1	62.9	60.6	95.3	83.3	88.6	82.6	61.0	60.3	98.4	99.0	87.1	84.5
October.....	88.1	77.5	78.0	81.8	61.2	59.7	94.2	82.3	88.4	81.4	58.8	60.6	98.6	99.4	86.3	84.7
November.....	86.2	76.2	-----	78.9	59.1	-----	90.1	78.0	-----	74.7	52.3	-----	98.0	-----	85.7	-----
December.....	85.3	75.9	-----	77.4	58.7	-----	84.9	75.2	-----	67.9	48.4	-----	98.0	-----	85.5	-----
Average.....	89.4	80.1	75.7	84.4	67.0	56.6	92.7	81.4	80.7	80.3	60.5	52.2	98.3	97.5	89.7	84.2

<sup>1</sup> Average for 10 months.

## Average Man-Hours Worked and Average Hourly Earnings

**I**N THE following tables the Bureau presents a tabulation of man-hours worked per week and average hourly earnings based on reports supplied by identical establishments in September and October 1933 in 15 industrial groups and 78 separate manufacturing industries. Man-hour data for the building-construction group and for the insurance, real estate, banking, and brokerage group are not available, and data for several of the 89 manufacturing industries surveyed monthly are omitted from these tables due to lack of adequate information.

The total number of establishments supplying man-hour data in these 15 industrial groups represents approximately 50 percent of the establishments supplying monthly employment data.

The tabulations are based on reports supplying actual man-hours worked and do not include nominal man-hour totals, obtained by multiplying the total number of employees in the establishment by the plant operating time.

Table 1 shows the average hours worked per employee per week and average hourly earnings in 15 industrial groups and for all groups combined. The average hours per week and average hourly earnings for the combined total of the 15 industrial groups are weighted averages, wherein the average man-hours and average hourly earnings in each industrial group are multiplied by the total number of employees in the group in the current month and the sum of these products divided by the total number of employees in the combined 15 industrial groups. The average man-hours and hourly earnings for the combined 89 manufacturing industries have been weighted in the same manner as the averages for all industrial groups combined, table 1.

In presenting information for the separate manufacturing industries shown in table 2, data are published for only those industries in which the available man-hour information covers 20 percent or more of the total number of employees in the industry at the present time.

**TABLE 1.—AVERAGE HOURS WORKED PER WEEK PER EMPLOYEE AND AVERAGE HOURLY EARNINGS IN 15 INDUSTRIAL GROUPS, SEPTEMBER AND OCTOBER 1933**

Industrial group	Average hours per week		Average hourly earnings	
	September 1933	October 1933	September 1933	October 1933
	Hours	Hours	Cents	Cents
Manufacturing.....	36.1	35.8	51.6	52.5
Coal mining:				
Anthracite.....	38.0	38.7	82.2	81.3
Bituminous.....	31.8	29.9	50.2	56.5
Metalliferous mining.....	39.0	39.6	50.6	51.4
Quarrying and nonmetallic mining.....	34.4	34.9	42.8	44.3
Crude-petroleum producing.....	38.0	35.5	67.7	76.8
Public utilities:				
Telephone and telegraph.....	37.2	37.6	69.5	71.0
Power and light.....	42.8	43.1	66.0	67.6
Electric-railroad and motor-bus operation and maintenance.....	45.3	45.5	57.5	58.9
Trade:				
Wholesale.....	42.8	43.4	57.5	59.9
Retail.....	39.5	39.5	49.5	49.6
Hotels.....	50.2	50.2	23.7	24.2
Canning and preserving.....	37.0	34.8	34.1	33.8
Laundries.....	39.0	38.6	38.5	39.1
Dyeing and cleaning.....	41.5	41.3	42.5	43.3
Average.....	38.0	37.8	51.6	52.5

Per capita weekly earnings, computed by multiplying the average man-hours worked per week by the average hourly earnings shown in the following table, are not identical with the per capita weekly earnings appearing elsewhere in this trend-of-employment compilation, which are obtained by dividing the total weekly earnings in all establishments reporting by the total number of employees in those establishments. As already noted, the basic information upon which the average weekly man-hours and average hourly earnings are computed covers approximately 50 percent of the establishments reporting monthly employment data.

TABLE 2.—AVERAGE HOURS WORKED PER WEEK PER EMPLOYEE AND AVERAGE HOURLY EARNINGS IN SELECTED **MANUFACTURING** INDUSTRIES, SEPTEMBER AND OCTOBER 1933

Industry	Average hours per week		Average hourly earnings	
	September 1933	October 1933	September 1933	October 1933
<b>Food and kindred products:</b>	<i>Hours</i>	<i>Hours</i>	<i>Cents</i>	<i>Cents</i>
Baking.....	41.1	40.9	50.3	50.6
Beverages.....	41.0	38.6	67.6	69.1
Confectionery.....	37.6	36.0	38.8	39.8
Flour.....	38.3	39.1	52.1	51.7
Ice cream.....	45.7	43.5	54.0	57.6
Slaughtering and meat packing.....	40.0	39.7	49.9	49.9
Sugar, beet.....	48.0	51.6	43.9	38.1
Sugar refining, cane.....	38.5	35.0	51.4	56.2
<b>Textiles and their products:</b>				
Fabrics:				
Carpets and rugs.....	37.1	37.9	50.4	50.5
Cotton goods.....	36.0	35.4	36.5	36.9
Cotton small wares.....	37.0	36.5	42.7	43.8
Dyeing and finishing textiles.....	35.2	36.6	49.9	50.0
Knit goods.....	36.0	36.7	45.0	45.4
Silk and rayon goods.....	34.1	35.1	42.9	42.7
Woolen and worsted goods.....	37.3	34.9	48.0	49.5
<b>Iron and steel and their products, not including machinery:</b>				
Bolts, nuts, washers, and rivets.....	34.0	33.8	49.0	50.1
Cast-iron pipe.....	28.3	25.0	45.9	49.9
Cutlery (not including silver and plated cutlery) and edge tools.....	37.6	37.0	50.0	50.7
Forgings, iron and steel.....	32.6	34.6	56.8	58.1
Hardware.....	34.3	35.1	50.6	47.6
Iron and steel.....	33.8	33.4	57.0	59.4
Plumbers' supplies.....	34.6	31.8	49.2	51.1
Steam and hot-water heating apparatus and steam fittings.....	33.0	32.4	54.3	55.0
Stoves.....	35.9	37.7	50.7	51.7
Structural and ornamental metalwork.....	33.6	34.3	52.1	54.1
Tin cans and other tinware.....	40.4	36.7	46.4	49.8
Tools (not including edge tools, machine tools, files, and saws).....	35.5	35.0	50.6	51.6
Wirework.....	36.7	34.9	52.0	55.4
<b>Machinery, not including transportation equipment:</b>				
Agricultural implements.....	34.2	35.1	50.0	51.3
Cash registers, adding machines, and calculating machines.....	38.7	37.8	66.9	69.8
Electrical machinery, apparatus, and supplies.....	33.4	33.7	58.8	59.4
Engines, turbines, tractors, and water wheels.....	34.5	34.8	58.6	59.6
Foundry and machine-shop products.....	33.8	34.1	54.7	55.8
Machine tools.....	35.0	36.0	59.0	58.2
Radios and phonographs.....	34.1	36.5	49.4	50.0
Textile machinery and parts.....	38.2	37.2	61.7	64.0
Typewriters and supplies.....	37.1	39.0	51.2	51.0
<b>Nonferrous metals and their products:</b>				
Aluminum manufactures.....	35.0	35.9	47.5	47.9
Brass, bronze, and copper products.....	36.7	35.6	52.1	52.4
Clocks and watches and time-recording devices.....	39.1	41.6	44.3	44.9
Jewelry.....	35.3	38.7	48.9	48.8
Lighting equipment.....	35.9	36.6	50.7	49.4
Silverware and plated ware.....	37.4	40.1	49.9	50.8
Smelting and refining—copper, lead, and zinc.....	37.3	36.3	49.4	51.1
Stamped and enameled ware.....	36.0	37.7	45.2	45.4

TABLE 2.—AVERAGE HOURS WORKED PER WEEK PER EMPLOYEE AND AVERAGE HOURLY EARNINGS IN SELECTED **MANUFACTURING** INDUSTRIES, SEPTEMBER AND OCTOBER 1933—Continued

Industry	Average hours per week		Average hourly earnings	
	September 1933	October 1933	September 1933	October 1933
<b>Transportation equipment:</b>	<i>Hours</i>	<i>Hours</i>	<i>Cents</i>	<i>Cents</i>
Aircraft.....	39.1	37.6	68.9	70.3
Automobiles.....	33.6	32.5	64.6	65.0
Cars, electric and steam railroad.....	33.8	34.9	60.7	62.5
Locomotives.....	29.7	31.6	60.4	60.8
Shipbuilding.....	29.7	30.3	66.3	67.1
<b>Railroad repair shops:</b>				
Electric railroad.....	43.1	43.2	56.5	57.1
Steam railroad.....	37.7	40.5	62.8	63.0
<b>Lumber and allied products:</b>				
Furniture.....	37.6	38.0	41.9	42.1
<b>Lumber:</b>				
Millwork.....	35.0	34.2	43.0	44.0
Sawmills.....	37.5	34.7	41.4	43.5
<b>Stone, clay, and glass products:</b>				
Brick, tile, and terra cotta.....	32.3	31.1	40.8	40.9
Cement.....	31.8	33.2	52.2	53.8
Glass.....	33.8	33.9	53.6	52.9
Marble, granite, slate, and other products.....	33.5	34.5	58.8	60.1
Pottery.....	38.0	39.8	44.9	44.7
<b>Leather and its manufactures: Leather</b>	37.9	37.8	48.8	50.7
<b>Paper and printing:</b>				
Boxes, paper.....	37.6	36.8	46.6	46.7
Paper and pulp.....	40.0	38.7	47.0	48.3
<b>Printing and publishing:</b>				
Book and job.....	35.4	35.0	72.3	72.3
Newspapers and periodicals.....	38.1	38.2	80.1	80.7
<b>Chemicals and allied products:</b>				
Chemicals.....	38.5	39.3	59.3	60.7
Cottonseed oil, cake, and meal.....	41.6	42.7	25.8	26.5
Druggists' preparations.....	37.9	38.3	48.3	48.0
Explosives.....	35.6	35.4	59.7	60.1
Fertilizers.....	40.8	35.7	31.0	35.8
Paints and varnishes.....	37.7	38.2	54.1	54.4
Petroleum refining.....	35.5	35.7	70.1	71.6
Rayon and allied products.....	37.9	37.9	46.3	47.5
Soap.....	39.4	39.0	49.6	49.9
<b>Rubber products:</b>				
Rubber goods, other than boots, shoes, tires, and inner tubes.....	34.7	35.6	49.4	49.0
Rubber tires and inner tubes.....	29.9	30.6	68.1	68.8
<b>Tobacco manufactures:</b>				
Chewing and smoking tobacco and snuff.....	37.5	36.3	37.0	37.3
Cigars and cigarettes.....	38.4	38.0	35.4	36.6

### Employment in Building Construction in October 1933

**E**MPLOYMENT in the building-construction industry increased 0.5 percent in October as compared with September and pay rolls increased 1.9 percent over the month interval.

The percents of change of employment and pay-roll totals in October as compared with September are based on returns made by 11,172 firms engaged on public and private projects not aided by public-works funds. These firms employed in October 92,953 workers in the various trades in the building-construction industry whose combined weekly earnings during the pay period ending nearest October 15 were \$2,022,884. These reports cover building operations in various localities in 34 States and the District of Columbia.

**COMPARISON OF EMPLOYMENT AND TOTAL PAY ROLL IN THE BUILDING CONSTRUCTION INDUSTRY IN IDENTICAL FIRMS, SEPTEMBER AND OCTOBER 1933**

Locality	Number of firms reporting	Number on pay roll		Percent of change	Amount of pay roll		Percent of change
		Sept. 15	Oct. 15		Sept. 15	Oct. 15	
Alabama: Birmingham.....	75	430	383	-10.9	\$6,283	\$5,634	-10.3
California:							
Los Angeles <sup>1</sup> .....	21	1,055	1,140	+8.1	20,204	22,617	+11.9
San Francisco-Oakland <sup>1</sup> .....	36	1,298	953	-26.6	29,633	19,904	-32.8
Other reporting localities <sup>1</sup> .....	22	571	526	-7.9	11,794	10,577	-10.3
Colorado: Denver.....	205	612	711	+16.2	11,268	12,961	+15.0
Connecticut:							
Bridgeport.....	125	560	615	+9.8	11,391	12,370	+8.6
Hartford.....	251	1,313	1,320	+0.5	26,702	28,516	+6.8
New Haven.....	181	1,128	1,118	-0.9	26,811	25,477	-5.0
Delaware: Wilmington.....	120	984	943	-4.2	19,290	19,125	-0.9
District of Columbia.....	520	8,594	7,752	-9.8	244,525	210,480	-13.9
Florida:							
Jacksonville.....	58	531	496	-6.6	9,028	6,875	-23.8
Miami.....	84	1,096	1,129	+3.0	17,301	19,023	+10.0
Georgia: Atlanta.....	153	1,172	1,144	-2.4	17,172	17,740	+3.3
Illinois:							
Chicago <sup>1</sup> .....	125	1,573	1,443	-8.3	48,531	39,139	-19.4
Other reporting localities <sup>1</sup> .....	77	1,249	1,476	+18.2	22,628	30,181	+33.4
Indiana:							
Evansville.....	55	320	347	+8.4	4,760	5,478	+15.1
Fort Wayne.....	87	348	372	+6.9	5,900	6,757	+14.5
Indianapolis.....	164	1,144	1,270	+11.0	22,321	26,097	+16.9
South Bend.....	39	206	255	+23.8	3,488	5,681	+62.9
Iowa: Des Moines.....	105	587	601	+2.4	10,125	10,542	+4.1
Kansas: Wichita.....	69	356	346	-2.8	6,205	5,954	-4.0
Kentucky: Louisville.....	155	1,385	1,317	-4.9	25,831	23,622	-8.6
Louisiana: New Orleans.....	122	1,272	1,016	-20.1	19,807	17,269	-12.8
Maine: Portland.....	101	384	430	+12.0	8,517	9,693	+13.8
Maryland: Baltimore <sup>1</sup> .....	105	1,310	1,291	-1.5	22,935	21,815	-4.9
Massachusetts: All reporting localities <sup>1</sup> .....	716	4,643	4,896	+5.4	116,335	114,694	-1.4
Michigan:							
Detroit.....	503	4,699	4,744	+1.0	93,061	98,270	+5.6
Flint.....	60	247	257	+4.0	4,661	4,302	-7.7
Grand Rapids.....	110	433	506	+16.9	6,975	7,822	+12.1
Minnesota:							
Duluth.....	55	278	256	-7.9	5,061	4,556	-10.0
Minneapolis.....	223	1,615	1,672	+3.5	33,489	35,404	+5.7
St. Paul.....	178	1,269	1,414	+11.4	29,142	30,502	+4.7
Missouri:							
Kansas City <sup>2</sup> .....	298	1,730	1,750	+1.2	36,105	38,506	+6.7
St. Louis.....	584	3,183	3,464	+8.8	79,739	91,300	+14.5
Nebraska: Omaha.....	153	823	844	+2.6	15,791	17,617	+11.6
New York:							
New York City <sup>1</sup> .....	317	5,340	5,799	+8.6	154,332	176,668	+14.5
Other reporting localities <sup>1</sup> .....	234	6,107	5,668	-7.2	141,249	132,610	-6.1
North Carolina: Charlotte.....	53	349	340	-2.6	5,073	5,566	+9.7
Ohio:							
Akron.....	85	357	396	+10.9	5,915	7,736	+30.8
Cincinnati <sup>3</sup> .....	478	2,401	2,385	-0.7	54,619	55,144	+1.0
Cleveland.....	621	2,738	2,956	+8.0	68,486	80,803	+18.0
Dayton.....	119	598	488	-18.4	10,717	9,703	-9.5
Youngstown.....	75	296	333	+12.5	4,862	5,608	+15.3
Oklahoma:							
Oklahoma City.....	98	533	657	+23.3	7,922	10,455	+32.0
Tulsa.....	56	192	240	+25.0	2,823	3,502	+24.1
Oregon: Portland.....	193	1,091	1,103	+1.1	22,040	23,514	+6.7
Pennsylvania: <sup>4</sup>							
Erie area <sup>1</sup> .....	28	350	259	-26.0	4,296	3,006	-30.0
Philadelphia area <sup>1</sup> .....	478	6,249	6,318	+1.1	115,716	121,398	+4.9
Pittsburgh area <sup>1</sup> .....	252	1,965	2,168	+10.3	47,507	46,659	-1.8
Reading-Lebanon area <sup>1</sup> .....	45	253	304	+20.2	4,236	5,307	+25.3
Scranton area <sup>1</sup> .....	38	261	269	+3.1	5,909	6,015	+1.8
Other reporting areas <sup>1</sup> .....	314	2,781	2,777	-0.1	45,878	53,638	+16.9
Rhode Island: Providence.....	263	1,704	1,972	+15.7	35,813	44,790	+25.1
Tennessee:							
Chattanooga.....	38	336	211	-37.2	5,486	3,462	-36.9
Knoxville.....	49	437	471	+7.8	6,389	7,051	+10.4
Memphis.....	78	552	488	-11.6	9,331	8,399	-10.0
Nashville.....	90	1,196	1,026	-14.2	16,515	14,969	-9.4
Texas:							
Dallas.....	184	932	792	-15.0	14,680	12,583	-14.3
El Paso.....	32	187	137	-26.7	2,131	1,511	-29.1
Houston.....	175	1,215	1,153	-5.1	18,824	17,934	-4.7
San Antonio.....	119	705	560	-20.6	9,413	7,480	-21.1

<sup>1</sup> Data supplied by cooperating State bureaus.

<sup>2</sup> Includes both Kansas City, Mo. and Kansas City, Kans.

<sup>3</sup> Includes Covington and Newport, Ky.

<sup>4</sup> Each separate area includes from 2 to 8 counties.

**COMPARISON OF EMPLOYMENT AND TOTAL PAY ROLL IN THE BUILDING CONSTRUCTION INDUSTRY IN IDENTICAL FIRMS, SEPTEMBER AND OCTOBER 1933—**  
Continued

Locality	Number of firms reporting	Number on pay roll		Percent of change	Amount of pay roll		Percent of change
		Sept. 15	Oct. 15		Sept. 15	Oct. 15	
Utah: Salt Lake City.....	91	448	620	+38.4	\$8,903	\$8,434	-5.3
Virginia:							
Norfolk-Portsmouth.....	94	1,092	968	-11.4	19,145	18,410	-3.8
Richmond.....	146	1,125	1,099	-2.3	22,208	22,233	+1
Washington:							
Seattle.....	157	788	789	+1	15,399	14,936	-3.0
Spokane.....	50	180	192	+6.7	3,717	3,592	-3.4
Tacoma.....	84	209	158	-24.4	3,601	2,751	-23.6
West Virginia: Wheeling.....	45	255	264	+3.5	4,690	5,591	+19.2
Wisconsin: All reporting localities.....	58	858	1,396	+62.7	14,888	24,976	+67.8
Total, all localities.....	11,172	92,478	92,953	+5	1,985,522	2,022,884	+1.9

<sup>1</sup> Data supplied by cooperating State bureaus.

### Trend of Employment in October 1933, by States

IN THE following table are shown the fluctuations in employment and pay-roll totals in October 1933 as compared with September 1933, in certain industrial groups by States. These tabulations have been prepared from data secured directly from reporting establishments and from information supplied by cooperating State agencies. The combined total of all groups does not include building-construction data, information concerning which is published elsewhere in a separate tabulation by city and State totals. In addition to the combined total of all groups, the trend of employment and pay rolls in the manufacturing, public utility, hotel, wholesale trade, retail trade, bituminous-coal mining, crude-petroleum producing, quarrying and nonmetallic mining, metalliferous mining, laundry, and dyeing and cleaning groups is presented. In this State compilation, the totals of the telephone and telegraph, power and light, and electric-railroad operation groups have been combined and are presented as one group—public utilities. Due to the extreme seasonal fluctuations in the canning and preserving industry, and the fact that during certain months the activity in this industry in a number of States is negligible, data for this industry are not presented separately. The number of employees and the amount of weekly pay roll in September and October 1933 as reported by identical establishments in this industry are included, however, in the combined total of "all groups."

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

The State totals for the anthracite-mining industry, which is confined entirely to the State of Pennsylvania, will be found in table 1, nonmanufacturing industries.

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

**COMPARISON OF EMPLOYMENT AND PAY ROLLS IN IDENTICAL ESTABLISHMENTS  
IN SEPTEMBER AND OCTOBER 1933, BY STATES**

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

State	Total all groups					Manufacturing				
	Number of establishments	Number on pay roll, October 1933	Per cent of change	Amount of pay roll (1 week) October 1933	Per cent of change	Number of establishments	Number on pay roll, October 1933	Per cent of change	Amount of pay roll (1 week) October 1933	Per cent of change
Alabama.....	521	66,320	+1.0	\$887,770	+3.2	213	46,993	+1.0	\$614,311	+4.0
Arizona.....	413	9,199	+5.3	191,978	+11.2	53	2,353	+1.6	49,405	+11.6
Arkansas.....	<sup>1</sup> 434	19,029	+2.6	273,376	+2	178	13,677	+2.9	178,428	+4
California.....	<sup>2</sup> 1,947	278,909	-8.8	6,376,951	-7.3	1,129	164,680	-14.0	3,444,299	-13.9
Colorado.....	815	38,646	+15.0	774,985	+15.0	118	16,526	+37.3	315,795	+29.4
Connecticut.....	1,119	171,944	+9	3,357,053	+1.1	658	151,237	+9	2,824,387	+1.1
Delaware.....	152	12,242	-5.4	243,569	+3.1	48	7,865	+( <sup>3</sup> )	157,822	+3.7
Dist. of Columbia.....	631	33,264	+3.3	764,824	+5.1	57	3,692	+7.5	118,635	4.2
Florida.....	639	26,961	+5.6	465,843	-8.9	141	15,722	+8.4	233,419	+10.8
Georgia.....	684	95,024	-1.1	1,294,156	+1.2	318	79,786	-1.7	992,531	-4
Idaho.....	225	9,927	+11.8	180,119	+6.0	41	5,312	+21.0	92,427	+10.8
Illinois.....	<sup>4</sup> 1,774	350,068	-3.8	7,283,044	-1.9	1,120	225,098	-1.2	4,260,535	-1
Indiana.....	1,276	143,077	+2.5	2,752,522	+7.0	579	105,688	+3.5	2,090,843	+8.4
Iowa.....	1,201	48,544	-1.0	941,336	+4.6	435	27,284	+1	519,345	+2.3
Kansas.....	<sup>5</sup> 1,367	68,896	+1.6	1,485,018	-2	465	28,850	+5	568,121	+6
Kentucky.....	854	75,357	+2.4	1,316,995	+7.1	205	28,138	-6	514,879	+2.2
Louisiana.....	502	35,380	-1.0	584,764	+1.5	204	21,682	+( <sup>3</sup> )	318,905	-( <sup>3</sup> )
Maine.....	582	50,758	-6.3	861,826	-6.9	182	42,006	-3.9	712,783	-6.1
Maryland.....	829	93,771	+2.2	1,847,958	-1.3	451	67,553	+1.9	1,274,985	-1.2
Massachusetts.....	<sup>6</sup> 8,068	394,987	+1.9	8,112,533	+1.1	1,141	208,083	+1.9	3,870,229	-1
Michigan.....	1,613	290,927	-9.2	6,233,512	-9.6	625	256,161	-7.4	5,285,411	-8.1
Minnesota.....	1,101	74,239	+1.9	1,554,187	+7.6	301	36,869	+3.4	737,643	+8.7
Mississippi.....	372	10,890	+2.5	144,728	+4.0	72	7,351	+2.1	88,352	+1.3
Missouri.....	1,217	120,775	-( <sup>3</sup> )	2,448,889	+8	530	69,240	-1.0	1,319,598	-2.0
Montana.....	357	11,808	+14.0	281,514	+13.8	52	4,128	+39.2	88,428	+39.2
Nebraska.....	727	26,692	+8.4	557,403	+12.5	125	14,596	+16.7	299,301	+19.0
Nevada.....	145	1,836	+7.6	45,227	+12.2	25	373	+5	9,466	+2.7
New Hampshire.....	512	41,281	-5.0	660,771	-12.1	187	36,368	-4.2	554,659	-13.9
New Jersey.....	1,532	203,230	-1.4	4,509,079	+2.2	<sup>7</sup> 655	184,329	+1.3	3,861,332	+2.7
New Mexico.....	194	4,508	( <sup>3</sup> )	85,932	+8.0	23	456	-6.9	8,038	-6
New York.....	8,429	592,547	+6	14,075,908	-( <sup>3</sup> )	<sup>8</sup> 1,801	365,914	+1	8,237,920	-1.5
North Carolina.....	916	134,142	+1.1	1,814,029	+3.1	556	128,630	+1.1	1,719,846	+3.1
North Dakota.....	342	4,558	+6.7	97,283	+10.4	59	1,150	-1	26,169	+3.4
Ohio.....	5,067	455,618	+5	9,236,944	+3.6	1,909	334,644	-2	6,717,357	+2.6
Oklahoma.....	778	32,767	+4.3	652,069	+8.7	148	12,136	+4.7	230,869	+8.9
Oregon.....	699	40,201	-1.2	757,418	+1.2	155	19,737	-8	373,865	+8
Pennsylvania.....	5,091	674,399	-1.7	14,034,212	+1.1	1,749	397,625	+7	7,140,815	+3.1
Rhode Island.....	918	68,544	+9.5	1,315,984	+9.9	265	56,252	+11.9	1,019,629	+12.7
South Carolina.....	320	59,689	+4	773,808	+2.3	174	56,442	+7.2	718,941	+2.2
South Dakota.....	260	6,308	+3.3	144,742	+5.3	47	2,263	+7.2	40,804	+5.4
Tennessee.....	737	71,867	-3	1,097,625	+9	269	53,531	-1.3	789,323	-1
Texas.....	822	74,110	+5.4	1,622,405	+5.9	406	43,181	+7.1	882,900	+6.3
Utah.....	345	16,737	+14.0	318,761	+15.6	85	6,364	+36.2	116,537	+26.7
Vermont.....	383	11,460	+2.2	215,445	+1.8	118	6,605	+4.7	123,647	+4.4
Virginia.....	1,323	95,018	+1.1	1,594,155	+2.3	411	67,196	-( <sup>3</sup> )	1,075,032	-3
Washington.....	1,170	64,171	+1.6	1,278,740	+2.7	262	30,420	-1	598,728	-1.2
West Virginia.....	875	112,132	-2.7	2,090,466	+3	183	40,441	-11.2	726,234	-15.5
Wisconsin.....	<sup>10</sup> 1,050	155,431	+1.0	2,773,972	+3.4	777	123,970	+11.0	2,159,912	+4.5
Wyoming.....	195	6,574	+12.7	173,474	+25.5	29	1,884	+40.0	47,140	+32.9

<sup>1</sup> Includes automobile dealers and garages, and sand, gravel, and building construction.

<sup>2</sup> Includes banks, insurance, and office employment.

<sup>3</sup> Less than one tenth of 1 percent.

<sup>4</sup> Includes building and contracting.

<sup>5</sup> Includes construction, municipal, agricultural, and office employment, amusement and recreation, professional, and transportation services.

<sup>6</sup> Weighted percent of change.

<sup>7</sup> Includes laundries.

<sup>8</sup> No change.

<sup>9</sup> Includes laundering and cleaning.

<sup>10</sup> Includes construction but does not include hotels and restaurants.



**COMPARISON OF EMPLOYMENT AND PAYROLLS IN IDENTICAL ESTABLISHMENTS  
IN SEPTEMBER AND OCTOBER 1933, BY STATES—Continued**

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

State	Wholesale trade					Retail trade				
	Number of establishments	Number on pay roll October, 1933	Percent of change	Amount of pay roll (1 week) October 1933	Percent of change	Number of establishments	Number on pay roll October 1933	Percent of change	Amount of pay roll (1 week) October 1933	Percent of change
Alabama.....	14	514	+4.5	\$15,108	+22.4	65	2,210	+8.3	\$37,317	+7.2
Arizona.....	25	221	+1.9	6,186	+9.9	181	1,717	+5.9	30,100	+8.1
Arkansas.....	20	608	+5.5	16,107	+10.4	120	1,661	+5.0	22,891	-1.7
California.....	103	5,740	+1.8	167,005	+2.7	128	26,967	+1.4	568,002	+1.5
Colorado.....	28	963	-1.4	28,114	+6.7	280	4,781	+3.8	92,859	+5.7
Connecticut.....	54	984	(*)	29,448	+3.3	120	5,237	+4.6	103,808	+4.2
Delaware.....	7	93	+2.2	1,905	+4.6	22	454	+5.3	10,273	+4.7
Dist. of Columbia.....	26	376	+2.5	11,242	+5.0	412	12,641	+3.7	257,460	+6.9
Florida.....	72	1,146	-1.4	26,274	+4.5	106	1,953	+2.6	36,554	+7.5
Georgia.....	33	505	+2.4	14,747	+7.2	40	2,385	+1.8	41,312	+6.6
Idaho.....	8	123	+1.8	3,446	+7.2	67	936	+6.4	14,998	+11.4
Illinois.....	49	2,480	+1.3	60,281	+1.9	148	24,967	+2.9	491,621	+1.1
Indiana.....	66	1,402	+1.6	34,816	+2.7	171	7,010	+2.1	124,122	+2.5
Iowa.....	36	1,170	-1.3	29,738	+6.2	128	3,437	+2.4	60,325	+3.5
Kansas.....	84	2,128	+4.7	49,116	-3.5	473	6,659	+1.6	120,459	+1.7
Kentucky.....	20	425	+1.5	9,353	+4.0	44	3,176	+7.5	55,236	+8.1
Louisiana.....	29	754	+2.3	18,099	+9.6	48	3,255	-6.9	53,449	-1.7
Maine.....	18	468	(*)	10,868	-1.3	67	969	+1.1	17,551	+3.1
Maryland.....	36	763	-1.8	17,254	-1.6	39	7,144	+7.9	121,937	+2.8
Massachusetts.....	701	15,284	+1.0	391,191	+1.7	4,184	66,783	+3.1	1,292,010	+1.7
Michigan.....	62	1,651	+2.0	46,215	+6.4	166	11,452	-4.0	225,047	+2.8
Minnesota.....	68	4,949	+1.8	132,301	+6.9	263	8,272	+6.3	143,722	+2.6
Mississippi.....	4	112	+1.8	2,208	+5.6	52	484	+1.5	5,743	+8.9
Missouri.....	60	4,935	+1.5	132,102	+7.6	109	9,692	-1.6	188,548	+1.2
Montana.....	15	249	-3.1	7,619	+6.6	81	989	+4.1	19,446	+4.1
Nebraska.....	35	1,021	+2.6	27,624	+5.1	188	2,066	+8.7	37,920	+9.0
Nevada.....	8	112	(*)	3,373	+1.8	39	284	+8.0	6,171	+6.0
New Hampshire.....	16	175	-4.9	4,504	-2.7	73	999	+2.0	15,301	+2.9
New Jersey.....	25	674	+7.7	18,647	+5.6	414	8,803	+6.9	192,033	+6.8
New Mexico.....	6	87	+3.6	3,108	+4.4	51	271	+1.1	6,215	+1.1
New York.....	450	13,853	+1.0	423,425	+3.6	4,258	87,467	+5.0	1,847,147	+5.2
North Carolina.....	16	208	+4.5	5,353	+9.0	157	658	+7.2	14,120	+3.7
North Dakota.....	15	236	+1.4	6,645	+5.2	11	299	+8.7	4,622	+8.2
Ohio.....	231	5,414	+1.8	136,833	+4.3	1,593	38,084	+6.3	718,495	+4.6
Oklahoma.....	56	1,228	+1.1	29,403	+9.0	107	2,313	+4.4	42,009	+10.8
Oregon.....	54	1,432	+1.6	38,588	+8.2	188	2,532	+3.5	51,634	+4.2
Pennsylvania.....	123	3,792	+2.1	103,115	+5.6	358	31,940	+10.2	164,843	+8.5
Rhode Island.....	44	1,213	+4.0	28,717	+3.6	491	5,028	+5.2	105,753	+3.4
South Carolina.....	14	217	+5.9	4,930	+9.4	20	537	(*)	5,869	+1.7
South Dakota.....	10	130	-1.8	3,429	+5.4	9	101	+11.0	1,714	+11.3
Tennessee.....	31	857	-6.3	18,149	-(*)	55	3,972	+9.8	61,053	+7.3
Texas.....	131	3,306	+3.7	81,536	+4.7	79	8,142	+6.4	138,268	+6.5
Utah.....	13	484	+1.6	11,772	+3.6	78	591	+1.0	13,687	+3.9
Vermont.....	5	115	+6.5	2,726	+5.9	33	451	+1.1	6,970	+2.9
Virginia.....	46	1,327	+10.4	30,178	+12.3	502	5,511	+6.0	103,498	+5.0
Washington.....	91	2,288	-1.1	62,431	+6.8	400	7,174	+2.6	133,395	+2.1
West Virginia.....	27	609	+1.7	17,257	+10.1	48	902	+4.6	16,713	+11.1
Wisconsin.....	46	888	-1.6	29,111	+1.3	50	11,087	+7.7	162,269	+8.5
Wyoming.....	8	64	(*)	1,865	+5.8	41	248	+3.3	5,754	+6.2

\* Less than one tenth of 1 percent.

° No change.

**COMPARISON OF EMPLOYMENT AND PAY ROLLS IN IDENTICAL ESTABLISHMENTS  
IN SEPTEMBER AND OCTOBER 1933, BY STATES—Continued**

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

State	Quarrying and nonmetallic mining					Metalliferous mining				
	Number of establishments	Number on pay roll October 1933	Per cent of change	Amount of pay roll (1 week) October 1933	Per cent of change	Number of establishments	Number on pay roll October 1933	Per cent of change	Amount of pay roll (1 week) October 1933	Per cent of change
Alabama.....	19	758	+27.2	\$8,187	+47.6	9	1,660	+2.3	\$23,858	-8.0
Arizona.....	3	41	-18.0	473	-17.0	20	2,362	+10.7	53,538	+18.0
Arkansas.....	10	324	-13.6	4,505	-6.0					
California.....	32	1,116	+1.8	22,403	+11.2	33	2,817	+3.7	65,261	+3.5
Colorado.....	4	44	+25.7	612	+4.6	16	1,086	+1.4	29,353	+17.7
Connecticut.....	26	353	-13.1	5,624	-8.9					
Delaware.....	3	59	-4.8	854	+3.3					
Dist. of Columbia.....										
Florida.....	18	835	-1.1	9,550	-1.6					
Georgia.....	27	1,489	+9.7	15,759	+18.9					
Idaho.....						11	2,147	+3.3	46,875	-3.2
Illinois.....	24	904	+3	14,938	-4.3					
Indiana.....	71	1,795	+3.0	27,403	-1.5					
Iowa.....	32	589	-11.4	8,092	-6.9					
Kansas.....	24	1,206	+12.2	22,255	-6.1	12	936	-5.6	17,220	-9
Kentucky.....	36	943	+12.4	9,630	+12.5					
Louisiana.....	13	646	-10.3	9,771	+2.5					
Maine.....	12	209	-16.1	3,860	-26.1					
Maryland.....	14	317	+12.8	4,248	+16.3					
Massachusetts.....	23	519	+3.2	11,219	+5.2					
Michigan.....	47	1,420	-10.1	27,191	+3.1	42	4,036	+8.1	59,359	+13.3
Minnesota.....	26	501	+30.5	8,726	+41.8	32	1,706	+10.9	35,601	+18.6
Mississippi.....	8	171	+12.5	2,181	+21.6					
Missouri.....	47	1,166	+9.3	17,545	+18.4	15	1,756	+1.3	22,777	+5.7
Montana.....	9	122	-16.4	1,388	-36.9	17	2,380	+5.9	67,248	+5.4
Nebraska.....	7	235	+8.3	3,231	+20.6					
Nevada.....						17	466	+34.7	11,634	+56.0
New Hampshire.....	11	258	+150.5	7,650	+255.3					
New Jersey.....	42	811	+12.0	13,146	+10.3	3	13	+44.4	262	+16.4
New Mexico.....						5	931	-1.1	19,482	+12.7
New York.....	76	2,176	-6	39,123	+1					
North Carolina.....	14	395	-5.5	4,980	+7.8					
North Dakota.....										
Ohio.....	136	3,873	+1.0	58,442	+4.3					
Oklahoma.....	15	252	+39.2	1,980	+28.5	32	1,686	-1	25,621	+2.9
Oregon.....	5	62	+14.8	984	+25.7	6	60	+3.4	1,112	+10.6
Pennsylvania.....	164	5,797	-2.4	84,883	+6.4					
Rhode Island.....										
South Carolina.....	5	95	-20.8	917	-22.3					
South Dakota.....	8	62	-3.1	1,153	+31.6					
Tennessee.....	25	1,539	+8.2	19,744	+23.1	4	313	+4.3	6,302	+12.1
Texas.....	21	407	-37.5	8,809	-26.2					
Utah.....	6	148	+28.7	2,216	+5.9	12	2,107	+4.0	40,986	+10.4
Vermont.....	40	2,329	+2.4	42,764	-2.0					
Virginia.....	32	1,411	-5.8	13,396	-11.0					
Washington.....	18	212	+29.3	3,855	+51.9					
West Virginia.....	24	899	-1.4	13,166	+5.7					
Wisconsin.....	14	167	-2.5	2,248	-7.0	(11)	376	+4.7	6,923	+1.5
Wyoming.....										

<sup>11</sup> Not available.

**COMPARISON OF EMPLOYMENT AND PAY ROLLS IN IDENTICAL ESTABLISHMENTS  
IN SEPTEMBER AND OCTOBER 1933, BY STATES—Continued**

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

State	Bituminous-coal mining					Crude-petroleum producing				
	Number of establishments	Number on pay roll October 1933	Per-cent of change	Amount of pay roll (1 week) October 1933	Per-cent of change	Number of establishments	Number on pay roll October 1933	Per-cent of change	Amount of pay roll (1 week) October 1933	Per-cent of change
Alabama.....	57	10,047	-1.8	\$122,594	-4.0					
Arizona.....										
Arkansas.....	3	195	-20.5	2,752	-17.1	9	485	+9.2	\$11,821	+22.6
California.....						40	7,723	+2.4	235,022	+8.8
Colorado.....	54	5,254	+14.5	94,785	+22.1					
Connecticut.....										
Delaware.....										
Dist. of Columbia.....										
Florida.....										
Georgia.....										
Idaho.....										
Illinois.....	33	7,754	-1.2	157,494	+20.9	7	145	-7.6	2,897	-1.2
Indiana.....	53	5,793	-4.1	109,876	+1.3	4	33	+37.5	382	+36.9
Iowa.....	23	1,980	+48.5	41,035	+143.6					
Kansas.....	26	1,356	+13.1	19,659	+16.2	30	1,466	+20.0	31,161	+17.8
Kentucky.....	165	31,773	+5.5	513,863	+14.2	6	261	+6.5	3,595	+24.7
Louisiana.....						8	216	+13.7	5,116	+34.4
Maine.....										
Maryland.....	16	1,451	+1.0	19,331	+4.8					
Massachusetts.....										
Michigan.....										
Minnesota.....										
Mississippi.....										
Missouri.....	21	1,649	+5	26,862	+22.4					
Montana.....	11	913	+5.1	23,713	+13.7	4	24	-17.2	564	-17.3
Nebraska.....										
Nevada.....										
New Hampshire.....										
New Jersey.....										
New Mexico.....	13	1,493	+11.6	26,228	+18.6	5	57	+7.5	1,562	+2.8
New York.....						6	303	+60.3	7,261	+84.9
North Carolina.....										
North Dakota.....	10	721	+51.5	15,108	+57.7					
Ohio.....	84	13,520	+3.3	247,271	+26.6	6	87	+17.6	1,309	+70.9
Oklahoma.....	18	779	+21.0	15,209	+31.4	56	5,335	+10.3	127,505	+12.8
Oregon.....										
Pennsylvania.....	449	47,987	-28.8	604,521	-40.2	21	892	+36.6	20,132	+50.5
Rhode Island.....										
South Carolina.....										
South Dakota.....										
Tennessee.....	22	2,978	+1.0	38,535	-2.6					
Texas.....	5	371	+6.6	6,815	-5.6	3	8,445	+7	285,131	+6.0
Utah.....	16	2,043	+36.7	51,706	+38.1					
Vermont.....										
Virginia.....	34	8,346	+6.7	143,690	+18.5					
Washington.....	10	387	+9.0	10,791	+48.7					
West Virginia.....	353	59,974	+3.0	1,110,970	+12.5	8	376	+13.6	7,824	+9.1
Wisconsin.....										
Wyoming.....	30	3,338	+6.4	95,899	+31.0	7	191	+4.4	4,882	+3.7

**COMPARISON OF EMPLOYMENT AND PAY ROLLS IN IDENTICAL ESTABLISHMENTS  
IN SEPTEMBER AND OCTOBER 1933, BY STATES—Continued**

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

State	Public utilities					Hotels					
	Number of establishments	Number on pay roll October 1933	Per cent of change	Amount of pay roll (1 week) October 1933	Per cent of change	Number of establishments	Number on pay roll October 1933	Per cent of change	Amount of pay roll (1 week) October 1933	Per cent of change	
Alabama.....	89	1,737	+2.3	\$35,936	+8.6	26	1,161	+ .6	\$9,773	+4.9	
Arizona.....	68	1,401	+5.9	33,964	+8.8	21	466	+6.6	6,529	+7.8	
Arkansas.....	62	1,710	+ .2	39,205	- .4	16	570	+2.1	4,734	+5.6	
California.....	44	42,039	- .1	1,172,929	+4.8	187	8,221	-2.6	134,661	-2.3	
Colorado.....	196	5,390	+2.6	137,222	+5.3	59	1,346	-7.6	17,752	-6.6	
Connecticut.....	135	9,464	+1.3	285,346	+ .3	32	1,188	+ .8	14,718	+ .4	
Delaware.....	28	1,104	+4.3	31,238	+7.6	6	251	(9)	3,401	+3.6	
Dist. of Columbia.	22	8,404	+ .8	231,275	+5.1	48	4,123	+7.0	57,434	+8.7	
Florida.....	185	4,775	+1.5	123,279	+10.1	58	1,087	+5.5	10,395	+6.4	
Georgia.....	186	6,504	+2.6	177,474	+7.6	29	1,306	-4.6	10,057	-1.4	
Idaho.....	56	730	+6.0	14,222	+7.3	22	355	- .3	4,021	+5.7	
Illinois.....	80	70,426	+3.0	1,934,605	+6.6	12	55	-1.2	207,755	+7.6	
Indiana.....	115	7,700	+1.2	196,552	+6.3	83	3,294	+5.4	32,691	+4.7	
Iowa.....	430	9,256	- .1	212,998	+6.7	67	2,299	+5.5	21,312	+6.1	
Kansas.....	126	7,299	- .6	167,029	(5)	32	694	+1.2	7,463	+3.8	
Kentucky.....	293	6,300	+ .4	145,707	+5.4	36	1,832	+2.9	18,459	+5.5	
Louisiana.....	151	5,527	+1.5	140,207	+6.7	22	1,726	-4.7	17,929	-4.3	
Maine.....	167	2,558	+2.1	68,833	+3.6	37	1,225	-30.0	13,976	-32.7	
Maryland.....	93	12,477	+2.1	338,287	-2.1	23	1,125	- .1	13,763	+3.1	
Massachusetts.....	13	131	46,898	+ .4	1,273,862	- .5	92	4,787	-6.8	64,711	-6.2
Michigan.....	406	22,473	+1.2	655,434	+4.8	110	4,658	-4.8	51,286	-2.4	
Minnesota.....	232	12,800	+2.1	331,135	+8.7	80	3,236	+1.8	37,740	+3.2	
Mississippi.....	143	973	- .1	19,747	+7.3	17	440	-2.4	3,038	+5.2	
Missouri.....	141	7,171	+1.1	184,827	+3.3	90	4,601	+4.9	52,528	+5.3	
Montana.....	101	1,966	+9.6	54,090	+5.6	28	410	-1.9	5,523	-1.3	
Nebraska.....	299	5,599	- .3	142,043	+6.8	42	1,495	+1.2	15,229	+8.3	
Nevada.....	38	354	-3.0	10,181	+2.5	12	167	-1.2	2,694	-4.8	
New Hampshire.....	140	2,149	+3.3	57,429	+4.0	26	589	-58.0	6,935	-54.9	
New Jersey.....	265	21,174	- .1	604,087	+2.2	85	4,440	-25.4	54,653	-18.3	
New Mexico.....	54	601	-9.8	12,336	+2.2	15	320	-10.6	3,414	-6.5	
New York.....	864	97,472	+1.4	2,966,657	+1.8	277	30,557	- .1	457,043	+3.3	
North Carolina.....	96	1,792	+3.8	37,495	+6.1	36	1,103	-2.5	9,203	-2.1	
North Dakota.....	171	1,235	+1.3	30,386	+7.2	24	404	+2.0	4,105	+3.3	
Ohio.....	489	31,964	+2.1	847,841	+7.1	152	8,946	+ .9	104,914	+2.5	
Oklahoma.....	245	5,926	+ .5	133,937	+6.3	63	1,604	+3.8	17,083	+4.0	
Oregon.....	183	5,556	+ .9	140,160	+4.1	60	1,261	+3.5	15,447	+5.2	
Pennsylvania.....	734	53,180	+7.7	1,474,411	+5.8	181	9,672	+2.5	116,784	+4.3	
Rhode Island.....	42	3,263	+ .2	93,781	+3.6	25	403	-40.8	4,857	-34.2	
South Carolina.....	70	1,533	-7.1	33,694	+5.7	15	422	+3.7	3,128	+9.1	
South Dakota.....	129	1,025	+3.5	25,138	+6.1	19	307	-1.6	3,720	+2.1	
Tennessee.....	244	4,341	+2.1	98,564	+3.4	37	2,203	- .7	18,700	+1.3	
Texas.....	136	6,822	+5.5	180,767	+7.1	46	3,697	+3.2	45,694	+3.3	
Utah.....	66	1,712	- .9	33,955	+2.0	13	474	-2.3	5,813	- .5	
Vermont.....	122	1,055	+ .4	25,582	+1.6	26	582	-8.3	5,805	-6.0	
Virginia.....	123	2,474	+ .6	58,891	+6.3	35	1,906	+2.1	19,917	+2.2	
Washington.....	199	9,599	+1.0	259,208	+5.4	84	2,510	- .6	28,445	+1.5	
West Virginia.....	119	6,254	+2.9	157,210	+7.5	38	1,112	+1.1	11,733	+1.7	
Wisconsin.....	14	41	10,808	312,160	+8.1	13	1,222	-4.3	(1)	-	
Wyoming.....	48	449	(9)	10,456	+5.2	12	127	+2.4	1,664	+2.4	

<sup>8</sup> No change.

<sup>11</sup> Not available.

<sup>12</sup> Includes restaurants.

<sup>13</sup> Includes steam railroads.

<sup>14</sup> Includes railways and express.

**COMPARISON OF EMPLOYMENT AND PAY ROLLS IN IDENTICAL ESTABLISHMENTS  
IN SEPTEMBER AND OCTOBER 1933, BY STATES—Continued**

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

State	Laundries					Dyeing and cleaning				
	Number of establishments	Number on pay roll October 1933	Per cent of change	Amount of pay roll (1 week) October 1933	Per cent of change	Number of establishments	Number on pay roll October 1933	Per cent of change	Amount of pay roll (1 week) October 1933	Per cent of change
Alabama	5	455	-2.4	\$4,179	-1.1	3	104	-21.8	\$1,022	-21.6
Arizona	10	377	+1.3	5,191	+2.0					
Arkansas	13	362	-4.7	3,343	-8.0	3	45	( <sup>9</sup> )	615	+10.6
California	<sup>15</sup> 69	4,977	-1.0	88,701	+1.6					
Colorado	9	586	-2.3	7,860	-5.5	9	149	-13.9	2,598	-12.8
Connecticut	25	1,184	+2.2	19,234	-3	12	270	+4.2	5,555	+4.1
Delaware	3	237	-8	3,965	-2.2					
Dist. of Columbia	20	2,561	+3	38,627	-1	5	132	-2.2	2,302	-2.4
Florida	9	501	-2.3	4,944	-2	13	119	+5.3	1,867	+3.6
Georgia	12	660	-1.9	5,982	-7.5	4	98	-1.0	1,125	-1.9
Idaho										
Illinois	<sup>15</sup> 26	1,620	-3.6	22,774	-3.3					
Indiana	21	1,553	-3.0	20,827	-5.7	12	215	+1.4	3,616	+1.8
Iowa	5	223	-2.2	3,113	-4.4	6	261	-1.5	4,125	-4.5
Kansas	<sup>15</sup> 40	918	+1.2	11,188	-2					
Kentucky	16	794	-4.0	9,512	-10.2	5	251	+2.4	3,610	+4.0
Louisiana						5	86	+10.3	1,078	+17.9
Maine	19	417	-11.3	5,958	-14.8					
Maryland	<sup>25</sup>	1,886	-1.3	28,478	-4.0	12	462	+9	6,974	+9.3
Massachusetts	113	3,696	+2	58,528	-1.4	78	1,872	-2.2	31,503	-9.0
Michigan	22	1,445	-4.3	19,880	-3.4	16	609	-1.1	11,267	-4
Minnesota	13	663	-3.1	10,581	-1.5	12	459	+2	7,680	-3.1
Mississippi	6	311	-1.6	3,096	-2.6					
Missouri	30	2,244	-1.3	29,587	-3.2	13	489	+3.6	8,666	+3.8
Montana	14	327	-6	5,600	+3.3					
Nebraska	7	571	-2.1	7,780	-6.6	3	104	( <sup>9</sup> )	1,885	+4.8
Nevada	4	51	-1.9	956	-4.1					
New Hampshire	18	332	-2.4	4,794	-6.3					
New Jersey	25	3,124	-2.6	61,401	-7	6	207	+1.5	5,163	+4
New Mexico	4	187	-10.5	2,795	-9.2					
New York	70	7,138	-1.6	121,578	-7	17	570	+2.0	10,762	+2.6
North Carolina	12	735	-5.4	7,776	-6.6					
North Dakota	11	210	-9	3,171	+2.0					
Ohio	79	4,086	-1.9	60,106	-2.4	42	1,646	+2.0	29,664	+5.5
Oklahoma	9	619	-6.6	7,921	-6.1	6	180	-12.6	2,429	-6.5
Oregon	4	311	-1.3	4,887	+2	4	64	-4.5	1,204	-4.6
Pennsylvania	40	2,928	+1	44,213	+1.0	18	1,036	+2	19,599	+9.4
Rhode Island	17	1,100	-2.7	18,764	-2.8	4	330	-5.4	6,177	+1.8
South Carolina	8	296	-3.6	2,860	-6.7					
South Dakota	5	104	-1.9	1,310	-8.6					
Tennessee	12	888	( <sup>8</sup> )	7,687	-4.0	4	54	-3.6	753	+3.0
Texas	24	1,176	-3.4	12,767	-5.0	16	430	-1.4	7,221	+1.0
Utah	7	489	( <sup>8</sup> )	6,850	-2	8	128	-10.5	2,294	-10.3
Vermont	4	59	-9.2	784	-4.7					
Virginia	10	841	+4.1	9,171	-5.9	22	282	-2.1	4,145	+1.9
Washington	12	558	-4.0	10,019	-5.5	14	197	-2.5	3,541	+1.3
West Virginia	20	694	-6	8,646	-2.2	9	221	+9	2,987	+2.1
Wisconsin	<sup>15</sup> 28	896	+5	12,890	-2.5					
Wyoming	6	95	-3.1	1,535	-4.4					

<sup>8</sup> No change.

<sup>15</sup> Includes dyeing and cleaning.

**COMPARISON OF EMPLOYMENT AND PAY ROLLS IN IDENTICAL ESTABLISHMENTS  
IN SEPTEMBER AND OCTOBER 1933, BY STATES—Continued**

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

State	Banks, brokerage, insurance, and real estate				
	Number of establishments	Number on pay roll October 1933	Percent of change	Amount of payroll (1 week) October 1933	Percent of change
Alabama.....	18	470	- .8	\$13,305	-1.8
Arizona.....	29	206	-1.9	5,606	+ .8
Arkansas.....	19	242	- .8	5,891	+ .7
California.....	1,140	22,931	- .6	751,471	+ .2
Colorado.....	27	1,068	- .7	37,046	+ .3
Connecticut.....	56	1,979	+ .2	68,316	+ .6
Delaware.....	17	570	- .5	19,696	- .4
District of Columbia.....	41	1,335	( <sup>3</sup> )	47,849	-1.2
Florida.....	18	567	+ .5	17,393	+ .3
Georgia.....	25	1,023	+ .4	29,715	+ .9
Idaho.....	16	138	-1.4	3,422	+ .5
Illinois.....	94	10,802	+ .1	368,436	+1.9
Indiana.....	39	1,176	-1.2	38,174	-1.0
Iowa.....	17	979	+ .1	31,357	- .3
Kansas.....	31	738	-1.2	22,607	- .9
Kentucky.....	21	842	- .5	29,543	-2.4
Louisiana.....	9	371	+ .3	13,520	- .5
Maine.....	16	254	( <sup>3</sup> )	6,597	+ .2
Maryland.....	24	856	( <sup>3</sup> )	31,660	+ .1
Massachusetts.....	227	8,408	+1.6	26,545	+2.7
Michigan.....	92	3,987	+ .4	124,308	+3.1
Minnesota.....	52	4,189	+25.8	101,857	+15.3
Mississippi.....	17	195	+ .5	4,322	+ .9
Missouri.....	86	4,747	+ .2	139,340	-2.8
Montana.....	21	244	( <sup>3</sup> )	6,867	- .5
Nebraska.....	17	505	+ .2	17,412	+ .8
Nevada.....	39	381	( <sup>3</sup> )	9,011	+ .2
New Hampshire.....	109	12,478	+ .3	351,086	- .5
New Jersey.....	16	87	+1.2	2,583	+1.5
New Mexico.....	726	53,634	- .6	1,842,595	-1.3
New York.....	26	556	+8.6	14,459	+8.1
North Carolina.....	38	274	-1.1	6,590	-2.3
North Dakota.....	278	7,938	-1.0	258,356	- .2
Ohio.....	21	592	-3.3	17,737	- .9
Oklahoma.....	15	758	- .4	26,356	+ .7
Oregon.....	798	23,119	- .3	714,474	- .6
Pennsylvania.....	28	926	+ .1	37,801	- .8
Rhode Island.....	11	110	( <sup>3</sup> )	3,301	+3.1
South Carolina.....	31	240	( <sup>3</sup> )	6,004	+1.0
South Dakota.....	31	1,129	+ .4	38,701	+ .9
Tennessee.....	23	1,311	+ .7	37,673	+ .6
Texas.....	14	457	-1.3	16,203	-1.1
Utah.....	30	235	+ .9	6,702	- .4
Vermont.....	32	1,337	- .2	43,326	+ .7
Virginia.....	32	1,324	+2.0	40,472	- .7
Washington.....	44	609	-1.1	17,471	-1.1
West Virginia.....	17	919	- .2	31,105	-( <sup>3</sup> )
Wisconsin.....	10	90	( <sup>3</sup> )	2,762	+1.5
Wyoming.....					

<sup>3</sup> Less than one tenth of 1 percent.

<sup>3</sup> No change.

## Employment and Pay Rolls in October 1933 in Cities of Over 500,000 Population

**I**N THE following table are presented the fluctuations in employment and pay-roll totals in October 1933 as compared with September 1933 in 13 cities of the United States having a population of 500,000 or over. These changes are computed from reports received from identical establishments in each of the months considered.

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

### FLUCTUATIONS IN EMPLOYMENT AND PAY ROLLS IN OCTOBER 1933 AS COMPARED WITH SEPTEMBER 1933

Cities	Number of establishments reporting in both months	Number on pay roll		Per- cent of change	Amount of pay roll (1 week)		Per- cent of change
		September 1933	October 1933		September 1933	October 1933	
New York City.....	5,396	345,282	351,859	+1.9	9,148,308	9,164,592	+0.2
Chicago, Ill.....	1,837	233,432	236,754	+1.4	5,375,740	5,473,204	+1.8
Philadelphia, Pa.....	842	149,742	156,319	+4.4	3,308,407	3,516,788	+6.3
Detroit, Mich.....	526	197,275	174,915	-11.3	4,525,377	3,951,659	-12.7
Los Angeles, Calif.....	833	77,706	79,113	+1.8	1,852,043	1,899,375	+2.6
Cleveland, Ohio.....	1,125	99,868	99,598	— .3	2,074,980	2,094,822	+1.0
St. Louis, Mo.....	520	73,756	73,731	— (1)	1,577,771	1,565,620	— .7
Baltimore, Md.....	577	54,684	56,348	+3.0	1,100,126	1,127,176	+2.5
Boston, Mass.....	3,654	99,675	101,249	+1.6	2,411,050	2,461,717	+2.1
Pittsburgh, Pa.....	435	56,333	56,951	+1.1	1,191,277	1,242,723	+4.3
San Francisco, Calif.....	1,151	53,887	52,234	-3.1	1,257,694	1,257,408	— (0)
Buffalo, N. Y.....	437	44,494	43,116	-3.1	966,001	938,827	-2.8
Milwaukee, Wis.....	451	45,800	46,669	+1.9	895,797	934,557	+4.3

<sup>1</sup> Less than one tenth of 1 percent.

## Employment in the Executive Civil Service of the United States, October 1933

**O**N OCTOBER 31, 1933, the United States Government had on its pay rolls 577,170 employees. This is an increase of 4,303 as compared with October 31, 1932. Comparing October 1933 with September 1933, there was an increase of 10,814 employees or 1.9 percent.

The data presented herein does not include the legislative, judicial, or Army and Navy services. The information shown in table 1 was compiled by the various departments and offices of the United States Government and sent to the United States Civil Service Commission where it was assembled. The figures were tabulated by the Bureau of Labor Statistics and are published in compliance with the direction of Congress.

Table 1 shows the number of Federal employees inside the District of Columbia, the number of employees outside of the District of Columbia, and the total number for the entire Federal service.

Approximately 12 percent of the total number of workers on the pay rolls of the United States Government are employed inside the District of Columbia.

TABLE 1.—EMPLOYEES IN THE EXECUTIVE CIVIL SERVICE OF THE UNITED STATES, OCTOBER 1932, SEPTEMBER AND OCTOBER 1933

Item	District of Columbia			Outside the District			Entire service		
	Perma- nent	Tem- pora- ry <sup>1</sup>	Total	Perma- nent	Tem- pora- ry <sup>1</sup>	Total	Perma- nent	Tem- pora- ry <sup>1</sup>	Total
Number of employees:									
October 1932.....	64, 484	2, 490	66, 974	470, 043	35, 850	505, 893	534, 527	38, 340	572, 867
September 1933.....	63, 258	6, 482	69, 740	453, 750	42, 866	496, 616	517, 008	49, 348	566, 356
October 1933.....	64, 668	6, 386	71, 054	454, 056	52, 060	506, 116	518, 724	58, 446	577, 170
Gain or loss:									
October 1932-October 1933.....	+184	+3, 896	+4, 080	-15, 987	+16, 210	+223	-15, 803	+20, 106	+4, 303
September 1933-October 1933.....	+1, 410	-96	+1, 314	+306	+9, 194	+9, 500	+1, 716	+9, 098	+10, 814
Percent of change:									
October 1932-October 1933.....	+ .3	+156.5	+6.1	-3.4	+45.2	+ <sup>(2)</sup>	-3.0	+52.4	+ .8
September 1933-October 1933.....	+2.2	-1.5	+1.9	+ .1	+21.4	+1.9	+ .3	+18.4	+1.9
Labor turn-over October 1933:									
Additions.....	<sup>2</sup> 2, 007	1, 426	<sup>2</sup> 3, 433	<sup>3</sup> 12, 152	24, 445	<sup>3</sup> 36, 597	<sup>4</sup> 14, 159	25, 871	<sup>4</sup> 40, 030
Separations.....	1, 326	<sup>2</sup> 793	<sup>2</sup> 2, 119	12, 307	<sup>3</sup> 14, 790	<sup>3</sup> 27, 097	13, 633	<sup>4</sup> 15, 583	<sup>4</sup> 29, 216
Turn-over rate per 100.....	2.07	12.33	3.01	2.68	31.16	5.40	2.63	28.91	5.11

<sup>1</sup> Not including field employees of the Post Office Department.<sup>2</sup> Not including 729 employees of the Federal Emergency Administration of Public Works transferred from a temporary to a permanent status.<sup>3</sup> Not including 461 employees of the Federal Emergency Administration of Public Works, transferred from a temporary to a permanent status.<sup>4</sup> See notes to details.<sup>5</sup> Less than one tenth of 1 percent.

Comparing October 1933 with September 1933, there was an increase of 2.2 percent in the number of permanent employees (half of this increase was caused by a transfer of 729 employees of the Public Works Administration from a temporary to a permanent status), and a decrease of 1.5 percent in the number of temporary employees in the District of Columbia, making a net increase of 1.9 percent in the total Federal employment in the city of Washington.

Comparing October 1933 with October 1932, there was an increase of three tenths of 1 percent in permanent employees and an increase of 156.5 percent in temporary employees, making an increase of 6.1 percent in the total number of employees in the District of Columbia. The large increase in temporary employment is caused by the setting up of a number of new independent establishments since October of last year.

Outside the District of Columbia, the number of permanent employees decreased 3.4 percent and the number of temporary employees increased 45.2 percent, comparing October 1933 pay rolls with those for October 1932.

Comparing October 1933 with September 1933, there was an increase of 0.3 percent in the number of permanent employees, an increase of 18.4 percent in the number of temporary employees, and an increase of 1.9 percent in total Federal employment.

Pay-roll figures for the entire Government service are presented herewith for the first time. The total Government pay roll for all classes of civil employees for the month of September was \$70,609,548, October pay rolls totaled \$74,407,443.

Table 2 shows employment and pay rolls for the Emergency Conservation Work.

There was an increase of 30,685 persons engaged in Emergency Conservation Work, comparing October with September. This increase was caused by recruiting additional enrolled personnel during the month.



TABLE 2.—EMPLOYMENT AND PAY ROLLS IN THE EMERGENCY CONSERVATION WORK, SEPTEMBER AND OCTOBER 1933

Group	Number		Pay rolls	
	September	October	September	October
Enrolled personnel.....	208, 402	239, 859	\$6, 508, 392	\$7, 490, 799
Reserve officers, line.....	2, 902	3, 298	678, 676	(1)
Reserve officers, medical.....	986	1, 074		
Supervisory and technical.....	14, 744	13, 488	1, 754, 485	1, 605, 140
Total.....	227, 034	257, 719	8, 941, 553	29, 095, 939

<sup>1</sup> Data not available.    <sup>2</sup> Not including October pay rolls for Reserve officers, line and medical.

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

The pay of the enrolled enlisted personnel is \$30 per month, except that 5 percent of the personnel of each company are paid \$45 a month and an additional 8 percent are paid \$36 per month. The pay roll for this branch of the service is figured on this basis. The amounts paid to Reserve officers, line and medical, are shown for September for the first time. Data for these branches will be supplied regularly hereafter.

### Employment on Class I Steam Railroads in the United States

REPORTS of the Interstate Commerce Commission for class I railroads show that the number of employees (exclusive of executives and officials) decreased from 1,018,138 on September 15, 1933, to 1,011,110 on October 15, 1933, or 0.7 percent. Data are not yet available concerning total compensation of employees for October 1933. The latest pay-roll information available shows a decrease from \$121,857,255 in August to \$118,777,553 in September, or 2.5 percent.

The monthly trend of employment from January 1923 to October 1933 on class I railroads—that is, all roads having operating revenues of \$1,000,000 or over—is shown by index numbers published in the following table. These index numbers are constructed from monthly reports of the Interstate Commerce Commission, using the 12-month average for 1926 as 100.

TABLE 1.—INDEXES OF EMPLOYMENT ON CLASS I STEAM RAILROADS IN THE UNITED STATES, JANUARY 1923 TO OCTOBER 1933

[12-month average, 1926=100]

Month	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
January.....	98.3	96.6	95.6	95.8	95.5	89.3	88.2	86.3	73.3	61.2	53.0
February.....	98.6	97.0	95.4	96.0	95.3	89.0	88.9	85.4	72.7	60.3	52.7
March.....	100.5	97.4	95.2	96.7	95.8	89.9	90.1	85.5	72.9	60.5	51.5
April.....	102.0	98.9	96.6	98.9	97.4	91.7	92.2	87.0	73.5	60.0	51.8
May.....	105.0	99.2	97.8	100.2	99.4	94.5	94.9	88.6	73.9	59.7	52.5
June.....	107.1	98.0	98.6	101.6	100.9	95.9	96.1	86.5	72.8	57.8	53.6
July.....	108.2	98.1	99.4	102.9	101.0	95.6	96.6	84.7	72.4	56.4	55.4
August.....	109.4	99.0	99.7	102.7	99.5	95.7	97.4	83.7	71.2	55.0	56.8
September.....	107.8	99.7	99.9	102.8	99.1	95.3	96.8	82.2	69.3	55.8	57.7
October.....	107.3	100.8	100.7	103.4	98.9	95.3	96.9	80.4	67.7	57.0	57.3
November.....	105.2	99.0	99.1	101.2	95.7	92.9	93.0	77.0	64.5	55.9	-----
December.....	99.4	96.0	97.1	98.2	91.9	89.7	88.8	74.9	62.6	54.8	-----
Average.....	104.1	98.3	97.9	100.0	97.5	92.9	93.3	83.5	70.6	57.9	<sup>2</sup> 54.2

<sup>1</sup> Revised.

<sup>2</sup> Average for 10 months.

## Wage-Rate Changes in American Industries

### Manufacturing Industries

**T**HE following table presents information concerning wage-rate adjustments occurring between September 15 and October 15, 1933, as shown by reports received from manufacturing establishments supplying employment data to this Bureau.

Increases in wage rates averaging 12.3 percent and affecting 96,461 employees were reported by 468 of the 18,602 manufacturing establishments surveyed in October. The iron and steel industry reported the greatest number of workers affected by wage-rate increases over the month interval. Thirty-five establishments in that industry reported increases in wage rates affecting 38,053 workers and averaging 10.7 percent. Increases affecting 7,109 employees and averaging 10.6 percent were reported by 21 establishments in the automobile industry. Other industries in which increases in rates affecting from 2,000 to 3,000 employees were reported were foundry and machine-shop products, chemicals, rayon, and brass, bronze, and copper products.

Of the 18,602 manufacturing establishments included in the October survey, 18,129 establishments, or 97.5 percent of the total, reported no change in wage rates over the month interval. The 3,262,266 employees not affected by changes in wage rates constituted 97.1 percent of the total number of employees covered by the October trend-of-employment survey of manufacturing industries.

Only five manufacturing establishments reported wage-rate decreases between September and October.

TABLE 1.—WAGE-RATE CHANGES IN MANUFACTURING INDUSTRIES DURING MONTH ENDING OCTOBER 15, 1933

Industry	Establishments reporting	Total number of employees	Number of establishments reporting—			Number of employees having—		
			No wage-rate changes	Wage-rate increases	Wage-rate decreases	No wage-rate changes	Wage-rate increases	Wage-rate decreases
All manufacturing industries.....	18,602	3,358,960	18,129	468	5	3,262,266	96,461	233
Percent of total.....	100.0	100.0	97.5	2.5	( <sup>1</sup> )	97.1	2.9	( <sup>1</sup> )
Food and kindred products:								
Baking.....	1,030	73,420	1,013	17	—	73,082	338	—
Beverages.....	413	26,154	396	15	2	25,228	921	5
Butter.....	307	5,966	305	2	—	5,960	6	—
Confectionery.....	302	43,619	297	4	1	43,507	99	13
Flour.....	417	17,646	412	5	—	17,553	93	—
Ice cream.....	356	11,377	349	7	—	11,285	92	—
Slaughtering and meat packing.....	244	112,501	243	1	—	112,498	3	—
Sugar, beet.....	63	21,913	54	9	—	19,955	1,958	—
Sugar refining, cane.....	13	9,704	10	3	—	7,618	2,186	—
Textiles and their products:								
Fabrics:								
Carpets and rugs.....	27	16,632	27	—	—	16,632	—	—
Cotton goods.....	689	309,034	683	6	—	308,238	796	—
Cotton small wares.....	116	11,621	114	2	—	11,616	5	—
Dyeing and finishing textiles.....	153	33,600	151	2	—	33,460	140	—
Hats, fur-felt.....	36	6,248	36	—	—	6,248	—	—
Knit goods.....	466	124,945	454	12	—	123,553	1,392	—
Silk and rayon goods.....	238	50,798	236	2	—	50,001	797	—
Woolen and worsted goods.....	240	75,365	239	1	—	75,118	247	—

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

TABLE 1.—WAGE-RATE CHANGES IN MANUFACTURING INDUSTRIES DURING MONTH ENDING OCTOBER 15, 1933—Continued

Industry	Establishments reporting	Total number of employees	Number of establishments reporting—			Number of employees having—		
			No wage-rate changes	Wage-rate increases	Wage-rate decreases	No wage-rate changes	Wage-rate increases	Wage-rate decreases
Textiles and their products—Continued.								
Wearing apparel:								
Clothing, men's.....	396	70,604	374	22	—	67,949	2,655	—
Clothing, women's.....	593	34,458	566	27	—	32,959	1,499	—
Corsets and allied garments.....	32	5,453	29	3	—	5,050	403	—
Men's furnishings.....	73	7,242	70	3	—	7,109	133	—
Millinery.....	135	8,845	134	1	—	8,792	53	—
Shirts and collars.....	122	18,650	122	—	—	18,650	—	—
Iron and steel and their products, not including machinery:								
Bolts, nuts, washers, and rivets.....	79	14,406	78	1	—	13,812	594	—
Cast-iron pipe.....	44	6,630	42	2	—	6,092	538	—
Cutlery (not including silver and plated cutlery) and edge tools.....	132	11,292	129	3	—	11,203	89	—
Forgings, iron and steel.....	66	7,214	63	3	—	6,806	408	—
Hardware.....	99	28,269	97	2	—	28,216	53	—
Iron and steel.....	206	254,363	171	35	—	216,310	38,053	—
Plumbers' supplies.....	73	9,314	70	3	—	9,242	72	—
Steam and hot-water heating apparatus and steam fittings.....	98	16,843	92	6	—	16,256	587	—
Stoves.....	162	25,346	155	7	—	24,697	649	—
Structural and ornamental metal work.....	202	17,045	197	5	—	16,523	522	—
Tin cans and other tinware.....	60	10,238	58	2	—	10,081	157	—
Tools (not including edge tools, machine tools, files, and saws).....	127	8,950	126	1	—	8,934	16	—
Wirework.....	71	7,836	70	1	—	7,832	4	—
Machinery, not including transportation equipment:								
Agricultural implements.....	79	9,118	75	4	—	7,773	1,345	—
Cash registers, adding machines, and calculating machines.....	35	16,366	35	—	—	16,366	—	—
Electrical machinery, apparatus, and supplies.....	291	112,500	282	9	—	111,053	1,447	—
Engines, turbines, tractors, and water wheels.....	92	21,167	87	5	—	20,069	1,098	—
Foundry and machine-shop products.....	1,075	125,024	1,046	29	—	122,015	3,009	—
Machine tools.....	143	15,601	136	7	—	14,813	788	—
Radios and phonographs.....	43	37,148	38	5	—	36,852	296	—
Textile machinery and parts.....	52	10,768	51	1	—	10,621	147	—
Typewriters and supplies.....	16	11,988	15	1	—	11,979	9	—
Nonferrous metals and their products:								
Aluminum manufactures.....	27	6,949	26	1	—	6,937	12	—
Brass, bronze, and copper products.....	212	39,185	207	5	—	36,621	2,564	—
Clocks and watches and time-recording devices.....	27	9,606	26	1	—	9,376	230	—
Jewelry.....	130	9,487	130	—	—	9,487	—	—
Lighting equipment.....	52	3,642	52	—	—	3,642	—	—
Silverware and plated ware.....	56	9,247	56	—	—	9,247	—	—
Smelting and refining—copper, lead, and zinc.....	42	14,140	40	2	—	1,289	851	—
Stamped and enameled ware.....	86	15,982	84	2	—	15,104	828	—
Transportation equipment:								
Aircraft.....	25	6,445	24	1	—	5,295	1,150	—
Automobiles.....	239	221,612	218	21	—	214,503	7,109	—
Cars, electric and steam railroad.....	49	8,876	49	—	—	8,876	—	—
Locomotives.....	11	2,851	11	—	—	2,851	—	—
Shipbuilding.....	100	30,322	98	2	—	30,255	67	—
Railroad repair shops:								
Electric railroad.....	380	19,631	363	17	—	18,741	890	—
Steam railroad.....	540	76,434	540	—	—	76,434	—	—

TABLE 1.—WAGE-RATE CHANGES IN MANUFACTURING INDUSTRIES DURING MONTH ENDING OCTOBER 15, 1933—Continued

Industry	Establishments reporting	Total number of employees	Number of establishments reporting—			Number of employees having—		
			No wage-rate changes	Wage-rate increases	Wage-rate decreases	No wage-rate changes	Wage-rate increases	Wage-rate decreases
Lumber and allied products:								
Furniture.....	468	60,655	455	13	-----	58,751	1,904	-----
Lumber:								
Millwork.....	494	21,348	481	12	1	20,890	328	130
Sawmills.....	621	83,438	614	7	-----	82,722	716	-----
Turpentine and rosin.....	27	1,923	26	1	-----	1,829	94	-----
Stone, clay, and glass products:								
Brick, tile, and terra cotta.....	662	20,469	650	12	-----	20,142	327	-----
Cement.....	131	13,199	128	3	-----	12,609	510	-----
Glass.....	177	46,900	170	7	-----	46,076	824	-----
Marble, granite, slate, and other products.....	235	5,982	234	1	-----	5,957	25	-----
Pottery.....	120	19,007	118	2	-----	18,894	113	-----
Leather and its manufactures:								
Boots and shoes.....	348	120,806	339	9	-----	119,931	875	-----
Leather.....	158	32,227	152	6	-----	31,619	608	-----
Paper and printing:								
Boxes, paper.....	327	27,785	325	2	-----	27,685	100	-----
Paper and pulp.....	416	101,951	409	7	-----	100,883	1,068	-----
Printing and publishing:								
Book and job.....	784	48,202	780	4	-----	48,053	149	-----
Newspapers and periodicals.....	463	70,883	462	-----	1	70,798	-----	85
Chemicals and allied products:								
Chemicals.....	106	26,471	103	3	-----	24,067	2,404	-----
Cottonseed oil, cake, and meal.....	104	6,677	101	3	-----	6,490	187	-----
Druggists' preparations.....	50	8,930	50	-----	4	8,930	-----	-----
Explosives.....	31	4,569	27	4	-----	4,380	189	-----
Fertilizers.....	175	8,957	152	23	-----	7,182	1,775	-----
Paints and varnishes.....	363	17,680	355	8	-----	17,317	363	-----
Petroleum refining.....	140	56,180	139	1	-----	56,118	62	-----
Rayon and allied products.....	24	37,681	22	2	-----	34,881	2,800	-----
Soap.....	109	17,274	107	2	-----	16,951	323	-----
Rubber products:								
Rubber boots and shoes.....	9	10,400	8	1	-----	10,123	277	-----
Rubber goods, other than boots, shoes, tires, and inner tubes.....	98	27,300	95	3	-----	26,477	823	-----
Rubber tires and inner tubes.....	42	58,668	41	1	-----	57,265	1,403	-----
Tobacco manufactures:								
Chewing and smoking tobacco and snuff.....	30	9,491	30	-----	-----	9,491	-----	-----
Cigars and cigarettes.....	208	46,407	205	3	-----	45,591	816	-----

## Nonmanufacturing Industries

DATA concerning wage-rate changes occurring between September 15 and October 15, 1933, in 15 groups of nonmanufacturing industries are presented in the following table.

No changes in wage rates were reported in the anthracite-mining industry. Increases were reported in each of the remaining 14 industries and decreases were reported in 3 industries over the month interval. The average percents of increase reported were as follows: Canning and preserving, 24.8 percent; bituminous-coal mining, 22.1 percent; hotels, 20.4 percent; power and light, 17.7 percent; retail trade, 17 percent; metalliferous mining, 15.2 percent; laundries and wholesale trade, each 13.1 percent; crude-petroleum producing, 12.5 percent; quarrying and nonmetallic mining, 10.3 percent; electric-railroad and motor-bus operation and maintenance, 7.5 percent; banks, brokerage, insurance, real estate, 5.3 percent; dyeing and clean-

ing, 5.1 percent; and telephone and telegraph, 4.8 percent. The average percents of decrease were: Quarrying and nonmetallic mining and retail trade, each 9.1 percent, and wholesale trade, 7.6 percent.

TABLE 2.—WAGE-RATE CHANGES IN NONMANUFACTURING INDUSTRIES DURING MONTH ENDING OCTOBER 15, 1933

Industrial group	Establishments reporting	Total number of employees	Number of establishments reporting—			Number of employees having—		
			No wage-rate changes	Wage-rate increases	Wage-rate decreases	No wage-rate changes	Wage-rate increases	Wage-rate decreases
Anthracite mining.....	159	77,833	159			77,833		
Percent of total.....	100.0	100.0	100.0			100.0		
Bituminous-coal mining.....	1,514	210,835	1,160	354		144,742	66,093	
Percent of total.....	100.0	100.0	76.6	23.4		68.7	31.3	
Metalliferous mining.....	297	27,974	286	11		26,369	1,605	
Percent of total.....	100.0	100.0	96.3	3.7		94.3	5.7	
Quarrying and nonmetallic mining.....	1,202	36,894	1,179	21	2	35,305	1,516	73
Percent of total.....	100.0	100.0	98.1	1.7	0.2	95.7	4.1	0.2
Crude-petroleum producing.....	260	29,053	252	8		28,685	368	
Percent of total.....	100.0	100.0	96.9	3.1		98.7	1.3	
Telephone and telegraph.....	8,294	246,416	8,292	2		246,004	412	
Percent of total.....	100.0	100.0	100.0	( <sup>1</sup> )		99.8	0.2	
Power and light.....	3,132	204,268	3,106	26		199,680	4,588	
Percent of total.....	100.0	100.0	99.2	0.8		97.8	2.2	
Electric-railroad and motor-bus operation and maintenance.....	557	133,244	517	40		127,148	6,096	
Percent of total.....	100.0	100.0	92.8	7.2		95.4	4.6	
Wholesale trade.....	3,039	91,276	3,023	14	2	91,038	231	7
Percent of total.....	100.0	100.0	99.5	0.5	0.1	99.7	0.3	( <sup>1</sup> )
Retail trade.....	18,588	437,841	18,554	32	2	437,219	611	11
Percent of total.....	100.0	100.0	99.8	0.2	( <sup>1</sup> )	99.9	0.1	( <sup>1</sup> )
Hotels.....	2,706	140,128	2,695	11		139,726	402	
Percent of total.....	100.0	100.0	99.6	0.4		99.7	0.3	
Canning and preserving.....	888	96,778	883	5		96,678	100	
Percent of total.....	100.0	100.0	99.4	0.6		99.9	0.1	
Laundries.....	965	57,152	945	20		55,789	1,363	
Percent of total.....	100.0	100.0	97.9	2.1		97.6	2.4	
Dyeing and cleaning.....	377	11,863	372	5		11,460	403	
Percent of total.....	100.0	100.0	98.7	1.3		96.6	3.4	
Banks, brokerage, insurance, and real estate.....	4,569	178,777	4,564	5		178,671	106	
Percent of total.....	100.0	100.0	99.9	0.1		99.9	0.1	

<sup>1</sup> Less than one tenth of 1 percent.

### Employment Created by Public-Works Fund

THE Bureau of Labor Statistics is charged with the duty of showing each month the number of wage earners employed on work financed from the \$3,300,000,000 public-works fund.

Public-works allotments are divided into two large classes. First, Federal allotments; second, non-Federal allotments. Federal allotments are monies which have been allotted to some branch of the United States Government. They are financed wholly by public-works funds. They include such types of projects as post-office buildings, built by the Procurement Division of the Treasury Department; naval vessels, built by the Bureau of Construction and Repair of the United States Navy Department; river, harbor, and flood-control work, supervised by the Corps of Engineers, War Department; and reclamation projects, such as the Boulder Dam and the Tennessee Valley project.

Whenever a contract is awarded by one of these Federal agencies, the name and address of the contractor, the type of project, and the amount of the contract is at once furnished to the Bureau of Labor Statistics. The Bureau then forwards a copy of its form (B.L.S. 742)

to each of the contractors, asking for the number of wage earners employed, the amount of pay rolls, and the number of man-hours worked, as well as the total amount of expenditures for materials purchased, for all pay-roll periods ending between the 15th of the past month and the 15th of the current month. The contractor in turn mails the schedule back to the Bureau, where the data are tabulated.

Information concerning non-Federal projects are obtained from the State engineers of the Public Works Administration. Whenever a contract for a non-Federal project is awarded, the procedure is exactly the same as described for Federal projects. Non-Federal projects include such work as road and street paving, sewerage systems and water works, school buildings, public buildings of all kinds, and slum clearance and housing projects. The Public Works Administration grants 30 percent of the total cost of non-Federal projects, and if necessary will loan the remaining 70 percent.

In addition to the work done by contractors, some Government departments, cities, and States do work under force account—that is, they hire the labor directly. Data concerning force-account work are obtained in the same manner as for contract work, except that the schedules are made out by the Federal, State, county, or city agency doing the work.

The information shown in the following tables should be regarded as more or less of a preliminary report, as work financed from public-works fund is just getting under way.

Table 1 shows employment, pay rolls, and man-hours worked on projects financed from public-works funds, during October 1933, by type of project.

TABLE 1.—EMPLOYMENT, PAY ROLLS, AND MAN-HOURS WORKED ON PROJECTS FINANCED FROM PUBLIC-WORKS FUNDS DURING OCTOBER 1933, BY TYPE OF PROJECT

Type of project	Number of projects reported	Number of wage earners employed	Amount of pay roll	Number of man-hours worked	Average earnings per hour	Average number of hours worked in month	Expenditures for material
Building construction.....	66	4, 157	\$387, 901	572, 293	\$0. 678	137. 7	\$412, 420
Public roads.....	1, 664	94, 350	(1)	(1)	(1)	(1)	(1)
River, harbor, and flood control.....	101	11, 639	378, 035	693, 562	. 545	59. 6	849, 249
Streets and roads <sup>2</sup> .....	20	1, 230	62, 354	100, 437	. 621	81. 7	73, 855
Naval vessels.....	34	3, 626	401, 294	515, 149	. 779	142. 1	8, 248, 361
Reclamation.....	12	3, 485	204, 729	337, 530	. 607	96. 9	168, 880
Water and sewerage.....	5	253	7, 929	12, 692	. 625	50. 2	7, 172
Miscellaneous.....	68	1, 815	135, 225	256, 621	. 527	141. 4	<sup>3</sup> 697, 285
Total.....	1, 970	120, 555	1, 577, 467	2, 488, 284	. 634	95. 0	10, 457, 231

<sup>1</sup> Data not available.

<sup>2</sup> Other than those reported by the Bureau of Public Roads.

<sup>3</sup> Includes \$544,385 worth of materials which cannot be charged to any specific type of project.

For the month ending October 15, there were 120,555 employees directly engaged on construction jobs, excluding clerical and supervisory workers, whose wages were paid directly from public-works funds.

Of the 120,555 people directly put to work on public-works construction projects up to October 15, 94,350 were working under the supervision of the Bureau of Public Roads. No data concerning

pay rolls, man-hours, or expenditures for materials were obtained from that Bureau. Beginning with the November figures, however, this information will be supplied.

Of the remaining 26,205 wage earners, the largest part were working on river, harbor, and flood-control projects. Building construction accounted for the employment of the third largest group.

The pay roll for workers, excluding those on public roads, totaled \$1,577,467. As the men worked an aggregate of 2,488,284 hours, this makes an hourly rate of 63.4 cents. Pay rolls for work on naval vessels reached a larger total than pay rolls for any other type of project. River, harbor, and flood-control work created more hours of labor, however.

The average hourly rate of earnings for workers on naval vessels was 77.9 cents. All types of work, except river, harbor, flood-control, and miscellaneous projects paid an average of over 60 cents per hour.

Expenditures for materials ranged from less than \$7,500 in the case of water and sewerage projects to over \$8,000,000 in the case of naval vessels. During the month scheduled, \$10,457,231 was expended for materials purchased by contractors reporting to the Bureau.

Table 2 shows employment, pay rolls, and man-hours worked during October on projects financed from public-works funds, by geographic divisions.

TABLE 2.—EMPLOYMENT, PAY ROLLS, AND MAN-HOURS WORKED ON PROJECTS FINANCED FROM PUBLIC-WORKS FUNDS DURING OCTOBER 1933, BY GEOGRAPHIC DIVISIONS

Geographic division	Number of wage earners employed on—		Amount of pay roll <sup>1</sup>	Number of man-hours worked <sup>1</sup>	Average earnings per hour <sup>1</sup>	Average number of hours worked in month <sup>1</sup>	Expenditures for materials <sup>1</sup>
	Public roads	Projects other than public roads					
New England.....	12,363	3,898	\$371,351	523,884	\$0.709	134.4	\$282,475
Middle Atlantic.....	20,550	2,286	201,459	290,745	.693	127.2	7,975,438
East North Central.....	9,522	3,124	116,901	179,373	.652	57.4	187,838
West North Central.....	16,803	5,751	170,548	316,620	.539	55.2	665,676
South Atlantic.....	6,241	3,395	273,203	393,776	.694	116.0	328,019
South Central.....	11,138	4,184	182,426	360,361	.506	86.1	194,733
Mountain and Pacific.....	17,733	3,587	261,579	423,525	.618	118.1	278,667
Total.....	94,350	26,205	1,577,467	2,488,284	.634	95.0	\$10,457,231

<sup>1</sup> Excluding data for public roads which are not available.

<sup>2</sup> Includes \$544,385 worth of materials which cannot be charged to any specific geographic division.

Of the 120,555 wage earners paid from public-works funds, over 20,000 worked in each of the following geographic divisions: Middle Atlantic States, West North Central States, and Mountain and Pacific States. The South Atlantic was the only geographic division having fewer than 10,000 workers paid from public-works funds.

The New England pay rolls reached a total of over \$370,000; the Middle Atlantic, South Atlantic, and Mountain and Pacific had pay rolls totaling over \$200,000.

The highest earnings per hour, 70.9 cents, were shown in the New England States. This was followed by 69.4 cents in the South Atlantic and 69.3 cents in the Middle Atlantic States.

By far the largest proportion of the material orders were placed by contractors located in the Middle Atlantic States. The preponderance of expenditures for materials to be used in the Middle Atlantic States was caused by the placing of an order for steel for battleship construction, amounting to over \$7,000,000. Materials purchased to be used in the West North Central States cost nearly \$700,000. In no other geographic division did expenditures for material total as much as \$400,000. Following is a list of the kinds of materials purchased, together with the expenditures for each type.

<i>Kind of materials</i>	<i>Amount expended</i>
Cement.....	\$71, 373
Chemicals.....	11, 804
Clay products.....	39, 735
Concrete products.....	19, 059
Cordage and twine.....	22, 173
Crushed stone.....	90, 301
Electrical machinery, apparatus, and supplies.....	40, 567
Explosives.....	14, 039
Forgings, iron and steel.....	10, 274
Foundry and machine-shop products not elsewhere classified.....	52, 748
Hardware, miscellaneous.....	22, 906
Instruments, professional and scientific.....	250, 812
Lighting equipment.....	34, 000
Lumber and timber products not elsewhere classified.....	722, 778
Machine tools.....	56, 818
Marble, granite, slate, and other stone products.....	38, 787
Minerals and earths, ground or otherwise treated.....	13, 996
Nonferrous-metal alloys; nonferrous-metal products, except aluminum, not elsewhere specified.....	153, 281
Paving materials and mixtures.....	43, 244
Planing-mill products.....	22, 707
Pumps and pumping equipment.....	13, 281
Refrigerators, mechanical.....	38, 235
Sand and gravel.....	13, 164
Smelting and refining, lead.....	11, 660
Steel-works and rolling-mill products.....	8, 378, 478
Structural and ornamental metalwork, not made in plants operated in connection with rolling mills.....	80, 964
Wire, drawn from purchased rods.....	43, 963
Other.....	146, 084
Total.....	10, 457, 231

It will be seen from this list that manufacturers of many classes of materials will profit by the public-works program. It is estimated that the fabrication of the materials purchased will give employment to approximately 27,000 people.

As already stated, this report must be classified as preliminary. Up to October 15 the construction program of the Public Works Administration had not as yet assumed full force.

#### Employment on Public Roads

THE following table shows the number of employees (excluding those employed on road projects financed from public-works funds) engaged in building and maintaining State and Federal roads during September and October 1933, by geographic divisions.



NUMBER OF EMPLOYEES ENGAGED IN THE CONSTRUCTION AND MAINTENANCE OF PUBLIC ROADS, STATE AND FEDERAL, DURING SEPTEMBER AND OCTOBER 1933, BY GEOGRAPHIC DIVISIONS<sup>1</sup>

Geographic division	Federal		State	
	September	October	September	October
New England.....	3,359	2,640	22,979	16,103
Middle Atlantic.....	7,872	5,103	47,121	45,815
East North Central.....	16,220	10,357	40,884	53,210
West North Central.....	7,594	5,482	27,780	32,527
South Atlantic.....	9,204	7,040	42,249	43,970
South Central.....	18,058	14,163	24,869	22,217
Mountain and Pacific.....	17,573	12,087	16,976	16,129
Total.....	79,880	56,872	222,858	229,971
Percent of change.....		-28.8		+3.2

<sup>1</sup> Exclusive of employment furnished by projects financed from public-works funds.

During the month of October there were 56,872 men employed on Federal road projects other than those financed from the public-works fund. This is a decrease of 28.8 percent as compared with September. The reason for the decrease in employees on Federal road work is that very few contracts are being awarded for road building from Federal funds outside of the public-works fund. There was an increase of over 64,000 in the number of people employed on public-road work financed from P.W.A. funds.

The number of people engaged on highway projects financed from State funds increased 3.2 percent in October as compared with September. The increases were confined to the East North Central, the West North Central, and the South Atlantic States. Decreases were shown in the other four divisions, with New England registering the largest falling-off in employment. Most of the employees working on road projects financed from State funds were engaged in maintenance work. Out of a total of 229,971 in October, 171,260, or 74.5 percent, were working at maintaining existing roads.

